

IV. MASTER PLAN PROPOSALS

After analyzing the existing facilities and completing the technical analyses of the terrain suitability for skiing/snowboarding, base area facilities, transit, circulation, and existing on-mountain facilities, a preferred Master Development Plan Amendment has been developed. This section outlines the new and renovated facilities for the Steamboat ski area over the next ten years.

.1 Goals and Objectives

A ski area Master Development Plan (MDP) involves planning the removal or replacement of existing equipment and the addition of new facilities over time. Modern mountain resorts require the most efficient and user friendly lift and trail systems possible, with a good balance of terrain type and variety, adequate parking and skier service facilities. The projects contained within this Master Development Plan Amendment will be constructed over a ten year period; therefore, it is necessary to have a complete understanding of how all the projects interact so that facilities can be balanced and capital invested effectively.

Objectives

The objectives of the Steamboat ski area Master Development Plan Amendment are as follows:

- Provide on-mountain food and beverage service facilities in balance with the ski area capacity and anticipated business levels
- Increase the quality and quantity of the children's facilities and teaching terrain to maintain family appeal.
- Provide base staging facilities in balance with mountain access and capacity requirements while reducing congestion in the base area during peak periods
- Optimize the utilization and operational efficiency of the existing physical plant (particularly by increasing use of underutilized lifts, such as Pony Express)
- Provide an expanded offering of other recreational activities for year-round utilization of the facilities, with focus on summer activites
- Continue to increase the quality of the facilities to meet the ever-increasing expectations of the local, regional and destination skier markets
- Provide more novice to intermediate terrain to meet the demand of the current guests and anticipated business levels
- Ensure that access and egress routes are of adequate skill level, capacity to ensure efficient and comfortable skier transportation through the resort complex



Since environmental stewardship is of the highest priority, all facilities and activities, both summer and winter, will be located, constructed and undertaken in an environmentally responsible manner. Steamboat ski area is committed to sustainable development. Steamboat ski area will develop and submit environmental plans for the improvements as required by NEPA (National Environmental Policy Act), which include Erosion and Sediment Control, Watershed Protection, and Stormwater Management. Monitoring stream health, controlling erosion and managing storm water remain a priority. Steamboat is committed to effective waste management with its award winning Zero Waste Initiative. The mountain's Vegetation Management Plan has recently been updated to reflect recent changes in the forested areas as a result of the mountain pine beetle epidemic. Efforts to assure the long term forest health while protecting wildlife habitat are ongoing. Programs are also in place to limit water usage through the introduction of highly efficient snowmaking equipment and reduced flow restroom fixtures, etc.

.2 Mountain Design Methodology and Planning Parameters

Ski Lift and Ski Trail Design

When designing a system of lifts and ski trails, the ultimate development should be planned in order that future lifts and additional ski trails will not create conflicts, congestion, crowding or worn-out snow conditions. Utilization of various lift loading and unloading patterns, as well as ski trail grading can direct skiers onto preferred ski trail systems to improve trail utilization and skier distribution or avoid major congestion areas.

Ski trails and slopes should be designed to provide the best skiing opportunities and then, subsequently, lifts located to best serve these ski trails since lifts are merely a means of access. The type of lift may vary, depending on the natural terrain it must cross and serve, as well as the required hourly capacity and type of skier being served. Ski lift loading and unloading terminals are preferably located in protected areas on slopes less than 20 percent. Adequate space must be allotted for lift queues, safe stopping, unloading areas and general congregation areas at both the upper and lower lift terminals. As a general rule, Ecosign allows between 15 and 25 square feet per skier for these congregation areas, depending upon anticipated queues and the capacity and type of lift.

During the resort design process, Ecosign has found that it is critical to balance all facilities, so that guests receive the same quality of experience regardless of which facility or area of the mountain they use. Ecosign uses the unit "*skiers per day*" to more easily compare the capacities of these diverse facilities. Facilities which must be balanced include: lifts, ski trails, grooming equipment, skier service building floorspace, food service seating, lift staging capacity, parking and base area capacity.



We have utilized a number and letter code to indicate the type of lift installations proposed. The coding is illustrated below.

D8G	Detachable 8-Passenger Gondola
D6C	Detachable 6-Passenger Chairlift
D4C	Detachable 4-Passenger Chairlift
4C	Fixed Grip Quadruple Chairlift
3C	Fixed Grip Triple Chairlift
2C	Fixed Grip Double Chairlift
Р	Platter Surface Lift
MC	Moving Carpet Conveyor Lift

Base Area Land Use & Development Assumptions

Base area land uses include terrain dedicated to winter and summer recreational activities, access roads, day use parking lots, base lodge(s), the lower terminals of the ski lifts and other infrastructure. Since the function, convenience, character and aesthetics of the base area and resort facilities all contribute to the visitor experience, the base area plays a critical role in the success of a resort. The base area requires a distinct spatial organization to effectively move visitors from the point of arrival to easily accessible parking lots, through the skier, snowboarder and other activity staging areas, up the hill and onto the slopes.

The base area development at Steamboat Springs is mostly outside of the Steamboat ski area's control, although there are zoning and/or plans in place for many of the parcels that are considered as possible for redevelopment. In 2008, Ecosign produced a Base Area Master Plan Summary for the development proposed for the base area by the many different owners and proponents. This was updated in the Development Analysis section of this report. Due to changed market conditions and the recent recession, it is anticipated that only a fraction of the proposed development will be realized in the next ten years. As detailed in that section, the anticipated level of accommodation development in the next ten years could result in an increase in skier visits in the range of 2,400 skiers per day. While this is significantly less than was forecasted in 2008, these new lodging units will still put pressure on all skier service facilities, as well as out-of-base lift capacity and overall ski area capacity.

.3 Master Development Plan Amendment – Summary

This Master Development Plan Amendment (MDPA) builds on previous plans that were accepted and/or approved by the USFS in the past. There are several new projects proposed in this plan that have not been previously proposed. Several



projects contained within the 2004 MDPA were not realized in the last 7 years and some of these projects have been retained in this updated plan. There are also several projects contained in this plan that were either accepted in the 1993 Master Plan or approved in the 1996 EIS (Final Environmental Impact Statement (FEIS), Steamboat Ski Area Expansion, March 1996). All of the unrealized projects have undergone thorough, detailed examination to determine if they are still relevant in the exact configuration that was previously proposed and if they are anticipated to be constructed within a ten year timeframe. After that analysis, some projects were dropped, some are contained in this report in the exact configuration as previously proposed and some others were retained but the configuration changed. The projects that were changed were generally found to have sound goals and objectives, but the configuration was changed due to changes in technology and products available, changes in the market, changes in visitor patterns and preferences, or a more efficient and effective way was found to implement the project.

This Master Development Plan illustrates and describes, in detail, the projects proposed for the short term/medium term (10 years) for the purpose of preparing them for approval and construction. Projects in the 2011 MDPA include reconfiguring the Bashor/Rough Rider area to accommodate a new Children's Learning Center, improve terrain park offerings as well as providing for non-skiing activities in winter and summer. Also included is the expansion of lift-serviced skiing farther south in Sunshine Bowl, where the terrain is suitable for the intermediate and low intermediate skiers that form the bulk of Steamboat's skier market. Lifts and trails used for access and egress will also be improved. Terrain access and egress and some trail development is proposed in the Pioneer Ridge area where development was approved in the 1996 EIS. Although the second lift in Pioneer Ridge remains a part of Steamboat's long range plans, it is not expected to be constructed within the ten year timeframe. Therefore, a skier's bridge is being proposed that would allow skiers to explore the terrain north of the existing development and ski downhill to BC Skiway. This would allow the current operating boundary to be relocated northward to the next ridge above the Fish Creek drainage. This plan proposes the upgrading of five lifts (Pony Express, Thunderhead, Bashor, Elkhead and South Peak), the installation of several new lifts (including the Sunshine II detachable quad chair, up to 3 moving carpets, a fixed grip chairlift in the Learning center, the Bashor gondola and a tubing area).

The 2011 MDPA includes a total of 29 ski lifts including two detachable eightpassenger gondolas, three detachable six-passenger chairlifts, six detachable quadruple chairlifts, two fixed grip double chairlifts, eight fixed grip triple or quadruple chairlifts, one wire rope tow (for the jumping hill) and seven moving carpets (not including the tubing lift). The total calculated SCC at completion would be about 18,000 skiers per day, an increase of 2,830 per day above the 2011 situation.



The peak days of the last few years sits at approximately 110% of the current SCC, which would then indicate that peak days in the future could be approximately 19,000 skiers per day, based on the same assumptions.

New ski trails will be developed in the Sunshine II area; new skiways, gladed areas and trails will be developed in the Pioneer Ridge area; trails will be expanded and realigned in the Bashor Bowl area; and several skiways and other trails will be widened and regraded to increase comfort, mitigate 'problem areas' and ease skier flow.

In-ground snowmaking infrastructure currently services approximately 273 acres of terrain. Steamboat also stretches flexible hoses to areas unserved by pipeline and hydrants covering another 22 acres, for a total of 295 acres. This plan proposes to supply snowmaking coverage to a total of about 404 acres of ski trails. *The 2004 MDPA had proposed a total of 90 acres of new snowmaking (including some of which was proposed and/or approved in previous plans); however, only about 11 acres of that snowmaking have been installed.*

Food services and other skier services will expand to better serve both the existing business levels and anticipated increases in business. The Rendezvous Lodge, which is currently undersized, will be expanded. Thunderhead Lodge will see minor changes, including the installation of new elevator and an expansion of the skier service areas on level one. New restaurants are proposed for the Bashor Bowl and Sunshine Bowl areas. In the design of these new facilities, as well as the expansion of Four Points Hut, the resort will utilize a more European dining strategy, providing several, smaller F&B outlets with a mix of quick service and fine dining options.

One patrol hut will be installed at the top of the new Sunshine II lift. More summer and winter recreation opportunities are proposed to offer a more complete year round resort experience at Steamboat.

It is envisioned that these projects will take place in several grouped phases of construction over the next ten years. The projects proposed for the Steamboat ski area are graphically illustrated in Figure 20, the Master Development Plan 2011. While these projects have been conceptually designed and have received rigorous scrutiny in terms of siting and general attributes, detailed construction level design and on-site adjustments will need to be prepared before implementation. As mentioned earlier, all projects are subject to the appropriate USFS approval processes before implementation is possible.



Longer term proposals and past visions for the final buildout of the resort were contained in previously publicly submitted reports, but the USFS specifically requested that longer term plans and the vision for buildout of the resort should not be submitted as part of this particular MDPA document. Rather, it should focus on projects anticipated for completion within a ten year horizon.

.4 Master Development Plan

Over the last few years, the Ecosign planning team and Steamboat management have worked together to improve the resort experience at Steamboat through several projects including the complete regrading of the lower mountain. The current operation has been studied and opportunities and constraints identified. This section presents a logical format to describe the planning team's rationale for the design of future facilities at Steamboat. The discussion is separated into major geographical zones or themes, within each is a summary of the proposed development which:

- 1. Describes the existing situation.
- 2. Presents relevant market research data and the conclusions of our analysis.
- 3. Provides recommendations for future development.

a. Learning Center Opportunities – Lower Mountain and Roughrider Basin

Current Situation

The Learning Center facilities at Steamboat are all located on the lower mountain, within sight of the base area. This area was completely renovated in 2007 including completely regarding of the area (approximately 20 acres), installing a new detachable six-passenger chairlift with a mid-offload for beginners, moving and/or renovating existing lifts, removing and reinstalling snowmaking and infrastructure, etc. There are currently 5 moving carpet lifts in close proximity to the base area, used for KVC, children's lessons, snowboarding lessons and adult lessons. These carpets vary in length from 80 feet to 235 feet and their associated trails vary in steepness from 8 to 14%. The relocated Preview triple chair is approximately 750 feet long and provides lifts service to trails with grades of 13-15%. The Christie Peak Express is a detachable six-passenger chairlift, with an angle unloading station approximately 1,550 feet up the slope, where a transition in the terrain occurs. This lift is used for morning staging as well as novice skiing on three trails covering the bulk of the Learning Center. These trails have steepest slopes ranging from 15 to 21%.



Analysis

Over many years, the Steamboat ski area has nurtured a reputation as one of the best ski areas in the nation for teaching skiers and snowboarders, with a particular emphasis on families. Steamboat has consistently ranked at the top in experiences offered to families, including a 'first place' ranking by readers of Ski magazine in 2009. The primary components of this strategy are to offer first class children's programs on the best ski terrain for the lower skill classes and free skiing for children if accompanied by an adult.

The regrading of the lower mountain in 2007 resulted in a much improved learning experience for beginners and novice skiers as well as a much better transition between the mountain and the base area. Although these measures vastly improved the experience, it is still quite crowded on peak days, simply due to the limited acreage of learning terrain available in this area.

The existing Christie Peak Express works fairly well for both novice return skiing and for skier staging when these two functions do not overlap. Although this installation was a significant improvement over the previous situation for both staging (only one lift ride required from the base; and high speed) and beginner skiing (on a detachable lift rather than a fixed grip triple chair), it has its limitations during the morning staging hours. Unfortunately, at exactly the time of day when the maximum capacity is needed for staging, the ski school begins to use the lift and significantly decreases its loading efficiency, as well as available capacity for staging. This affects both the learning experience (longer lines due to the presence of staging skiers) and the experience of the staging skiers (longer lines and ride times due to the presence of beginners and their loading and unloading difficulties).

The lower part of the mountain (Headwall area) is obviously the most ideal location for the lowest skilled skiers as their confidence is higher when they are located in close proximity to the base area facilities (resting areas, warm areas, restrooms, etc.) but Steamboat has run out of space in the base area. Due to the lack of snow 'frontage' on the edge of the base area in the main arrival area, there is insufficient space to spread the moving carpets along the snow front for the easiest access for guests and virtually every square foot of space on the lowest part of the mountain is being used for learning or general skier circulation. The issue of available space will be further complicated beginning in the 2011-12 ski season, when the Steamboat Springs Redevelopment Authority's "Promenade" along the base area's snow frontage is completed.



When Ecosign performed a slope analysis map of the entire ski area, filtered to look for additional beginner and novice terrain, the location that seemed most suitable for Learning Center expansion was the Bashor Bowl area. This area is not only reasonably close to the base area but also has suitable slopes, is sizeable and is undergoing a biologically and aesthetically significant change due to the removal of pine trees due to the presence of a pine beetle infestation. The 2004 MDPA proposed the renovation of this area by creating new trails and adding new lifts; however, since that time, Ecosign and Steamboat management have examined this area extensively to determine the highest and best use of this area considering future needs, existing and future skier circulation, Learning Center expansion, other summer and winter recreational activities and the changing landscape. A new vision is proposed below.

Proposed Actions

In order to maintain the quality of the learning experience for all guests, including children in ski school, Steamboat needs to expand the acreage offered for these purposes. The Bashor Bowl area seems to be the most logical to expand into. Ecosign and Steamboat management have explored many options in an extensive process to use this terrain in the best way considering the natural topography, existing trails, vegetative changes due to pine beetle, access routes, through traffic, etc. This process has resulted in the plan proposed here, as illustrated on Figure 21.

As shown, it is proposed to create a new Learning Center in the Bashor Bowl area, in and around the area between Lower Eagle's Nest and the Thunderhead lift. The Rough Rider platter tow will be removed and several other lifts (and trails) are to be constructed in this area. Primary access for beginners will be via a new gondola direct from the base area. Skier services for ski school and public alike will be contained in a new building adjacent to the top of the access gondola, on the ridge above the existing 'picnic shelter'. Nearby there will be a tubing area, 2 or 3 new moving carpets for beginner skiers and a short 1,300-foot long chairlift to service beginners and novices. The existing Bashor Bowl chairlift will also be replaced and re-aligned to provide better service for the terrain park, and a new chairlift will be installed in the Swinger area to provide lift access to the novice skiing and 'beginner terrain park' proposed to be located in this formerly treed area. The top of the Swinger trail will be realigned and graded to make it suitable for novices and the area between Swinger and Giggle Gulch may be selectively graded in order to create small terrain park features and access routes.

Immediately adjacent to the skier services building will be two or three moving carpet lifts (length of about 330 feet) for ski school teaching. The three trails serviced by these carpets are designed with slopes of 12%, 12% and 16% respectively to provide a logical progression of learning. A small, almost flat area is provided at



the top of the 12% slopes so that skiers who have never used ski equipment before can familiarize themselves the equipment 'on the snow' before getting onto a sloped trail and begin skiing. A new chair lift would provide return cycle skiing in the terrain surrounding the existing Rough Rider basin. This would likely be a used chairlift running at a reduced capacity and speed to provide comfortable loading and unloading for beginners. At a length of 1,300 feet and a proposed speed of only 350 fpm, misloads would be reduced and the ride time would be only 3.7 minutes.

The carpets and beginner chairlift will provide a new learning center for a significant number of ski school attendees. This new facility will free up space in the base area to better accommodate the increase in skiers expected from an increase in the number of available beds and the implementation of the MDPA projects.

The skier services building at the top of the Bashor gondola (in the center of the Rough Rider Learning Center) will contain over 8,000 square feet of floorspace including space for children's ski school (seating for 300 kids, kitchen and restrooms) as well as a small café for the public, outdoor seating, restrooms, a guest services desk and indoor and outdoor storage. The gondola will require approximately 3,500 square feet for indoor gondola cabin storage so that the cabins are protected from bad weather in winter and sun damage in summer. As the gondola storage space will be empty during daytime operations, it is the intention to use this indoor space for seating for children at lunchtime (this storage space will be specially designed for this dual use). Kitchen and restroom space for the children's space will be constructed adjacent to this 'dual use' seating space. These facilities will be discussed in more detail in a following section.

Some of the earth removed from the beginner zone during construction will be moved downhill, adjacent to the Thunderhead lift, easing the transition into Right O Way from the Thunderhead staging area and the Vagabond Flats. This will make it easier for the less skilled skiers to get into Right O Way and will make the Thunderhead staging area more functional.

A tubing area will also be constructed in this zone as part of this development (located in the area surrounding the existing picnic shelter). The café and a guest services desk in the lodge will support this facility. Tubing will operate during both daytime and night time, with operations supported by the Bashor Gondola and illumination of the area surrounding the tubing zone for night-time operations. The tubing area is located on the south side of the ridge, which should naturally shelter some of the illumination from accommodations near and to the north of Burgess Creek Road. It is the intention that this facility will see a high level of activity both winter and summer.



b. Bashor Bowl Terrain Park

Current Situation

The Bashor Bowl Terrain Park is located in the Bashor Bowl area, just above the lower mountain. Currently, the bulk of the terrain park is serviced by the Bashor Bowl double chair and there are several 'lines' of varying character and difficulty. Immediately adjacent to the chairlift are a NASTAR race course and a halfpipe (on the east side of the lift), as well as a couple of terrain park 'lines' on the west side of the lift. The easier terrain park, the Rabbit Ears Terrain Park, is located on the Big Foot trail and is not generally used by people return skiing on the Bashor lift. People using this terrain park are generally 'passing through' after skiing the mid and upper mountains or return skiing using the Christie Peak Express.

Analysis

The existing Bashor lift is an older double chair which has awkward top and bottom terminal locations. Also, the lift is not ideally located to service the entire area that has potential for terrain park development. Due to the design of the lift equipment the bull wheel is located on the far side of a major trail from the maze area (Eagle's Nest), which does cause a bottleneck, and due to the bottom terminal location, the lift maze is located in this major bottleneck. The top terminal of this lift is located and designed rather poorly, with a straight offload into a steep bank and a 'too flat' trail on the west side to access a large part of the terrain park. Theoretically, skiers could use the summer road to the east to access the Rabbit Ear's Terrain Park and the Thunderhead lift; however, that route is also extremely flat (it requires walking) and the adjacent NASTAR race course blocks any potential traffic moving in northward when NASTAR is in use.

A significant amount of the Bashor Bowl area has been affected by the pine beetle and has been subsequently logged, providing large swaths of cleared areas suitable for various levels and types of skiing, in particular, the areas around the existing Giggle Gulch/Swinger zone and around Rough Rider basin. Slope gradients in the Giggle Gulch/Swinger zone are suitable for both novice skiing and terrain park development. Both the Lower Giggle Gulch and Swinger trails get quite low utilization on an average day as they basically take skiers off the 'high route' back to the base area (Short Cut) and onto the low route (Right O Way), which is slightly flatter and a more 'round-about' route.



Proposed Actions

As illustrated on Figure 21, it is proposed to move the Bashor lift to a location which will not only provide access to an expanded area for terrain park users but will interfere less with the beginner zone and through traffic. A new fixed grip chairlift will be installed in this area with new bottom and top terminal locations. The bottom terminal will be moved approximately 130 feet to the south-east in conjunction with the removal of the small hill and tree island side to the east of the existing bottom terminal, keeping both the terminal and the maze out of through traffic and separating the Eagle's Nest through traffic from Bashor return cycle skiing traffic. The top terminal will be located approximately 500 feet to the south-east of the existing terminal and at a height which will allow skiers to easily progress to Big Foot and Eagle's Nest (to the east) and to Vogue and the western part of the terrain park via two new skiways emanating eastward and westward from the top terminal. This new location will also provide direct lift access to the Rabbit Ears terrain park, increasing the use of this lift and the variety of terrain available from the lift.

A new lift in the Giggle Gulch/Swinger area will provide lift access to Swinger, upper Right O Way, and the newly clear-cut zone between Swinger and Giggle Gulch This is a wide open area with gentle to moderate slope gradients which can be used both for novice skiing and for beginner level terrain park features. The top of this lift will be located immediately adjacent to the top of the Bashor gondola and the bottom will be located at the confluence of the Swinger and Giggle Gulch trails.

c. Boulevard/Main Drag regrade & Rough Rider Bypass

Current Situation

Boulevard and Main Drag are two parallel skiways which move skiers from the top of Christie Peak to the Bashor Bowl area and the Thunderhead lift. They traverse across steep terrain, are narrow and have varying slope gradients. Main Drag is below, and slightly steeper than Boulevard, but still accesses the Thunderhead lift, crossing Bashor Bowl/Rough Rider basin just below the existing Rough Rider lift using the Lower Main Drag skiway. Boulevard is higher and allows skiers to traverse into the top of Rough Rider Basin. These trails are not only used by skiers transiting from Christie Peak to Thunderhead, but are also used by ski school to give their novice students a larger ski experience outside of the lowest part of the mountain.



Analysis

The 2004 MDPA identified the narrowness and varying gradient of these trails to be a problem and proposed merging them into one trail with a 40 foot width and a constant 10% gradient. This would create a better ski experience for novice return skiers and transiting users; this plan was approved by the USFS through a NEPA process in 2009, but has not been implemented to date. The constant grade, at 10%, would limit acceleration and keep skiers at a comfortable and uniform speed over the length of the trail. Although there will be some variation of speed between skill classes, (ski type, wax type, etc.), the differentiation of speed between individuals will be small. Passing will be much more comfortable as the extra width will create two or three 'lanes' and the smaller difference in speed between users will make it much more predictable and comfortable for all users. Some variation in the design may be necessary to accommodate the changes in skier flow, skier crossings, etc. that are proposed in the Rough Rider basin/Bashor Bowl area.

This route has become even busier with the installation of the Christie Peak Express due to its increased attractiveness as a staging route to the upper mountain via Thunderhead. It will also continue to be an important route for ski school as the lift access has improved considerably, even if the trail has not. With the development of the Roughrider area as a self-contained Learning Center, the Lower Main Drag trail (through the Rough Rider area) will be decommissioned and will not be available to skiers moving towards the Thunderhead lift.

Proposed Actions

As the design for construction of the Boulevard/Main Drag project moved forward, it became more evident that the construction was going to be more of a widening and re-contouring project of Boulevard with little impact on Main Drag. Because of the development of the Learning Center, Main Drag will cease to be an access route to the Thunderhead lift. Therefore, a new trail will need to be constructed, skirting above the Learning Center, from Boulevard to the Thunderhead lift. To accomplish this, Boulevard will be extended, crossing Eagle's Nest above the existing Rough Rider Basin entrance continuing northward under the Thunderhead lift through newly cleared terrain (mostly cleared due to the pine beetle damage) and then dropping down to the Vagabond Flats (please see Figure 21, the Roughrider Learning Center and Bashor Bowl Terrain Park plan).



d. Low Intermediate/Intermediate Skiing Opportunities – Sunshine Bowl

Current Situation

Many of Steamboat's destination guests are families and intermediate/low intermediate skiers. Much of the lower and mid mountain is simply too steep for this level of skier and the largest expanse of this type of terrain is in the Sunshine Bowl area, at high elevation and at the extreme southern end of the ski area. As part of the 2004 MDPA, Steamboat replaced the long, slow, fixed grip Sunshine chairlift with a detachable quadruple chairlift which not only increased the capacity and comfort of this lift, but decreased the ride time, making this area much more attractive. The Sunshine Bowl area is now one of the most popular parts of the mountain and relatively long lift lines occur on a regular basis. The increased popularity of this lift and skiing zone has shifted more F&B demand to Rendezvous Lodge, especially during traditional family vacation weeks.

Analysis

As shown on the Existing Mountain Facilities map, and as determined in the Terrain Capacity Analysis section of this report, the Sunshine bowl contains the bulk of the novice/low intermediate terrain at Steamboat, suitable for a very large and significant proportion of guests. All of this terrain is located within the Special Use Permit, but just over half of this terrain is currently developed for skiing.

The detachable quad has made this area much more attractive for skiing, but there are still several 'challenges' which make this area less than ideal for the low intermediate guest: first its distance from the base area, second, the configuration of the egress route and its capacity, and third, the quality and size of the service facilities (especially food). The lift and trail capacity calculations show that the current Sunshine lift has an excess of ski terrain, which is proved out by a simple observation of the trails in this pod, of which some are quite sparsely populated (in particular the Flintlock and Quick Draw trails. On the days when extensive lift surveys were performed, the Sunshine Lift was seen to have some of the highest utilization rates at the ski area during its peak period and had a consistent line-up from 10:20 to 12:40. The Sunshine Express sees very heavy usage in the morning, tapering off somewhat during the lunch hour, and often not returning the same heavy usage that day. One goal is to keep skiers, especially family groups, in this area for the entire day.

Lower skilled skiers have a couple of options for egress from Sunshine, all of which include taking the Elkhead lift and then skiing down from the Thunderhead Lodge or downloading on the gondola. From the top of the Sundown and Sunshine



lifts, higher skilled skiers can ski directly down the steeper Sundown trails and ski right to the base area via a system of trails and skiways. Lower skilled skiers use Lower High Noon or Daybreak while the lowest skilled skiers use the Broadway trail. The upper section of the Broadway skiway from Rendezvous to Elkhead was upgraded as part of the 2004 MDPA and has made a significant difference in the ability of lower skilled skiers to comfortably make their way from Rendezvous and the South Peak chair down to the bottom of the Elkhead lift.

Elkhead is a fixed grip quadruple chairlift with all the operational detractions of a fixed grip lift (slow speeds and loading difficulties, especially for the lower skilled skier. Due to loading issues, Elkhead does not have enough capacity to efficiently pull all the skiers out of this 'hole' during noon or afternoon egress, and long lines occur. This situation is another factor influencing the novice/low intermediate's decision to spend their time in the Sunshine Bowl area.

Finally, the Rendezvous Lodge is the only skier service building located in this zone and it is an older building currently undersized for busy days. This is the Sunshine Bowl's primary food service and warming/restroom site and if a novice/low intermediate skier makes their way out here on a peak day, the appearance of the facility and crowds may negatively affect their desire to return.

Proposed Actions

The Sunshine chairlift works quite well in its current configuration; it services a large number of trails that have more than adequate capacity for the current lift. The combination of demand for this type of terrain, the popularity of the current Sunshine lift, the availability of similar terrain in the same general vicinity and the excess trail capacity on the existing lift leads us to propose the installation of another ski lift in Sunshine Bowl. A new detachable quadruple chairlift (Lift 22 - Sunshine II) is proposed to service the mountain to the south of the existing Sunshine lift. The bottom of the lift will be very close to the bottom of the South Peak lift, while the top terminal will be located on the shorter peak on the south side of the Sunshine bowl. This lift would be approximately 5,900 feet in length with a vertical rise of approximately 1,025 feet and a rated capacity of 2,400 pph. This new lift would service several new fall-line trails on this new peak, as well as using portions of several existing trails for return cycle skiing. As shown later in this report, this lift would add approximately 1,780 skiers per day to the SCC calculation, and increase the number of skiers the Sunshine zone would approximately double (to 3,590).



In order to ease the pressure on the South Peak lift and improve skier circulation, it is proposed to build a skiway from this new lift to Lower Rendezvous Way to serve a similar function to the existing Rendezvous Way, but allowing access by Sunshine II skiers as well.

With the increase in the number of skiers in this pod, Broadway will be regraded below the switchback and the capacity of Elkhead lift will be increased. Rendezvous Saddle will be expanded and a second, smaller food facility added in the vicinity of Sunshine II.

e. Pioneer Ridge/Pony Express

The Forest Service approved the addition of two new lifts in the Pioneer Ridge area in the "Final Environmental Impact Statement (FEIS), Steamboat Ski Area Expansion" of 1996 and the "Expansion Plan for Pioneer Ridge". The first phase of that expansion was implemented with the installation of the Pony Express detachable quad chair and its associated trails. The second phase, located to the north of Pony Express, has never been constructed; however, many people do ski in this area, particularly on powder days. It is still envisioned that lifts, trails and other facilities will be implemented in the Phase II area in the future, but likely beyond the timeline of this MDPA.

Current Situation & Analysis

As stated in the 2004 MDPA, the Pony Express lift is currently rated at 1,200 pph, with the possibility to increase to 1,800 pph at such time that improvements are made to the trail network. The existing lift services a network of trails that fall into the high intermediate, advanced and expert skill classes and have typically been well used on powder days, but not in hard snow conditions. The 2004 MDPA proposed to widen, summer groom and re-contour sections of the Longhorn, Middle Rib and Crux trails as well as installing snowmaking on Longhorn, Middle Rib and Chaps. The following statement was taken directly from the 2004 document "Currently, Pioneer *Ridge is underutilized in all but powder conditions due to a lack of natural snow, lack of* machine made snow, exposure of rocks and logs. Grooming is limited due to the narrow nature of the trails, especially Longhorn, which creates cupping which in turn makes it difficult to provide a uniform skiing surface. There are also major challenges at the *Crux.* When the light on the land approach was implemented, it was also understood that there would be future needs for trail improvements to improve skiability. The purpose and need will remain as originally intended. The Pioneer Ridge pod is unique, in that all other pods offer a quality intermediate option. Family groups often struggle in the terrain. An intermediate, groomed trail is needed to get anticipated utilization. It is proposed that Longhorn be widened by an average of 30 feet and that it and Middle Rib be re-contoured in discrete areas that are severely off fall line to facilitate snow grooming. It is proposed that the Crux terrain be reevaluated for re-grading as it is the major collector for the Pod and is very



constrained and suffers from marginal snow conditions. In order to improve access between skiing pods, two small trail changes are proposed; 1) a proposed connector trail from Longhorn to the base of Storm Peak Express and 2) a route from Last Chance to the top of Longhorn."

During the summer of 2010, Steamboat performed some minor tree removal and re-contouring on Middle Rib and Royal Flush to allow for better snow retention and easier grooming. During the winter of 2010-11, a special effort was made to groom more of the Pony Express pod in these improved areas, as well as using more winch equipped grooming machines to groom the more difficult areas. These measures were implemented in order to make the area more attractive to skiers in the intermediate skill classes which form a large part of Steamboat's market. Steamboat management has stated that these efforts seem to have increased the use of the Pony Express lift .throughout the winter.

The undeveloped section of Pioneer Ridge (Phase II from the 1996 FEIS) is located north of the Pony Express lift and consists of a mixed forest with moderately spaced trees. It is accessible from the Pony Express lift and is moderately well used by experts on powder days. On powder days, skiers will hike or traverse into this area, ski the treed terrain until they reach Burgess Creek and then side step back up to the BC Skiway out of the valley bottom. This is quite a popular area on those select days, but despite moderate grades, gets little use on non-powder days due to the difficulty of getting in and out of the terrain as well as the preponderance of trees on all slopes.

Proposed Actions

While Steamboat does not see the need in the near future to build another lift in the Pioneer Ridge pod continued trail improvements should increase the utilization of the pod and justify an increase of the capacity of the lift to 1,800pph. Selective tree removal and re-contouring will be proposed on a site-by-site basis in order to increase the skiability and groomability of this area. Also, as proposed in the 2004 MDPA, installing snowmaking in this zone will increase the groomability and skiability of this zone. These measures will essentially create several good, groomable trails in this pod (including 2 or 3 high intermediate routes), increasing the attractiveness of this zone. Once utilization increases on a consistent basis, Steamboat will add enough chairs to reach the previously approved 1,800 pph.

It is also proposed to build a skiway connecting the Crux with the bottom of the Storm Peak and Burgess Creek chairlifts. This will make it much easier to exit this pod without riding the lift again.



Relative to terrain north of Middle Rib it is proposed to expand the operating boundary of the resort to the next ridge. To improve access, a narrow 10% skiway will be constructed from the top of Pony Express lift into this pod. This will provide a groomed access route to this area. Also included in this phase is a collector route and creek crossing near the bottom of the pod. This will provide a convenient exit and help keep people out of the steep sided Burgess Creek valley. This collector route will be a skiway constructed at a 9-10% grade, built on the side of the valley connecting the area proposed for the bottom lift terminal of the Pioneer Ridge chairlift in 1996 with the proposed bridge. The creek crossing will consist of a bridge built high over the creek, landing beside the BC Skiway. In the location illustrated, this bridge would be approximately 325 feet long and would be approximately 80 feet above the creek at mid span. This bridge should also be constructed with a lineal grade of about 7-8% so that skiers will slowly slide across the valley; it will be designed to carry and maintain a snow load for skiing surface. (By way of reference, the bridge will be similar to existing structures at the base of Vail's Blue Sky Basin.)

The next phase of development in this area will consist of improving the skiing in this zone. Over time, this will takes two forms: improving the gladed skiing experience (within the timeframe of this plan) and creating traditional ski trails (likely occurring subsequent to this plan). Selectively cutting trees in small dense parts of the forest that connect pockets of less dense forest will improve the gladed skiing experience and create improved routes that will be more instinctual to follow.

f. Moving Skiers up the Mountain - Lift Staging Capacity, Transport Trails, etc.

Current Situation

Steamboat has quite a unique situation, with only one staging portal for 16,000+ skiers. Most other resorts with these business levels have two or more portals, with one or more staging lift emanating from each portal. Currently, Steamboat has two primary staging routes up the mountain; the Gondola and the Christie Peak Express/Thunderhead routes. Theoretically, skiers could also access the upper mountain using Preview, Christie 3 and Thunderhead, but this is so slow and inconvenient that it is infrequently used. Steamboat experiences peak days in the range of 16,000 skiers, with days of 14,000 skiers occurring approximately 2-5 times per year. Because almost all the beginner terrain is in the base area, virtually all beginners and novices remain in the base area. On peak days, only 400-500 skiers remain in the base are;, however, beginning at 9:30 some of them start using the Christie Peak as a return cycle skiing lift, adversely affecting the staging process, lift lines and operational efficiency of that lift.



Analysis

As mentioned in the Development Analysis section of this report, it is anticipated that development in the Steamboat community will continue in the future, albeit at a slower pace, adding over 4,500 pillows (from 700+ units) in the next 10 years. It is anticipated that these new beds will generate an increase in skier visits in the range of 1,500-1,800 skiers per day, while an increase in local residents will increase skier visits by 500-660 skiers per day, resulting in peak days with visitation up to 19,000 skiers per day. This increase would not only affect the number of people on the mountain, but would also affect the access time, skier service requirements, etc.

Even with the upgrade and increase in capacity of the Christie Peak chair in 2007, the gondola still remains the preferred access route due to its fast, direct route to the upper mountain. In cases where the gondola lift line is over 15 minutes (a common occurrence on days over 10,000 skiers), the total wait/trip time can actually be shorter on the Christie Peak/Thunderhead route than on the gondola, but the perception is not so. On the day in 2008 when lift rides and lift lines were documented (with only 12,000 skiers), the gondola line was 16-30 minutes in length for approximately 2 hours (from 8:40 to 10:40). On days of 14,000 skiers, the gondola line commonly reaches 20 minutes for up to 2 hours. On peak days, the gondola line can reach a 35+ minute wait and line-ups will last all morning. Lift lines on the Christie Peak Express increase exponentially with an increase in business levels due to the fact that the gondola is already full and there is a threshold to guest's propensity to wait for the gondola around the 20-minute range. When business levels increase in the future as anticipated, more staging capacity will be needed 'out-of-base' to make the wait time acceptable. This can be accomplished by increasing the rated capacity of out-of-base lifts and/or increasing the effective capacity of the existing lifts (loading efficiency, other uses, etc.).

With the expansion of the Learning Center into the Rough Rider basin, a low skill level access route will be required, in fact, it depends on it. As the intention is to move some 'never-ever' beginner ski school into this zone, the access method should not require any skiing skill; therefore, a gondola would seem to be the most effective conveyance due to the fact that a ski school instructor will be in charge of the safety of several children at a time to both contain them and ensure safety. A gondola cabin also has the advantage that it can have the best loading efficiency, as it does not rely on the skill of the skier using it. A gondola stretching from the base area to the Bashor Bowl area would provide easy, safe, direct access for the Rough Rider Learning Center.



The Thunderhead lift was identified as a bottleneck for skier staging previous to the 2004 MDPA and was addressed in that document. The existing lift is rated at a maximum of 2,400 pph and experiences lines in excess of 25-40 minutes during morning staging periods on busy days. The lift ride analysis performed in 2008 found that, on a 12,000 skier day, there were significant lift lines of 5-9 minutes over a 2 hour period, peaking at about 15 minutes length. The analysis also found that the loading efficiencies on this lift were only 70-80% during the busiest time of the day (actually loading of 1,600-1,900 pph). As with the Christie Peak lift, lift line lengths increase substantially on days with higher skier visits and can exceed 30 minutes on peak days. The approved 2004 MDPA proposed replacing the Thunderhead lift with a new chairlift with a capacity of 2,800 pph to mitigate this problem. To date, this measure has not been implemented. An upgrade to 2,800 pph capacity will be required as SCC increases and, at a minimum, coincidental with the construction of Sunshine II.

With the addition of a second lift in the Sunshine bowl, the total SCC in that zone will be about 3,590 skiers per day (up from the existing 1,920). Spur Run and Huffman's are the primary route for this traffic and even today have some challenges accommodating skier traffic, due to grades and visibility. Therefore, they should be realigned and recontoured to increase comfort and capacity.

The Sundown lift is the primary route for these skiers to access the Sunshine Bowl and it experiences short lines on busy days. On the busiest days, Steamboat operates the older Priest Creek lift to take pressure off the Sundown lift; it does not run full, however, it is effective to mitigate the longest lines.

Proposed Actions

As mentioned earlier, it is proposed to construct a new gondola connecting the base area to Bashor Bowl. This lift is intended primarily to move beginners from the base area up to the new Rough Rider Learning Center, but it could also provide a logical first step in a staging route to the upper mountain in non-peak hours. This lift will be at full capacity for ski school use during the peak morning staging period, which will reduce ski school use of the Christie Peak Express during this busy time. Fewer low skilled skiers using the Christie Peak will not only free up capacity for staging but will also increase the actual realized capacity of the lift due to improved loading and fewer stops.

The 2004 MDPA proposed that the Thunderhead lift be upgraded to a detachable quad chairlift with a capacity of 2,800 pph to more closely align with the increase in out-of-base capacity provided by the proposed Christie Peak detachable six passenger chairlift. Experience over the last couple years has shown that, as anticipated, only



part of the Christie Peak's capacity is used for staging, even during peak periods, however, the Thunderhead lift still has experienced an increase in pressure during these periods. With an anticipated increase in skier visits and another staging route that could directly supply the Thunderhead lift, it will then become critical to increase capacity on that lift for morning staging. If, according to the staging forecasts, an additional 1,900 skiers per day come skiing on a 'design day' (or 2,500 on a peak day), it is likely that 1,600-1,700 of those will want access to the upper mountain in the morning (or about 2,000 on a peak day). Since the gondola is already running full for several hours on the busy days, most of these people will take an alternative route (either Christie or Bashor gondola) and then load on Thunderhead. An increase in actual delivered capacity of 300-400 pph on Thunderhead would likely remedy today's crowding, but an additional 700-800 pph would be required on peak days to stage the increase in skiers at such time as Sunshine II is constructed. Therefore, it is proposed to replace this lift with a sixpassenger chairlift with a rated capacity of 3,200 pph. At a loading efficiency of 80%, this lift should realize an actual delivered capacity of approximately 2,560 pph, which is about 700-1,000 pph more than the current lift delivers. If the maze area is carefully designed and actively managed during busy times, it may be possible to approach 85% loading efficiency on the busiest days.

In order to accommodate the increased number of low intermediate and intermediate skiers moving from the Thunderhead Lodge area to Sundown (for staging to Sunshine Bowl), improvements are proposed for the Spur Run/Spur Run Face/Huffman's zone. The existing Spur Run has sections that are too flat and too steep for the level of skiers using it as well as a skiway section whose entrance is somewhat hidden from view. Regrading and re-alignment of the easiest route will make this a much more enjoyable experience for the increased number of skiers that are anticipated to use this route in the future.

g. Egress Routes - Lifts & trails - All Skill Classes

Current Situation

As mentioned previously, Steamboat currently moves over 16,000 skiers per day through their base area and up the mountain on the busiest days. Moving this number of skiers up the mountain can be a challenge, but transporting them safely and comfortably down the mountain at the end of the day is also a major consideration. Although it is theoretically possible to ski to the base area from the top of virtually every lift, it is not possible for every skill level to do so comfortably or confidently. Therefore, many skiers, particularly those in the lower skill classes, use a series of lifts and trails to get out of the Sunshine and Sundown areas and make their way to the base area at the end of the day. Both the South Peak and Elkhead lifts see large



traffic volumes late in the day when the return cycle ski lifts are closing. The Broadway, Lower High Noon and Upper Why Not trails also see high volumes of traffic at this time of day by these same skiers.

Once these skiers arrive at the top of Elkhead, they have a multitude of choices for egress down the mountain, with many of the more experienced skiers taking the Heavenly Daze or Upper Valley View trails, the intermediate skiers taking Heavenly Daze or Vagabond and the least experienced skiers taking upper Vagabond to the Vagabond Saddle or the long, winding Why Not skiway/trail. Lower on the mountain, skiers using the Heavenly Daze trail will then spread out amongst several lower-mid mountain trails before re-concentrating on the skiway under the Christie lift line and skiing through the Headwall beginner zone. Many of the skiers using the mid mountain trails between Heavenly Daze and Vagabond will end up on lower Eagle's Nest, concentrating on the Short Cut skiway for transport to the Headwall area. Skiers using Lower Concentration, Lower Vagabond and the BC Skiway (out of the Burgess Creek/Storm Peak/Four Points/Pony Express zone) all end up on the Right-O-Way trail, which is the lowest and flattest route into the base area.

Analysis

South Peak Lift

As witnessed in the lift ride counts performed in 2008 and 2010, the South Peak lift experiences crowding both at lunchtime and at the end of the day. Although it is theoretically possible to get to Rendezvous from any trail in the upper half of the Sunshine pod, it seems that many skiers in this zone either don't plan ahead or decide only once they are at the bottom of the pod that it is time for lunch, to leave or time for a break. This fixed grip lift is rated at 1,800 pph and loads a maximum of approximately 1,450 pph (a low loading efficiency of about 80%, due to the lower skill class of its users) with lift lines peaking at 15 minutes long. The proposed Sunshine II lift is further south than the existing Sunshine lift and the Rendezvous Lodge is accessible from only a very small proportion of its terrain; even with a new access traverse. This means that most of its skiers will have no choice but to take South Peak Lift out of the Sunshine Bowl at the end of the day, or if they wish to access Rendezvous for lunch. This new lift could easily double the end of day demand on the South Peak lift.



Broadway Trail

The Broadway trail is the easiest route out of the Sunshine zone and was originally constructed in a less than idea manner, with several narrow and steeper sections. Following direction from the 2004 MDPA, the upper portion of Broadway has been widened and regraded. While that measure made the upper section much better, the lower section, just after the switchback, has now become a point of concern, causing a bottleneck, with crowding and creating apprehension in skiers.

Elkhead Lift

As noted in the lift ride counts performed in 2008 and 2010, the Elkhead lift is somewhat busy at lunchtime, but experiences extreme crowding at the end of the day on peak days. This results in lift lines that can exceed 35-45 minutes on peak days and persist for 1.5 to 2 hours. Due to the fact that the Elkhead is a fixed grip lift and that many of its users are of the lower skill class users and may be tired at the end of the day, this lift experiences many stops at peak times due to loading and unloading difficulties, reducing its actual realized capacity to about 1,800 pph, far below its rated capacity of 2,400 pph. The current calculated daily lift capacity of Sundown will be 1,830 skiers per day and the daily lift capacity of Sunshine is 1,810 skiers per day. If 100% of the Sunshine skiers and only 50% of the Sundown skiers use Elkhead at the end of the day (2,890 skiers total), it is calculated that this lift would have to run full for 1.5 hours to stage (at its observed actual capacity of 1,800 pph). This calculation agrees with the counts and general observations on site. As mentioned earlier, the installation of the Sunshine II lift will increase the number of skiers in the Sunshine Bowl and significantly increase the number of skiers needing egress from the bottom of Sundown/Elkhead. If we consider the capacities of the 3 lifts (existing Sunshine and Sundown and proposed Sunshine II) that Elkhead provides egress for, it seems there should be an increase in demand of about 50% for Elkhead's egress capacity

Lower Eagle's Nest/Short Cut

Currently, many skiers traverse the Bashor Bowl area both in the middle of the day and at the end of the day using Lower Eagle's Nest/Short Cut route. This route works very well except for a couple of features limiting the capacity of this route including some limited sight lines, the narrowing of the Lower Eagle's Nest trail at the bottom of the Bashor lift terminal and the narrowness of the Shortcut skiway.



Why Not

The Why Not trail/skiway winds its way down the Thunderhead terrain with a series of skiways and switchback turns. For the most part this trail works fairly well for novice skiers with a fairly flat grade where the trail is narrow and generous turns; however, the switchback turn at the 8,950-foot elevation is less than ideal. The width, sharp angle and steepness of this turn are the main bottleneck on this trail, causing crowding and apprehension in the users of this trail. **Proposed Actions**

South Peak Lift

Due to the installation of the Sunshine II lift, the lift capacity in the Sunshine Bowl zone will increase from the existing 1,920 skiers per day up to approximately 3,590 skiers per day, many of whom will require egress from the bottom of the bowl via the South Peak lift. Currently, approximately 1,450 pph of South Peak's capacity is used at peak times with minimal line-ups. If this lift were to be used by 50% of the existing Sunshine lift's users and 100% of the new Sunshine II users, capacity needs would increase by about 50% to about 2,180 pph (actual achieved capacity). A detachable quad chairlift rated at 2,400pph should be able to achieve a 90% loading efficiency, resulting in an achieved capacity of approximately 2,160 pph, which is very close to the requirement for egress needs.

The new lift would be located on a similar alignment to the existing chair, however, the top terminal may need to be a little farther north to provide easier access to both the Rendezvous Lodge and to the South Peak Flats trail (and then onto Broadway). The alignment of the lift may need to be adjusted and the bottom terminal will need to be relocated slightly to allow space for the larger terminal and maze area, as well as the adjacent Sunshine II terminal and maze area.

Broadway Trail

It is proposed to re-align and regrade the portion of the Broadway trail immediately after the switchback. In order to create a comfortable skiway/trail with high capacities, the skiway needs to have grades in the 8-11% range when narrow, and exponentially higher widths as the steepness increases beyond 12%. This measure will require earthworks and realignment of the trail into the hillside somewhat.

Elkhead Lift

With the installation of the Sunshine II lift, it will be necessary to take actions that will mitigate the larger numbers of skiers wanting to get out of the Sundown and



Sunshine areas at the end of the day. As mentioned in the analysis section, it would seem that approximately 2,900 skiers currently use this lift in the last 1.5-2 hours of the day to egress that area, with an actual achieved capacity of about 1,800 pph. In order to accommodate the additional 1,780 skiers that could be present with the new Sunshine II detachable quad chair in Sunshine Bowl, additional actual capacity of 880-1,170 pph would be required at Elkhead. A detachable six-passenger chairlift would have enough delivered capacity to improve the staging time significantly in the near future and adequately once the Sunshine II lift is constructed.

Lower Eagle's Nest/Shortcut

With an overall increase in skier visits, this route will also experience slightly more traffic. As shown in the Rough Rider Learning Centre and Bashor Bowl Terrain Park map, Lower Eagle's Nest will be realigned slightly between the 7,570 and 7,440-foot elevations, the Bashor lift lower terminal shifted north and a tubing hill installed adjacent to it. Trees will be removed on the north side of the run between the 7,570 and 7,500-foot elevations to open up sightlines and provide more space for skier traffic from this trail and lower Vertigo to merge and diverge. The tubing hill will encroach slightly on the existing alignment, but the hill just east of the Bashor lift will be removed to create more space. The Short Cut skiway will also be widened.

Why Not

It is proposed to adjust the alignment and grades of the switchback on Why Not between the elevations of 8,930 and 8,990In order to ease the grades, it is proposed to lengthen this portion of the trail by moving the switchback further east. By moving the switchback further east and raising the surface, skiers will decelerate when coming into the sharp corner, so that they are approaching the corner under very controlled speed. The corner will also be designed with extra width so that a couple of novice skiers can negotiate this corner side by side with comfort. The grade immediately downhill from the corner will increase to a comfortable 10% for a short length before merging with the existing grades. These measures will make this corner much more comfortable for the skill of skiers using this route.

h. Miscellaneous Trail Improvements

Steamboat's program of minor trail renovation will continue, including widening bottle necks, removing hazard trees and regrading where necessary. These minor renovations will be ongoing, when deemed necessary, and included in annual summer grooming plans.



Summary of 2011 MDPA Lifts and Trails

The configuration of the lifts and trails proposed in the 2011 MDPA are illustrated on Figure 21. The areas proposed for renovation or construction are illustrated graphically in Figure 22, the Mountain Renovation and Construction Plan. Increases in lift SCC will occur chiefly due to the installation of new lift capacity in Sunshine Bowl and the reconfiguration of the Bashor Bowl/Rough Rider area. Quality of service and access and egress functions drive the replacement of several other lifts, including Thunderhead, Elkhead and South Peak.

If all the lift and trail projects proposed under this, the 2011 MDPA are completed, the ski area will have an SCC of approximately 18,000 skiers per day, an increase of 2,830 over the current SCC. The proposed lift specifications are listed in Table IV.1.

Lift	Lift Name	Lift	Hourly	Vertical	VTF/Hr	VTF	Loading	Access	Daily Lift	Тор	Bottom	Slope	Ride
No.		Туре	Capacity	Feet	(000)	Demand	Effic.	Reduc.	Capacity	Elevation	Elevation	Length	Time
1	Gondola	D8G	2,800	2,176	6,093	12,679	95%	65%	1,280	9,076	6,900	8,852	8.9
2	Preview	3C	1,450	129	187	3,090	70%	0%	320	7,043	6,914	741	2.0
3	Christie Peak	D6C	3,200	1,102	3,526	6,671	80%	21%	1,360	8,013	6,911	4,636	4.6
4	Christie III	3C	1,710	1,026	1,754	10,580	85%	50%	250	8,020	6,994	3,680	7.4
5R	Bashor Bowl	4C	2,400	346	830	12,096	80%	0%	410	7,831	7,485	1,578	3.7
6R	Rough Rider	3C/4C	1,800	227	409	5,911	70%	0%	340	7,710	7,483	1,320	3.8
7R	Thunderhead	D6C	3,200	1,641	5,251	10,939	85%	40%	1,770	9,075	7,434	5,530	5.5
8	Burgess Creek	3C	1,800	939	1,690	9,855	85%	19%	860	9,200	8,261	3,490	7.0
9	Pony Express	D4C	1,800	1,657	2,983	17,262	90%	0%	1,130	9,741	8,084	5,035	5.0
10	Bar UE	2C	1,025	1,356	1,390	14,777	90%	0%	510	10,375	9,019	4,596	9.2
11	Storm Peak	D4C	2,400	2,159	5,182	15,851	90%	9%	1,940	10,379	8,220	6,884	6.9
12	Four Points	3C	1,800	1,361	2,450	16,934	85%	0%	740	9,765	8,404	4,012	8.0
13	Morningside	3C	1,800	541	974	16,605	85%	0%	300	10,544	10,003	2,686	5.4
14R	Elkhead	D6C	3,200	762	2,438	9,037	85%	80%	340	9,200	8,438	2,464	2.5
15	Sundown Express	D4C	2,800	1,936	5,421	15,411	90%	18%	1,830	10,386	8,450	5,418	5.4
16	Priest Creek	2C	1,050	1,852	1,945	15,411	90%	100%	0	10,370	8,518	5,095	9.8
17R	South Peak	D4C	2,400	312	749	7,622	90%	80%	120	9,362	9,050	1,669	1.7
18	Sunshine Express	D4C	2,400	1,256	3,014	9,309	90%	4%	1,810	10,386	9,130	5,559	5.6
		MC	1,500	6	9				30	6,902	6,896	80	1.3
		MC	1,500	22	33				60	6,926	6,904	201	2.5
		MC	1,500	32	48				90	6,963	6,931	237	2.4
		MC	1,500	24	36				60	6,945	6,921	192	2.4
19	Bashor Gondola	D8G	2,000	618	1,236	10,000	90%	100%	0	7,522	6,904	4,830	4.4
20	Swinger Platter	3C/4C	1,200	318	382	5,523	70%	0%	350	7,528	7,210	1,377	3.4
21a	Bashor Beg. 1	2-MC	1,500	36	54				200	7,559	7,523	332	3.3
21b	Bashor Beg. 1	MC	1,500	43	65				120	7,554	7,511	333	3.3
22	Sunshine II	D4C	2,400	1,030	2,472	7,761	90%	0%	1,780	10,080	9,050	5,960	6.0
	Freestyle Aerial Hill	WRT	264	226	60				0	7,526	7,300	637	2.2
Tota	1		53,899		50,680				18,000				

TABLE IV.1 STEAMBOAT SKI AREA LIFT SPECIFICATIONS AND CAPACITIES



The detailed specifications for the ski trails proposed to be present under the 2011 MDPA are listed in Table IV.2. The ski area will have a total of 218 designated trails, skiways, and gladed areas covering approximately 1,482 acres. Improved tree skiing with better access and egress in the Pioneer Ridge area will encompass approximately 326 acres and is anticipated to see increased use as a result. Skiers using the Pioneer Ridge zone will be using the Pony Express and Thunderhead lifts to return ski in this area. A further 1,485 acres of treed terrain located between the designated trails all over the mountain will continue to be skied lightly, mostly during times of new snow.

New designated ski trails in the Sunshine II area cover approximately 60 acres, plus another approximately 60 acres of tree skiing between those trails. The reconfiguration of the Roughrider/Bashor Bowl area will see a small increase in skiable acreage (18 acres) but a significant increase in intensity of use.



				Ele	vation	Total	Horz.	Slope	Perce	ent Slop	Avg.	Horz.	Slope S	kiers A	At Area	
Trail		Trail	Skill	Тор	Bottom	Vert.	Dist.	Dist.			Width	Area	Area			
Name		No.	Class	Feet	Feet	Feet	Feet	Feet	Avg.	Steep.	Feet	Acres	Acres D	ensity	Total	
Lift 1 - Gondola										•						
Heavenly Daze		1A	4	9,070	7,967	1,103	4,100	4,246	27%	43%	175	16.50	17.09	19	325	
Upper Valley View		1B	6	8,956	8,074	882	2,770	2,907	32%	49%	93	5.91	6.20	7	45	
Lower Valley View	1/5 area	4A	6	7,904	7,220	684	2,380	2,476	29%	49%	84	4.60	0.96	7	5	
Upper Yoo Hoo	1/5 area	4B	4	8,011	7,763	248	2,130	2,144	12%	13%	46	2.24	0.45	19	10	
See Me Race Course	1/5 area	4C	4	7,758	7,189	569	1,900	1,983	30%	41%	93	4.07	0.85	19	15	
See Me	1/5 area	4D	5	7,757	7,180	577	1,900	1,986	30%	44%	190	8.30	1.73	15	25	
Voo Doo	1/5 area	4E	6	7,714	7,235	479	1,440	1,518	33%	50%	162	5.35	1.13	7	10	
Jess' Cut Off	1/5 area	4G	4	7,965	7,755	210	1,160	1,179	18%	33%	97	2.58	0.52	19	10	
Vogue	1/5 area	4H	4	7,755	7.245	510	1.860	1.929	27%	41%	134	5.71	1.18	19	20	
Giggle Gulch	1/5 area	4J	3	7,420	7.203	217	1.130	1.151	19%	23%	90	2.33	0.47	19	10	
Short Cut	1/5 area	4L	3	7,413	7,094	319	3,060	3,077	10%	10%	53	3.74	0.75	19	15	
Lower Eagle's Nest	1/5 area	4P	3	7,740	7,415	325	1,880	1,908	17%	19%	144	6.22	1.26	19	25	
Lower Vertigo	1/5 area	40	6	7,860	7,730	130	410	430	32%	32%	308	2.90	0.61	7	5	
. 0	1/5 area	4R	6	7,720	7,520	200	1,230	1,246	16%	32%	113	3.18	0.64	7	5	
Upper Vagabond	1/5 area	7A	3	9,071	8,345	726	3,040	3,125	24%	34%	145	10.13	2.08	19	40	
Upper Concentration	1/5 area	7E	6	8,952	8,155	797	1,700	1,878	47%	56%	294	11.47	2.53	7	20	
	1/5 area	7G	6	9,071	8,770	301	700	762	43%	51%	98	1.57	0.34	7	2	
Oops	1/5 area	7H	6	8,920	8,670	250	560	613	45%	51%	142	1.83	0.40	7	3	
Ted's Ridge	1/5 area	71	6	8.650	8.030	620	1.570	1.688	39%	53%	145	5.22	1.12	7	10	
Vertigo	1/5 area	7J	6	8,570	7.860	710	1.470	1.632	48%	54%	159	5.35	1.19	7	10	
Betwixt	1/5 area	7K	3	8,334	8,130	204	1,880	1,891	11%	11%	34	1.46	0.29	19	5	
Eagle's Nest	1/5 area	7L	3	8,130	7,740	390	1.410	1.463	28%	37%	125	4.04	0.84	19	15	
Feather	1/5 area	7N	2	8,890	8.851	39	570	571	7%	7%	43	0.56	0.11	24	2	
Upper Why Not	1/5 area	70	2	8,820	8,651	169	1,430	1,440	12%	12%	35	1.15	0.23	24	5	
Mid Why Not	1/5 area	7P	2	8,598	8,357	241	2,600	2,611	9%	10%	29	1.71	0.34	24	10	
Lower Why Not	1/5 area	70	2	8,355	7,470	885	7,770	7.820	11%	21%	31	5.59	1.13	24	25	
· · · · · · · ·	1/5 area	8E	2	9.055	8.825	230	1.780	1.795	13%	16%	25	1.02	0.21	24	5	
Mid Right-O-Way	1/5 area	X	2	7,205	7,050	155	1,680	1,687	9%	9%	53	2.06	0.41	24	10	
Lower Right-O-Way	1/5 area	Y	2	7,050	6,904	146	2,310	2,315	6%	6%	33	1.76	0.35	24	10	
Total Lift 1		2	(not inc	luding pa	urtial trails)		,	7,153	(not in	cluding p	artial tra	uls)	45.45		697	
				01				.,		01						
Lift 2 - Preview																
Preview		2A	1	7,041	6,918	123	980	988	13%	13%	118	2.66	2.68	36	95	
Total Lift 2		1						988					2.68		95	
Lift 3 - Lower Christ	ie Peak															
		3A	1	7,110	7,035	75	560	565	13%	13%	96	1.24	1.25	24	30	
		3B	2	7,134	6,914	220	1,890	1,903	12%	17%	100	4.36	4.39	24	105	
	<u> </u>	3C	2	7,090	6,944	146	1,120	1,129	13%	21%	116	2.97	3.00	24	70	
Total Lower Lift 3		3						3,597					8.64		205	
Lifts 3 & 4 - Christie	е Ш & Upp	er Chri	istie Pe	ak												
Lower Valley View	4/5 area	4A	6	7,904	7,220	684	2,380	2,476	29%	49%	84	4.60	3.83	7	25	
Upper Yoo Hoo	4/5 area	4B	4	8,011	7,763	248	2,130	2,144	12%	13%	46	2.24	1.81	19	35	
See Me Race Course	4/5 area	4C	4	7,758	7,189	569	1,900	1,983	30%	41%	93	4.07	3.40	19	65	
See Me	4/5 area	4D	5	7,757	7,180	577	1,900	1,986	30%	44%	190	8.30	6.94	15	100	
Voo Doo	4/5 area	4E	6	7,714	7,235	479	1,440	1,518	33%	50%	162	5.35	4.51	7	30	
Sitz	4/5 area	4F	4	8,016	7,880	136	530	547	26%	35%	133	1.62	1.67	19	30	
Jess' Cut Off	4/5 area	4G	4	7,965	7,755	210	1,160	1,179	18%	33%	97	2.58	2.10	19	40	
Vogue	4/5 area	4H	4	7,755	7,245	510	1,860	1,929	27%	41%	134	5.71	4.74	19	90	
Giggle Gulch	4/5 area	4J	2	7,420	7,203	217	1,130	1,151	19%	23%	90	2.33	1.90	24	45	



				Ele	vation	Total	Horz.	Slope	Perce	ent Slop	Avg.	Horz.	Slope S	kiers A	At Area	
Trail		Trail	Skill	Тор	Bottom	Vert.	Dist.	Dist.		-	Width	Area	Area			
Name		No.	Class	Feet	Feet	Feet	Feet	Feet	Avg.	Steep.	Feet	Acres	Acres D	ensity	Total	
Boulevard		4K	2	8,016	7,750	266	2,740	2,753	10%	10%	43	2.69	2.70	24	65	
Short Cut	4/5 area	4L	2	7,413	7,094	319	3,060	3,077	10%	10%	53	3.74	3.01	24	70	
		4M	3	7,175	7,040	135	550	566	25%	26%	336	4.24	4.37	19	85	
Bear Claw		40	3	7,880	7,760	120	310	332	39%	39%	200	1.42	1.52	19	30	
Lower Eagle's Nest	4/5 area	4P	2	7,740	7,415	325	1,880	1,908	17%	19%	144	6.22	5.05	24	120	
Lower Vertigo	4/5 area	4Q	3	7,860	7,730	130	410	430	32%	32%	308	2.90	2.43	19	45	
	1/5 area	4R	3	7,750	7,510	240	1,630	1,648	15%	32%	123	4.59	0.93	19	20	
Main Drag		4S	2	7,785	7,643	142	910	921	16%	16%	22	0.46	0.46	24	10	
Mid Right-O-Way	2/5 area	Х	2	7,205	7,050	155	1,680	1,687	9%	9%	53	2.06	0.83	24	20	
Lower Right-O-Way	2/5 area	Y	2	7,050	6,904	146	2,310	2,315	6%	6%	33	1.76	0.70	24	15	
Total Upper Lift 3 &	4	17	(not inc	luding X	Y)			26,547	(not in	cluding X	,Y)		52.88		940	
Lift 5 - Bashor Bowl																
Bashor Terrain Park		5A	4	7,685	7,540	145	630	646	23%	25%	133	1.93	1.98	19	40	
Bashor Terrain Park		5B	4	7,760	7,555	205	810	836	25%	29%	268	4.98	5.14	19	100	
Bashor Terrain Park		5C	4	7,770	7,490	280	1.120	1.154	25%	29%	102	2.62	2.70	19	50	
Super Pipe		5D	5	7,790	7.530	260	1.380	1.404	19%	29%	102	3.22	3.28	15	50	
Mid Yoo Hoo		5E	3	7.822	7.615	207	1.880	1.891	11%	11%	37	1.59	1.60	19	30	
		4I	4	7,790	7,487	303	1.510	1.540	20%	35%	181	6.29	6.42	19	120	
	4/5 area	4R	3	7,750	7,510	240	1,630	1,648	15%	32%	123	4.59	3.71	19	70	
Total Lift 5		6	(not inc	luding 4I	,4R)	210	1,000	6,736	(not in	cluding 4	I,4R)		25.31	17	470	
Lift 6 - Rough Rider																
Life o Rough Ruter	half	6A	1	7 708	7 485	223	1 4 2 0	1 437	16%	18%	174	5 67	2 87	24	70	
	half	64	2	7 708	7 485	223	1,120	1,137	16%	18%	174	5.67	2.87	24	70	
	neug	6B	2	7,708	7 485	223	1,420	1,437	15%	23%	146	4 94	5.00	24	120	
Total Lift 6		3	2	7,700	7,105	220	1,170	4,362	1070	2070	110	1.21	10.74	21	260	
Lift 7 - Thunderhead	l.															
Upper Vagabond	4/5 area	7A	3	9,071	8,345	726	3,040	3,125	24%	34%	145	10.13	8.33	19	160	
Lower Vagabond		7B	3	8,345	7,441	904	3,760	3,867	24%	40%	166	14.36	14.77	19	280	
		7C	6	7,700	7,500	200	1,100	1,118	18%	28%	46	1.15	1.17	7	10	
Mother Nature		7D	6	8,200	8,020	180	370	411	49%	50%	82	0.70	0.78	7	5	
Upper Concentration	4/5 area	7E	6	8,952	8,155	797	1,700	1,878	47%	56%	294	11.47	10.14	7	70	
Lower Concentration	1/2 area	7F	3	8,140	7,660	480	1,840	1,902	26%	33%	122	5.14	2.66	19	50	
Lower Concentration	1/2 area	7F	6	8,140	7,660	480	1,840	1,902	26%	33%	122	5.14	2.66	7	20	
	4/5 area	7G	6	9,071	8,770	301	700	762	43%	51%	98	1.57	1.37	7	10	
Oops	4/5 area	7H	6	8,920	8,670	250	560	613	45%	51%	142	1.83	1.60	7	10	
Ted's Ridge	4/5 area	7I	6	8,650	8,030	620	1,570	1,688	39%	53%	145	5.22	4.49	7	30	
Vertigo	4/5 area	7J	6	8,570	7,860	710	1,470	1,632	48%	54%	159	5.35	4.75	7	35	
Betwixt	4/5 area	7K	3	8,334	8,130	204	1,880	1,891	11%	11%	34	1.46	1.18	19	20	
Eagle's Nest	4/5 area	7L	3	8,130	7,740	390	1,410	1,463	28%	37%	125	4.04	3.35	19	65	
Lower Broadway		7M	2	7,750	7,538	212	1,300	1,317	16%	19%	81	2.41	2.44	24	60	
Feather	4/5 area	7N	2	8,890	8,851	39	570	571	7%	7%	43	0.56	0.45	24	10	
Upper Why Not	4/5 area	70	2	8,820	8,651	169	1,430	1,440	12%	12%	35	1.15	0.93	24	20	
Mid Why Not	4/5 area	7P	2	8,598	8,357	241	2,600	2,611	9%	10%	29	1.71	1.38	24	35	
Lower Why Not	4/5 area	7Q	2	8,355	7,470	885	7,770	7,820	11%	21%	31	5.59	4.50	24	110	
Upper Arrowhead G	ades	7R	6	8,810	8,210	600	1,300	1,432	46%	50%	176	5.26	5.79	4	20	1/2 dens.
Lower Arrowhead G	ades	7S	6	8,220	7,740	480	1,220	1,311	39%	53%	124	3.46	3.72	4	15	1/2 dens.
	1/5 area	8E	2	9,055	8,825	230	1,780	1,795	13%	16%	25	1.02	0.21	24	5	
Total Lift 7		20	(not inc	luding 8E	E)			38,755	(not in	cluding 8	E)		76.64		1,040	



				Ele	vation	Total	Horz.	Slope	Perce	ent Slon	Avg.	Horz.	Slope	Skiers A	At Area	
Trail		Trail	Skill	Тор	Bottom	Vert.	Dist.	Dist.		r	Width	Area	Area			
Name		No.	Class	Feet	Feet	Feet	Feet	Feet	Avg.	Steep.	Feet	Acres	Acres I	Density	Total	
Lift 8 - Burgess Cre	eek								0					v		
Tower	4/5 area	8A	2	9,196	9,060	136	1,530	1,536	9%	24%	118	4.16	3.34	24	80	
Ruby's Run		8B	3	9,060	8,835	225	710	745	32%	32%	409	6.66	6.99	19	135	
Lightning		8C	3	8,809	8,475	334	1,070	1,121	31%	33%	245	6.02	6.31	19	120	
Blizzard		8D	5	8,860	8,565	295	890	938	33%	40%	135	2.75	2.90	15	40	
	3/5 area	8E	2	9,055	8,825	230	1,780	1,795	13%	16%	25	1.02	0.62	24	15	
Northern		8F	3	9,090	8,809	281	940	981	30%	32%	145	3.12	3.26	19	60	
White Out		8G	4	9,175	8,625	550	1,360	1,467	40%	43%	163	5.08	5.48	19	105	
Skyline	3/5 area	8H	3	9,196	9,055	141	940	951	15%	34%	114	2.46	1.49	19	30	
Velvet	3/5 area	8I	3	9,189	9,075	114	790	798	14%	17%	63	1.15	0.70	19	15	
Lower Rainbow	1/4 area	11V	3	9,055	8,227	828	3,740	3,831	22%	37%	203	17.39	4.45	19	85	
Total Lift 8		9	(not inc	luding 11	V)			10,331	(not in	cluding 1	1V)		35.54		685	
Lift 9 - Pony Express	5															
Middle Rib		9A	5	9,736	8,325	1,411	4,720	4,926	30%	50%	97	10.46	10.92	15	160	
Outlaw		9B	5	8,770	8,180	590	2,290	2,365	26%	50%	94	4.95	5.11	15	75	
Canter/Lariat		9C	5	8,329	8,081	248	2,200	2,214	11%	13%	27	1.37	1.38	15	20	
Lower Pony Liftline		9D	5	8,334	8,094	240	960	990	25%	30%	52	1.16	1.19	15	15	
Royal Flush Right		9E	6	9,500	8,770	730	1,650	1,804	44%	52%	140	5.31	5.81	4	20	1/2 dens.
Royal Flush Left		9F	6	9,470	9,022	448	980	1,078	46%	54%	173	3.89	4.28	7	30	
Ambush		9G	6	8,910	8,575	335	870	932	39%	44%	127	2.53	2.71	7	20	
Cinch		9H	5	9,660	9,440	220	1,290	1,309	17%	29%	80	2.37	2.40	15	35	
Fools Gold		9I	5	9,711	9,510	201	611	643	33%	40%	390	5.47	5.76	7	40	1/2 dens.
Cabin Fever		9J	6	9,728	9,475	253	800	839	32%	48%	241	4.42	4.64	4	15	1/2 dens.
Pony Liftline		9K	6	9,731	8,620	1,111	2,900	3,106	38%	49%	99	6.60	7.07	7	50	
Diamond Hitch		9L	6	9,363	8,469	894	2,580	2,731	35%	49%	163	9.68	10.24	4	35	1/2 dens.
Chaps		9M	5	8,640	8,350	290	690	748	42%	43%	56	0.89	0.97	15	15	
Longhorn		9N	5	9,736	8,150	1,586	5,130	5,370	31%	47%	86	10.10	10.57	15	155	
WJW		90	6	8,943	8,760	183	400	440	46%	50%	147	1.35	1.48	7	10	
Flying Z Gulch		9P	5	9,736	9,045	691	3,160	3,235	22%	33%	95	6.88	7.04	15	100	
Chuckwagon		9Q	5	9,080	8,963	117	620	631	19%	19%	71	1.01	1.03	15	15	
N.D.		9R	5	9,074	9,014	60	430	434	14%	14%	70	0.69	0.70	15	10	
Wapiti		9S	5	9,088	9,036	52	700	702	7%	7%	21	0.33	0.33	15	5	
Nash Junction		9T	5	9,620	9,160	460	1,320	1,398	35%	45%	158	4.79	5.07	7	35	1/2 dens.
Total Lift 9		20						35,893					88.70		860	
Lift 10 - Bar UE																
Buddy's Run	2/10 area	11A	4	10,374	9,015	1,359	5,280	5,452	26%	45%	183	22.20	4.58	19	85	
Upper SP Liftline	2/10 area	11C	6	10,370	9,840	530	1,670	1,752	32%	47%	43	1.64	0.34	7	2	
Mid SP Liftline	2/10 area	11D	5	9,820	9,646	174	710	731	25%	29%	54	0.88	0.18	15	2	
Lower SP Liftline	2/10 area	11E	6	9,633	9,172	461	1,380	1,455	33%	47%	51	1.61	0.34	7	2	
Triangle 3	2/10 area	11F	6	10,370	9,780	590	2,050	2,133	29%	49%	309	14.53	3.02	2	5	1/3 dens.
Calf Roper	2/10 area	11G	4	9,876	9,701	175	1,490	1,500	12%	12%	32	1.10	0.22	19	5	
Meadow Lane	2/10 area	11H	4	9,725	9,580	145	1,150	1,159	13%	14%	39	1.03	0.21	19	5	
Cyclone	3/10 area	11I	5	9,720	9,080	640	1,850	1,958	35%	48%	174	7.37	2.34	15	35	
Storm Peak Right	2/10 area	11Q	6	10,374	9,700	674	2,400	2,493	28%	50%	323	17.77	3.69	7	25	
Total Lift 10		0	(not inc	luding pa	urtial trails)			0	(not in	cluding p	artial tra	ils)	14.94		166	



				Ele	vation	Total	Horz.	Slope	Perce	nt Slop	Avg.	Horz.	Slope S	Skiers A	t Area	
Trail		Trail	Skill	Тор	Bottom	Vert.	Dist.	Dist.			Width	Area	Area			
Name		No.	Class	Feet	Feet	Feet	Feet	Feet	Avg.	Steep.	Feet	Acres	Acres D	Density	Total	
Lift 11 - Storm Peak																
Buddy's Run	8/10 area	11A	5	10,374	9,015	1,359	5,280	5,452	26%	45%	183	22.20	18.34	15	265	
Drop Out	8/10 area	11B	5	9,015	8,227	788	2,490	2,612	32%	49%	275	15.71	13.18	15	190	
Upper SP Liftline	8/10 area	11C	6	10,370	9,840	530	1,670	1,752	32%	47%	43	1.64	1.38	7	10	
Mid SP Liftline	8/10 area	11D	5	9,820	9,646	174	710	731	25%	29%	54	0.88	0.73	15	10	
Lower SP Liftline	8/10 area	11E	6	9,633	9,172	461	1,380	1,455	33%	47%	51	1.61	1.36	7	10	
Triangle 3	8/10 area	11F	6	10,370	9,780	590	2,050	2,133	29%	49%	309	14.53	12.10	2	30	1/3 dens.
Calf Roper	8/10 area	11G	4	9,876	9,701	175	1,490	1,500	12%	12%	32	1.10	0.89	19	15	
Meadow Lane	8/10 area	11H	4	9,725	9,580	145	1,150	1,159	13%	14%	39	1.03	0.83	19	15	
Cyclone	6/10 area	11I	5	9,720	9,080	640	1,850	1,958	35%	48%	174	7.37	4.68	15	70	
Vortex	8/10 area	11J	6	8,800	8,330	470	1,180	1,270	40%	57%	213	5.78	4.98	7	35	
Tornado Lane	8/10 area	11K	4	9,020	8,470	550	2,570	2,628	21%	34%	95	5.62	4.60	19	85	
	8/10 area	11L	6	8,740	8,407	333	940	997	35%	51%	144	3.10	2.63	7	20	
Typhoon/Tornado	8/10 area	11M	6	9,720	8,750	970	2,520	2,700	38%	51%	202	11.66	9.99	7	70	
Nelson's Run	8/10 area	11N	5	9,720	8,480	1,240	3,160	3,395	39%	45%	119	8.63	7.42	15	110	
Twister	8/10 area	110	6	9,710	8,565	1.145	2,920	3.136	39%	51%	142	9.51	8.18	7	55	
Hurricane	8/10 area	11P	5	9,460	8.650	810	2.000	2.158	41%	47%	180	8.27	7.14	15	105	
Storm Peak Right	8/10 area	110	6	10 374	9,700	674	2,400	2,493	28%	50%	323	17 77	14 77	7	105	
Storm Peak Left	8/10 area	11R	5	10,365	9,780	585	1 750	1 845	33%	45%	228	9 14	7.71	15	110	
Storm Peak Traverse	1/2 area	115	5	10,301	10,230	71	600	604	12%	23%	76	1.04	0.53	15	10	
Unner Rainbow	8/10 area	115	5	9 730	9.055	675	2 560	2 647	26%	39%	148	8.69	7 19	15	105	
Rainbow Cut-off	8/10 area	1111	5	9,600	9,000	110	420	134	26%	28%	71	0.69	0.56	15	10	
Lower Painbow	3/4 area	11V	3	0.055	9,70 8 227	828	3 740	2 921	20%	2070	202	17.20	12.26	10	255	
Lower Rainbow	8/10 area	11W	6	9,055	8 930	500	1 100	1 208	15%	5770 60%	203	2.11	13.50	7	15	
Total Lift 11	0/10 ureu	23	0	7,450	0,750	500	1,100	1,200	4,570	0070	04	2.11	1// 38	/	1 705	
		23						40,077					144.50		1,705	
Lift 12 - Four Points																
Drop Out	2/10 area	11B	5	9.015	8 227	788	2 490	2 612	32%	49%	275	15 71	3 30	15	50	
Cyclone	1/10 area	111	5	9,720	9,080	640	1 850	1 958	35%	48%	174	7 37	0.78	15	10	
Vortex	2/10 area	111	6	8 800	8 330	470	1,000	1,270	40%	-1070 57%	213	5 78	1.24	15	10	
Tornado Lane	2/10 area	11K	4	9,000	8 470	550	2 570	2 628	21%	34%	95	5.62	1.24	19	20	
Tomado Lanc	2/10 area	111	6	9,020 8 740	8 407	333	940	997	35%	51%	144	3.10	0.66	7	5	
Typhoon Tornado	2/10 area	11M	6	0,740	8 750	970	2 520	2 700	38%	51%	202	11.66	2.50	7	15	
Nolson's Pun	2/10 area	11NI	5	0,720	8,750	1 240	2,520	2,700	30%	J170 4504	110	8.63	1.95	15	25	
Twister	2/10 area	110	5	9,720	0,400 0 565	1,240	2,020	2 126	200/	4J70	142	0.05	2.04	15	15	
I wister Hurricano	2/10 area	110	5	9,710	8,505	1,145 810	2,920	2 158	3970 A104	J170 4704	142	9.31 8.27	2.04	15	25	
Linnar Dainhaw	2/10 area	111	5	9,400	0.055	675	2,000	2,130	4170 260/	4770 200/	149	0.27 8.60	1.70	15	25	
Deper Kallbow	2/10 area	1111	5	9,750	9,055	110	2,500	2,047	20%	39% 200/	140	0.09	0.14	15	23	
Kallibow Cut-oli	2/10 area	11W	5	9,000	9,490	500	420	1 209	20% 450/	20% 600/	/1 04	0.08	0.14	15	5	
Total Lift 12	2/10 <i>ureu</i>	11W	(not in	9,450	0,950	300	1,100	1,208	4.5%	oluding n	04 artial tra	2.11	17.71	/	207	
10tal Litt 12		0	(not in	luung pa	i tiai traiis)			0	(not m	luung p		uis)	17.71		207	
Lift 13 - Morningsid	e															
Alarm Clock/Spoore	Dor	134	5	10 500	10.000	401	2 820	2 872	1704	4504	121	7 83	7.05	7	60	1/2 dong
Corridor	Dai	13A 12P	5	10,500	10,009	491	2,650	1 160	1770 204	4,5 %	22	0.62	0.62	15	10	1/2 uclis.
Morningside Liftline		130	5	10,500	10,000	518	2 580	2 621	2/0	5104	01	5.41	5.52	15	20	1/2 dong
Roostar		120	6	10,327	10,005	401	2,360	1 709	20%	J170 400/	91	2 72	2.92	4	20	1/2 dens.
Koostei		120	5	10,490	10,095	200	1,000	1,708	24%	49%	90	5.12 9.47	3.65 9.76	4	15	1/2 defis.
Huevos		13E	5	10,439	10,150	309	1,170	1,210	20%	42%	515	8.47 1.52	8.70 1.54	7	10	1/2 dens.
Over Easy		13F	5	10,538	10,348	190	1,440	1,452	15%	20%	46	1.55	1.54	/	10	1/2 dens.
Frying Pan		13G	5	10,348	10,200	148	520	541	28%	44%	189	2.26	2.35	/	15	1/2 dens.
Lower Cowboy Coffe	а	13H	5	10,190	10,009	181	2,050	2,058	9%	9%	100	4.69	4.71	7	35	1/2 dens.
		13I	5	10,368	10,009	359	2,190	2,219	16%	25%	339	17.04	17.27	4	65	1/4 dens.
		13J	6	10,343	10,046	297	1,710	1,736	17%	21%	331	13.01	13.20	2	25	1/4 dens.
		13K	6	10,376	10,105	271	1,160	1,191	23%	32%	294	7.83	8.04	2	15	1/4 dens.
		13L	4	10,351	10,156	195	770	794	25%	40%	340	6.01	6.20	5	30	1/4 dens.
		13M	4	10,362	10,250	112	470	483	24%	24%	471	5.08	5.22	5	25	1/4 dens.
Total Lift 13		13						20,057					85.21		390	



				Ele	vation	Total	Horz.	Slone	Perce	nt Slor	Avg.	Horz.	Slone	Skiers /	At Area	
Trail		Trail	Skill	Тор	Bottom	Vert.	Dist.	Dist.	1 01 00	more	Width	Area	Area			
Name		No.	Class	Feet	Feet	Feet	Feet	Feet	Avg.	Steep.	Feet	Acres	Acres I	Density	Total	
Lift 14 - Elkhead									0	•				·		
Sunnyside		14A	3	9,196	8,442	754	2,690	2,794	28%	39%	110	6.82	7.08	19	135	
Moon Dog		14B	5	8,715	8,582	133	300	328	44%	44%	96	0.66	0.72	15	10	
Elkhead Liftline		14C	6	9,070	8,510	560	1,300	1,415	43%	59%	95	2.83	3.08	7	20	
Spur Run Road		14D	2	9,055	8,530	525	5,050	5,077	10%	13%	52	6.03	6.06	24	145	
Spur Run Face		14E	3	8,850	8,700	150	560	580	27%	27%	146	1.88	1.95	19	35	
Huffman's		14F	3	8,988	8,805	183	710	733	26%	35%	69	1.12	1.16	19	20	
Tower	1/5 area	8A	2	9,196	9,060	136	1,530	1,536	9%	24%	118	4.16	0.84	24	20	
Skyline	2/5 area	8H	3	9,196	9,055	141	940	951	15%	34%	114	2.46	1.00	19	20	
Velvet	2/5 area	8I	3	9,189	9,075	114	790	798	14%	17%	63	1.15	0.46	19	10	
Moonlight	1/5 area	15H	3	9,055	8,454	601	2,920	2,981	21%	30%	130	8.70	1.78	19	35	
Total Lift 14		6	(not inc	luding pa	artial trails)	1		10,927	(not in	cluding p	artial tra	uls)	24.12		450	
Lift 15 - Sundown																
One O'Clock		15A	3	9,715	9,150	565	1,770	1,858	32%	36%	137	5.56	5.84	19	110	
Lower High Noon		15B	3	9,150	8,454	696	2,740	2,827	25%	40%	139	8.74	9.02	19	170	
Two O'Clock		15C	4	9,785	9,150	635	1,860	1,965	34%	43%	121	5.16	5.45	19	105	
Daybreak		15D	4	9,175	8,540	635	2,540	2,618	25%	41%	107	6.23	6.42	19	120	
Three O'Clock		15E	6	10,379	8,820	1,559	4,090	4,377	38%	57%	144	13.52	14.47	7	100	
Traverse		15F	5	10,379	10,315	64	820	822	8%	8%	114	2.15	2.16	15	30	
Lights Out Sunset		15G	5	9,800	8,780	1,020	2,970	3,140	34%	45%	212	14.46	15.29	15	220	
Moonlight	4/5 area	15H	3	9,055	8,454	601	2,920	2,981	21%	30%	130	8.70	7.10	19	135	
Closet		15I	6	10,286	8,742	1,544	3,940	4,232	39%	48%	756	68.35	73.41	1.8	130	1/4 dens.
Shadows		15J	6	10,360	8,570	1,790	4,380	4,732	41%	45%	836	84.11	90.86	1.8	160	1/4 dens.
Twilight		15K	7	10,380	8,505	1,875	4,700	5,060	40%	67%	94	10.12	10.90	5	55	1/2 dens.
-		15L	7	10,364	8,509	1,855	4,660	5,016	40%	63%	84	9.02	9.71	5	50	1/2 dens.
		15M	6	10,012	9,070	942	2,500	2,672	38%	47%	1,041	59.77	63.87	2	150	1/3 dens.
Storm Peak Left	2/10 area	11R	5	10,365	9,780	585	1,760	1,855	33%	45%	226	9.14	1.93	15	30	
Storm Peak Traverse	1/2 area	11S	5	10,345	10,230	115	550	562	21%	23%	55	0.70	0.36	15	5	
Upper High Noon	1/5 area	18A	3	10,379	9,139	1,240	6,590	6,706	19%	32%	173	26.12	5.32	19	100	
Total Lift 15		13	(not inc	luding 11	R, 11S,18	A)		42,300	(not in	cluding 1	1R, 11S,	,18A)	322.11		1,670	
Lift 16 - Priest Cree	k															
Back -up Lift only																
Total Lift 16		1						0					0.00		0	
Lift 17 - South Peak																
Spike		17A	2	9,358	9,055	303	1,950	1,973	16%	21%	126	5.62	5.69	24	135	
South Peak Liftline		17B	3	9,358	9,070	288	1,590	1,616	18%	33%	81	2.95	3.00	19	55	
Total Lift 17		2						3,589					8.69		190	
Lift 18 - Sunshine																
Upper High Noon	4/5 area	18A	3	10,379	9,139	1,240	6,590	6,706	19%	32%	173	26.12	21.26	19	405	
Fawn		18B	3	9,450	9,230	220	1,080	1,102	20%	27%	96	2.37	2.42	19	45	
Sunshine Liftline		18C	3	10,370	9,139	1,231	5,400	5,539	23%	31%	211	26.21	26.88	19	510	
Flintlock		18D	3	10,020	9,139	881	4,330	4,419	20%	34%	148	14.67	14.97	19	285	
Upper Quickdraw		18E	4	10,360	9,890	470	1,450	1,524	32%	38%	244	8.11	8.53	19	160	
Lower Quickdraw	2/3 area	18F	3	9,890	9,210	680	3,940	3,998	17%	24%	150	13.56	9.17	19	175	
Kit		18G	3	10,015	9,998	17	280	281	6%	6%	42	0.27	0.27	19	5	
Trap		18H	2	9,980	9,900	80	360	369	22%	22%	97	0.80	0.82	24	20	
Cub		18I	3	9,915	9,740	175	800	819	22%	22%	172	3.15	3.22	19	60	
Pup	1/2 area	18J	3	9,770	9,495	275	1,000	1,037	28%	38%	134	3.08	3.19	19	60	
Buckshot	1/2 area	18K	4	9,700	9,440	260	1,010	1,043	26%	43%	119	2.76	2.85	19	55	



				Ele	vation	Total	Horz.	Slope	Perce	nt Slop	Avg.	Horz.	Slope	Skiers	At Area	
Trail		Trail	Skill	Тор	Bottom	Vert.	Dist.	Dist.		•	Width	Area	Area	L		
Name		No.	Class	Feet	Feet	Feet	Feet	Feet	Avg.	Steep.	Feet	Acres	Acres	Density	Total	
Lift 18 - Sunshine ((cont'd)															
Ramrod	1/8 area	18L	2	9,590	9,305	285	1,220	1,253	23%	26%	198	5.55	0.71	24	15	
Ramrod	3/8 area	18L	3	9,590	9,305	285	1,220	1,253	23%	26%	198	5.55	2.14	19	40	
Upper Tomohawk		18M	3	10,379	10,050	329	1,250	1,293	26%	33%	215	6.16	6.37	19	120	
Lower Tomohawk	1/8 area	18N	2	10,060	9,070	990	6,790	6,862	15%	25%	187	29.12	3.68	24	90	
Lower Tomohawk	3/8 area	18N	3	10,060	9,070	990	6,790	6,862	15%	25%	187	29.12	11.04	19	210	
Sundial		18O	2	10,290	10,060	230	1,280	1,300	18%	27%	73	2.14	2.17	24	50	
Rendezvous Way		18P	2	9,855	9,520	335	2,620	2,641	13%	18%	47	2.83	2.85	24	70	
Baby Powder	gladed	18Q	3	9,690	9,305	385	2,450	2,480	16%	19%	197	11.06	11.20	10	105	1/2 dens.
Total Lift 18		17	(not in	cluding cla	ass 3 18L,	18N)		42,665	(not ind	cluding c	lass 3 18	3L, 18N)	133.74		2,480	
Base Area Beginne	er Lifts															
5			1	6,902	6,896	6	100	100	6%	6%	44	0.10	0.10	36	5	
			1	6,926	6,904	22	220	221	10%	10%	91	0.46	0.46	36	15	
			1	6,963	6,931	32	260	262	12%	12%	79	0.47	0.48	36	15	
			1	6,945	6,921	24	210	211	11%	11%	77	0.37	0.37	36	15	
Total Base Area Beg	ginner Lifts	4			,			795					1.41		50	
Lift 20 - Swinger P	latter															
Swinger	latter	4N	2	7 480	7 2 10	270	1 630	1 652	17%	18%	96	3 58	3 63	24	85	
Swinger		20A	3	7,500	7,250	250	1,330	1,353	19%	22%	191	5.83	5.93	19	115	
Total Lift 20		2	5	1,000	1,200	200	1,000	3,006	1770	2270	1/1	0.00	9.56		200	
Life 21 Dechar M	7.7															
Lift 21 - Dashor MA		21 A	1	7 550	7 523	36	340	342	110%	110%	186	1 45	1.46	36	55	
		21A 21B	1	7,539	7,525	26	340	342	1170 80%	1170 80%	128	1.45	1.40	36	35	
		21D	1	7,557	7,511	20	340 85	85	2%	2%	120	0.37	0.37	36	15	
Total Lift 21		3	1	7,501	1,555		00	768	270	270	170	0.57	2.83	50	105	
Lift 22																
		22A	2	10.055	9 900	155	1.080	1 091	14%	16%	123	3.05	3.08	24	75	
		22/1 22B	2	10,085	9,870	215	1,600	1,654	13%	16%	119	4 48	4 52	24	110	
		220	2	9,920	9745	175	870	887	20%	24%	165	3 30	3 37	24	80	
		22D	4	9,970	9,720	250	1.080	1.109	23%	39%	347	8.61	8.84	10	85	1/2.dens
		22E	3	10.010	9,720	290	1,000	1 244	24%	29%	228	6.32	6.50	10	60	1/2 dens.
		22F	2	10.045	9,645	400	1,210	1,912	21%	23%	172	7.40	7.57	24	180	1/2 401151
		22G	2	9.665	9,505	160	1,050	1.062	15%	19%	146	3.53	3 57	24	85	
		22H	2	9,760	9,290	470	3,900	3.928	12%	19%	129	11.52	11.60	24	280	
		221	2	9.800	9,600	200	900	922	22%	24%	109	2.25	2.30	24	55	
		22J	2	9.870	9,520	350	2.030	2.060	17%	23%	125	5.82	5.91	24	140	
		22K	2	9,725	9,375	350	2,500	2,524	14%	17%	166	9.51	9.60	24	230	
Lower Quickdraw	1/3 area	18F	3	9,890	9,210	680	3,940	3,998	17%	24%	150	13.56	4.59	19	85	
Pup	1/2 area	18J	3	9,770	9,495	275	1,000	1,037	28%	38%	134	3.08	1.60	19	30	
Buckshot	1/2 area	18K	4	9,700	9,440	260	1,010	1,043	26%	43%	119	2.76	1.43	19	25	
Ramrod	1/8 area	18L	2	9,590	9,305	285	1,220	1,253	23%	26%	198	5.55	0.71	24	15	
Ramrod	3/8 area	18L	3	9,590	9,305	285	1,220	1,253	23%	26%	198	5.55	2.14	19	40	
Lower Tomohawk	1/8 area	18N	2	10,060	9,070	990	6,790	6,862	15%	25%	187	29.12	3.68	24	90	
Lower Tomohawk	3/8 area	18N	3	10,060	9,070	990	6,790	6,862	15%	25%	187	29.12	11.04	19	210	
		18R	2	9,840	9,615	225	2,280	2,291	10%	10%	61	3.18	3.20	24	75	
Total Lift 22		11	(not in	cluding '1	8' trails)			18,394	(not inc	cluding '	18' trails))	95.23		1,950	
Total Return Skiin	σ	176						61.5	miles				1.206.5	Acres	14.815	



			Ele	vation	Total	Horz.	Slope	Perce	ent Slop	Avg.	Horz.	Slope	Skiers	At Area	
Trail	Trail	Skill	Тор	Bottom	Vert.	Dist.	Dist.			Width	Area	Area	1		
Name	No.	Class	Feet	Feet	Feet	Feet	Feet	Avg.	Steep.	Feet	Acres	Acres	Density	Total	
Connectors & Hike-To Trails															
	А	4	10,528	10,240	288	1,260	1,292	23%	30%	62	1.80	1.85	19	35	
Cowtrack	В	6	10,400	9,765	635	2,160	2,251	29%	54%	400	19.81	20.65	4	70	1/2 dens.
The Ridge	С	6	10,530	9,885	645	2,230	2,321	29%	56%	356	18.21	18.96	4	65	1/2 dens.
Chute 1	D	7	10,380	9,955	425	1,040	1,123	41%	65%	258	6.17	6.67	5	35	1/2 dens.
Chute 2	E	7	10,310	9,990	320	710	779	45%	80%	217	3.54	3.88	5	20	1/2 dens.
Chute 3	F	7	10,530	10,035	495	1,060	1,170	47%	80%	139	3.39	3.74	5	20	1/2 dens.
Big Meadow	G	6	10,035	9,580	455	2,610	2,649	17%	36%	441	26.41	26.81	2	45	1/4 dens.
Flying Z	Н	6	9,900	9,160	740	2,970	3,061	25%	49%	399	27.21	28.04	2	50	1/4 dens.
Upper Cowboy Coffe	Ι	5	10,325	10,190	135	890	900	15%	23%	85	1.73	1.75	15	25	
Jump Start	J	6	10,250	10,075	175	830	848	21%	33%	85	1.62	1.66	7	10	
Hot Cakes	K	6	10,260	10,015	245	1,270	1,293	19%	26%	84	2.44	2.48	7	15	
Tomahawk Traverse	L	5	10,010	9,925	85	2,570	2,571	3%	3%	28	1.65	1.65	15	25	
High Line	М	3	10,370	10,185	185	1,890	1,899	10%	10%	68	2.93	2.94	19	55	
Lower High Noon	Ν	3	9,365	9,150	215	1,050	1,072	20%	27%	173	4.17	4.26	19	80	
South Peak Flats	0	2	9,365	9,250	115	1,060	1,066	11%	13%	114	2.77	2.79	24	65	
Rolex Catwalk/Broadv	Р	2	9,325	8,440	885	6,330	6,392	14%	18%	45	6.56	6.62	24	160	
West Side	Q	6	9,210	8,580	630	1,700	1,813	37%	49%	104	4.07	4.34	7	30	
Rolex	R	6	9,250	8,450	800	2,120	2,266	38%	50%	136	6.62	7.08	7	50	
Park Lane	S	3	9,035	8,920	115	1,170	1,176	10%	10%	21	0.57	0.57	19	10	
Surprise	Т	3	8,590	8,310	280	870	914	32%	37%	127	2.54	2.67	19	50	
So What	U	2	8,365	8,265	100	1,440	1,443	7%	7%	19	0.64	0.64	24	15	
B.C. Ski Way	V	3	8,200	7,570	630	5,980	6,013	11%	15%	37	5.12	5.15	19	100	
Upper Right-O-Way	W	2	7,435	7,205	230	1,810	1,825	13%	14%	60	2.50	2.52	24	60	
Mid Right-O-Way 2/5 area	Х	2	7,205	7,050	155	1,680	1,687	9%	9%	53	2.06	0.83	24	20	
Lower Right-O-Way 2/5 area	Y	2	7,050	6,904	146	2,310	2,315	6%	6%	33	1.76	0.70	24	15	
	Z	2	7,605	7,500	105	1,110	1,115	9%	9%	54	1.38	1.39	24	35	
Walk Up Calf	AA	6	10,560	10,050	510	2,130	2,190	24%	57%	461	22.54	23.18	4	80	1/2 dens.
East Face Right	BB	7	10,560	9,950	610	1,440	1,564	42%	65%	427	14.13	15.35	3	40	1/4 dens.
East Face Left	CC	7	10,560	10,090	470	1,470	1,543	32%	69%	210	7.07	7.42	5	35	1/2 dens.
North St. Pats	DD	7	10,080	9,960	120	780	789	15%	15%	81	1.45	1.47	5	5	1/2 dens.
Last Chance	EE	- 7	10,160	9,585	575	5,690	5,719	10%	26%	21	2.75	2.76	10	30	
	FF	7	10,450	10,000	450	1,080	1,170	42%	65%	477	11.83	12.82	3	30	I/4 dens.
	GG	- 7	10,555	10,120	435	990	1,081	44%	75%+	542	12.31	13.45	3	35	1/4 dens.
	НН	7	10,520	10,110	410	9/0	1,053	42%	90%	329	7.32	7.95	3	20	I/4 dens.
	11	7	10,160	9,950	210	1,750	1,763	12%	13%	19	0.75	0.76	10	10	1/4 1
	JJ	7	10,500	9,970	530	1,630	1,/14	33%	/8%	387	14.48	15.23	3	40	1/4 dens.
Christmas Tree Bowl	KK	/	10,525	10,050	475	980	1,089	48%	8/%	320	1.19	/.99	3	20	1/4 dens.
		5	8,490	8,315	1/5	1,980	1,988	9%	9% 12%	31	1.40	1.41	15	20	
	MM	4	7,520	7,435	85	730	735	12%	12%	104	1.75	1.76	19	35	
		4	7,920	7,800	170	/90	1 1 2 2	8% 150/	8% 150/	20	0.30	0.30	19) 15	
L	00	4	8,050	7,800	170	1,110	1,125	15%	15%	152	0.75	0.70	19	15	
Jump Hill	40		7,520	7,300	220	630	76 007	35%	50%	153	2.22	2.35		1 590	-
Subtotal Connectors, etc	42						76,237					2/5.66		1,580	
Total	218						76.0					1,482.2	Acres	16,395	
		1.0	1. /									20110		224	
Tree Skiing Pioneer Ridge Zoi	ne	1.0	skiers/a	cre								526.0	Acres	326	
Other Tree Skiing Between Tr	ails	0.5	skiers/a	cre								1,485.0	Acres	743	
GRAND TOTAL												3,293.2	Acres	17,464	



Cumulative Ski Trail Balance

Table IV.3 lists the skill level distribution for the return cycle skiing trails only which would be present if all proposals for trail development are implemented. Plate IV.1 shows that the trails are fairly not too different than the existing balance, but with an improvement in the amount of beginner terrain. The shortage in the expert skill class will be mitigated by the tree skiing off the top of the mountain as listed in the next section.

Skill Classification	Acres	Skiers	Balance	Ideal
1 Beginner	11.0	350	2.4%	5%
2 Novice	132.1	3,157	21.3%	10%
3 Low Intermediate	275.2	5,060	34.2%	20%
4 Intermediate	112.9	1,890	12.8%	30%
5 High Intermediate	210.6	2,609	17.6%	20%
6 Advanced	444.0	1,644	11.1%	10%
7 Expert	20.6	105	0.7%	5%
Novice	1,206.5	14,815	100%	100%

TABLE IV.3 CUMULATIVE SKI TRAIL BALANCE STATEMENT RETURN CYCLE SKIING ONLY

Average Density =	14.9	Skiers/Acre
Optimum Density =	18.0	Skiers/Acre
Weighted Demand =	11,591	VTF/Skier/Day



SKI TRAIL BALANCE

PLATE IV.1

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Table IV.4 lists the skill level distribution for all of the designated ski trails and skiways including designated gladed zones but not including the lightly skied areas between designated trails). It shows a bit better balance in the uppermost skill classes.

Ski	ll Classification	Acres	Skiers	Balance	Ideal
1	Beginner	11.0	350	2.1%	5%
2	Novice	147.6	3,527	21.5%	10%
3	Low Intermediate	290.8	5,355	32.7%	20%
4	Intermediate	117.7	1,980	12.1%	30%
5	High Intermediate	215.4	2,679	16.3%	20%
6	Advanced	577.2	2,059	12.6%	10%
7	Expert	120.1	445	2.7%	5%
	TOTALS	1,479.8	16,395	100%	100%

CUMULATIVE SKI TRAIL BALANCE STATEMENT
ALL DESIGNATED SKI TRAILS

TABLE IV.4

Average Density =	12.2	Skiers/Acre
Optimum Density =	17.7	Skiers/Acre
Weighted Demand =	12,006	VTF/Skier/Day





PLATE IV.2



i. Snowmaking Expansion

The existing snowmaking system at Steamboat can cover most of the lower mountain area and several upper mountain trails. Because of the typical abundance of natural snow experienced in Steamboat, snowmaking is primarily used to supplement the natural snow in areas of the lower mountain subject to high sun exposure due to the mountain's southern and western exposures, to provide coverage during the early season and to improve the durability of the snow surface in high wear areas. During periods of low snowfall, snowmaking can be used to improve the surface on many highly used trails. During winters with abundant natural snowfall, many areas do not require snowmaking. On the other hand, some areas such as lower Pioneer Ridge and Lower High Noon are in a "snow shadow" and do not receive as much natural snowfall even during wetter winters due to their geographic orientation.

As mentioned in the Inventory Section, the 2004 MDPA significantly overstated the existing snowmaking acreage, claiming 373 acres. The actual, measured coverage is estimated to be 273 acres serviced by pipeline and hydrants with an additional 22 acres covered lightly by stringing out long runs of hose. The actual amount water used in these ancillary areas is minimal, amounting to only around 1.5 million gallons or less that 1.5% of the annual total.

Snowmaking is proposed for additional areas of the mountain that require additional snow due to exposure, wear due to skier traffic or because they receive less that average natural snow. (e.g., Lower High Noon). Figure 23 illustrates the proposed snowmaking.

In the 2004 MDPA, approximately 90 acres of new snowmaking were proposed and approximately 11 acres of that has been installed (leaving approximately 79 acres not implemented). In this plan, it is proposed to increase snowmaking coverage beyond the existing by approximately 109 total acres.

The reconfigured Roughrider and Bashor area will require replacement of old lines and some new areas of coverage as a result of expanded terrain. Snowmaking is also proposed for Short Cut, Spur Run, Westside, Lower High Noon, Lower Rainbow, Upper Longhorn, Lower Longhorn, Lower Pony Express Liftline, Lower Middle Rib, Upper Middle Rib, BC Skiway, Chaps, Upper SPX Connector, Lower SPX Connector, Daybreak, Spike and lower Tomahawk, and extending upper Tomahawk about 1500 feet farther down the hill.

During the past 6 years Steamboat has pumped an average of 92.5 million gallons (284 AF) from the Yampa River for snowmaking. This is significantly less than the 100 million gallons disclosed in the 2004 MDPA for several reasons. The regrading



of the Headwall area at the base of the mountain providing Ski School Magic Carpet teaching areas at natural grade rather than constructing them on man made snow has reduced water consumption considerably. The introduction of high efficiency snowmaking guns mounted on towers that use less compressed air to atomize and disperse the water has resulted in less water being lost to evaporation during the snowmaking process and, because it is much easier to direct the man made snow to the desired location, less snow (water) is lost to the wind, trees etc.

For many years the findings published in the *Final Report on the Colorado Ski Country USA Water Management Research Project* (February 1996) by Wright Water Engineers has remained the standard for calculating water depletion for snowmaking in Colorado stating that 78% of the water used to produce man made snow returns to the watershed leaving 22% considered consumptive. According to engineers at Resource Engineering, Inc., of Glenwood Springs, Colorado, a consumptive factor 20% consumptive is now being considered because of the new, more efficient snowmaking equipment and techniques available. Considering this new standard, 80% of the 92.5 million gallons used for snowmaking in Steamboat returns to the river and 20%, 18.5 million gallons, 57 acre feet, is considered consumptive.

Analyzing detailed records kept by Steamboat's snowmaking department reveals an overall average of 0.94 acre feet of water per acre was used for snowmaking. Using a simple calculation to estimate the impact of the proposed 109 acres of additional snowmaking coverage would amount to an additional 101.5 acre feet, 20.3 acre feet consumptive, bringing the annual total water consumption for snowmaking to an average of 77.3 acre feet consumptive.

Steamboat has absolute right to 9.7 cfs, with an additional 6.3 cfs conditional, for a maximum continuous flow rate from the river of 7,181 gallons per minute with no maximum withdrawal limit. Additionally, Steamboat is in process of renewing a 30 year lease on 140 AF of water sorted in Yamcola Reservoir, located upstream of the town of Yampa near the headwaters of the Yampa River. This water can be made available during extreme low flow in the river during drought conditions. Steamboat, therefore, has sufficient water rights to support this proposed snowmaking expansion.

The snowmaking system was originally installed using uncoated steel pipe 30 years ago, in 1981. Given the 20 year life expectancy of uncoated, unprotected, piping it is no surprise that there has been considerable deterioration of the original piping infrastructure. Upgrading and replacing the piping system has been a priority during the past several years. New pipe has been installed from the Well Pit pumps by the river through the base area ant to the top of Christie Peak Express Lift as well as along Right-O-Way to the Slope Maintenance Facility.



In 2011 over 5,000 feet of pipe will be replaced along the Yoo Hoo Road from Slope Maintenance to the Control Building. 12,600 feet of additional high priority pipe replace remains and is scheduled for replacement in the next two years. All of the pipe replace has been upsized to carry additional flow capacity.

In 2010 the primary pumps were replaced boosting the system capacity from 3,300 to 4,200 gallons per minute. The additional pumping capacity coupled with new, high efficiency tower mounted snowmaking guns will enable Steamboat to cover the additional proposed terrain in roughly the same timeframe as before allowing this additional terrain to be covered prior to the busy Christmas Holiday period.

Trail	Area
Name	(Acres)
New Snowmaking Coverage	
Short Cut	1.05
Swinger	9.72
Upper Rought Rider	1.95
Rough Rider	11.12
Upper Swinger	6.38
Swinger South	1.98
Spur Run	0.66
Westside	8.16
Lower High Noon	12.90
Daybreak - Lower One O'clock	1.24
Daybreak - Lower Two O'clock	1.52
Daybreak	4.88
Spike - Lower Tomahawk	13.34
Tomahawk Extenstion	3.44
Lower Rainbow	9.03
Longhorn Upper	3.64
Longhorn Lower	5.10
Lower Pony X Liftline	1.02
Middle Rib Lower	1.91
Middle Rib Upper	4.51
BC Skiway	3.51
SPX Connector Upper	0.66
SPX Connector Lower	0.38
Chaps	0.84
Subtotal	109.0

TABLE IV.5PROPOSED SNOWMAKING COVERAGE



j. Mountain Operations - Maintenance Facilities

Grooming is an essential component of mountain operations and any expansion of terrain must be matched by the expansion of the existing grooming effort. Based on the methodology and assumptions generally used in determining grooming requirements, the addition of 60 acres of groomable terrain in the Sunshine Bowl, a further 18 acres in the Bashor zone and additional acreage added in the Pony Express/Pioneer Ridge areas, it would take about 2 additional snowcats if Steamboat chooses to groom all of it every night in one nightly shift. Based on that fact, Steamboat may need to expand their fleet by 2 snowcats and provide expanded maintenance service for the larger fleet. The existing maintenance shops located near the bottom of the Thunderhead lift should have enough capacity to accommodate this small increase in service required.

Storage

Steamboat management is confident that it has enough indoor storage for its existing and near future needs, however, it does have a significant need for additional storage for constructed terrain park features such as boxes, rails, etc., primarily during summer. Steamboat intends to enlarge the outdoor storage area located uphill of the Slope Maintenance shop for summer storage of equipment such as terrain park rails, etc. Additionally, the proposed Bashor gondola top terminal will be designed to accommodate other storage needs.

<u>Ski Patrol</u>

With the expansion onto a new peak with the Sunshine II lift, a new patrol hut will be constructed. Permanently stationing a ski patroller at the top of this lift during operating hours will ensure that a patroller can quickly access any accident simply by skiing downhill.

k. On-Mountain Skier Service Facilities

Current Situation

As listed in the Inventory section, Steamboat has skier service facilities both in the base area and on-mountain. Many of the skier service facilities in the base area are not owned or operated by Steamboat, and thus not under their control. Private businesses have responded to business opportunity here and the Steamboat Ski & Resort Corporation has added their own facilities to supplement those. All base area facilities are located on private land, while all on-mountain facilities are on public land (except the sheltered picnic area and restroom at Bashor which are on both



private and public land). Most of the skiers on Steamboat on any given day are skiing on the upper or mid mountain, far from the base area. Therefore, most skiers eat lunch at one of the on-mountain facilities.

Steamboat has two full service on-mountain food service/skier service facilities including the Thunderhead Lodge, Rendezvous Saddle and one warming hut, Four Points. The Thunderhead Lodge is a very large building containing the top gondola terminal, over 40,000 square feet of skier service space, 1,000 indoor food service seats, gondola storage and F&B warehouse. It also has a large food service facility exclusively for ski school on the second floor. Rendezvous Lodge, located in the Sunshine/Sundown area, is a moderate sized facility with 20,500 square feet of skier service space, 674 indoor food service seats and 480 outdoor food service seats. The Four Points hut is a very small food service facility with kitchen, restrooms, 24 indoor seats and 80 outdoor seats.

There is lunch time overcrowding in all the on mountain restaurants, even on days with moderate business levels. Utilization of outdoor seating on days when weather permits greatly reduces congestion in the restaurant facilities. There are 120 outdoors seats at Thunderhead, 240 at Rendezvous Saddle and 84 at Four Points.

The Thunderhead and Rendezvous facilities are connected to sanitary sewer in the base area, while the PHQ and Four Points currently use septic tanks and leach fields. Water for Thunderhead and Four Points is collected from several springs, and then stored in two storage tanks (the 10,000 gallon Moonlight tank and the 250,000 gallon Rainbow tank). Water for the Rendezvous facility is collected from a nearby infiltration gallery and stored in a 55,000 gallon tank near the restaurant. Sufficient water is available for Thunderhead and Four Points; however, the Rendezvous facility has shown signs of nearing the limit of its water supply.

Analysis

On-site observation and the analysis in the Inventory section both concluded that there is a shortage of skier service space on the mountain, most noticeably in food services. The 2004 MDPA proposed that the Four Points hut be increased in size (to 1,760 square feet with 60 indoor seats), that a new facility be installed in the Cyclone Flats area near the bottom of the Bar UE lift (2,905 square feet with 150 indoor seats) and another hut similar to Four Points (1,055 square feet with 30 indoor seats), would be installed at the top of Sunshine Bowl. It was also proposed that a 2,350 square foot 'sprung' structure be installed in the Bashor Bowl area (on private land), containing 100 food service seats and a small retail facility. None of these projects have been realized; Four Points is scheduled for expansion in the summer 2012 and the current design incorporates seats originally proposed for the Sunshine facility.



The ski area has agreed with the USFS to not pursue construction of the Sunshine facility until a new MDPA is accepted.

On-mountain indoor food service facilities can accommodate approximately 4,428 skiers per day. There is an additional 2,059 skiers per day capacity in the base area. Assuming that about 1,000 skiers remain on the lower mountain for skiing (Headwall & Bashor zones), that means that the on-mountain facilities can only serve about 32% of the skiers indoors on the upper/mid mountain on a peak day (based on 14,000 upper mountain capacity). Acceptable industry levels of service generally place this figure at 60-70% for indoor seats and 20-40% for outdoor seats. As shown on Figure 10, and as experienced during holiday periods, the Sunshine/Sundown area is significantly underserved by the size of the Rendezvous Lodge, and will be even more underserved once another lift is installed in the Sunshine Bowl. As discussed earlier, the quality and size of the food service experience in the Sunshine Bowl is one of the factors that could help attract and keep skiers in this area for the entire day.

As part of development of the Rough Rider Learning Center, a new building will be needed, whose main function will be to service children's ski school and support non-skiing activities. It would also be used in summer for on mountain activities focused in this zone.

Proposed Actions

As mentioned previously, approval has been granted and plans have been produced for a major renovation and expansion of the Four Points facility. These plans would expand the facility to a total of 3,000 square feet, containing approximately 100 food service seats. Seventy of these seats would be available to customers of the 'grab n go' sales point in the early morning, but would be closed late morning and re-opened for lunch as a sit-down full service restaurant. The 'grab n go' sales point would remain open but seating would be limited to the approximately 30 short term indoor seats located adjacent to that outlet.

The 2004 MDPA also proposed a permanent food service facility at the Cyclone Flats area, which has not been implemented. This location will be best suited for development in conjunction with the build-out of Pioneer Ridge skiing facilities discussed in this plan which will likely be beyond the eight to ten year scope of this plan amendment.

The 2004 MDPA also proposed a food service facility at the top of the Sunshine and Sundown lifts. In the intervening time, this proposal was put 'on hold' in order to construct a larger Four Points Hut. It is still a very desirable area due to the large



volume of skier traffic, views, etc. and is again proposed for construction. This facility will be located just east and south of the existing trail sign at Sunshine peak. It will offer approximately 50 indoor seats and 50 outdoor deck seats. Because of the remoteness of this facility and the physical challenges in developing a source of potable water and sanitary sewer facilities a warming hut similar to Vail's Blue Sky Basin with food service offerings limited to pre-packaged product and waterless restroom facilities.

The installation of a new chairlift in the Sunshine Bowl will significantly increase the number of skiers in this zone, and ideally, they should all be able to get lunch in their chosen zone of skiing. Steamboat proposes to respond to the need for additional seats in several different facilities so that their core intermediate guests can have a variety of experiences without leaving the area where the terrain is perfect for their skiing experience. The Rendezvous facility already provides a food court experience and a fine dining experience, but is overcrowded. In order to provide a temporary solution plans are being developed to expand the existing deck and cover portions to improve utilization of outdoor seating. Additionally, it is proposed to expand this facility by approximately 275 indoor seats, (increasing from 674 to 950 indoor seats). This expansion would likely encompass about 10,000 square feet.

At such time as Sunshine II lift is constructed, a new restaurant – lodge will be added beside lower Tomahawk near the 9,320 foot elevation. This restaurant would contain approximately 300 indoor seats, 100 outdoor seats, as well as kitchen, storage, restrooms, etc. It is envisioned that this facility will be approximately 10,000 square feet in size.

As described in a previous section, the new Rough Rider Learning Center will have, at its core, a skier service facility including space for 300 ski school kids to eat lunch at one time (including kitchen space, storage and restrooms specifically for ski school), a café, a guest services desk and restrooms for other guests, and indoor and outdoor storage space for Learning Center and terrain park equipment. The building will be located immediately adjacent to the top terminal of the Bashor Gondola and the gondola cabin storage space. In order to maximize the efficient use of space, it is proposed to use the gondola cabin storage space as ski school seating space during the daytime (gondola cabins are only stored at night, so this space is completely empty during the day). The approximately 3,500 square feet required for cabin storage is almost identical to the 3,000 to 3,600 square feet needed for 300 kids seats (at 10-12 sq. ft. per seat). The kitchen to serve those children would be located in the lodge building immediately adjacent to the seating space, as would be the children's restrooms. A small food service facility for non-ski school guests will also be located in the lodge building.



It is envisioned that this cafe would have approximately 100 indoor seats plus kitchen space (could possibly be combined with the kids kitchen space) and restrooms. This café would be used both by adults in ski school as well as users of the terrain park and all others, including non-skiers who are observing or participating in other activities such as tubing. Some outdoor seating would also be desirable, whose size would depend on the specific architecture of the building. This facility would also contain a guest services desk where guests could book alternative activities such as tubing. The gondola storage/kids seating would cover approximately 3,500 square feet, while the rest of the lodge would encompass approximately 5,000 square feet.

Steamboat is proposing to develop a private club facility to be located on private land near the top of Christie Peak Express lift with 100 restaurant seats available to club members. Since these members will not be dining at other on-mountain facilities, this represents a net increase in available restaurant seats. Resort club programs are rising in popularity among larger resorts and offer a variety of amenities to their members such as special parking privileges, less crowded dining facilities with space available for social functions, weddings, etc. Although the onmountain club is in the early planning stage, the need for such a facility a facility has been identified. Approximately six private clubs currently operate in the base area.



TABLE IV.6RESTAURANT SEATS AND SEATING CAPACITY

	No. of	fSeats	No. of Turns		No. of Skiers Served		
Restaurant / Café	Indoor	Outdoor	Indoor	Outdoor	Indoor	Outdoor	Total
On Mountain							
Thunderhead Lodge							
Stoker's	225		2.0		450	-	450
Hazie's	120		2.0		240	-	240
Children's Area	200		2.0		400	-	400
Main Cafeteria	455	120	3.0	2.0	1,365	240	1,605
Sub-total Thunderhead	1,000	120			2,455	240	2,695
Bashor Bowl Lodge							
Children's Ski School	300		2.0		600	-	600
Café	100	50	3.0	2.0	300	100	400
Sub-total Bashor	400	50			900	100	1,000
Four Points Lodge							
Sit-Down Restaurant	70	72	2.0	1.5	140	108	248
Grab n Go	30		4.0		120	-	120
Sub-total Four Points	100	72			260	108	368
Christie Peak Club	100	50	2.0	1.5	200	75	275
Sunshine Restaurant	50	50	3.0	2.0	150	100	250
Rendezvous Saddle Lodge							
Ragnar's	120		2.0		240	-	240
Main Cafeteria	286	240	3.0	2.0	858	480	1,338
Loft Area	268		3.0		804	-	804
Expansion Area	275	150	3.0	2.0	825	300	1,125
Sub-total Rendezvous	949	390			2,727	780	3,507
Tomahawk Restaurant	300	150	3.0	2.0	900	300	1,200
Total On Mountain	2,899	882			7,592	1,703	9,295
Base Area							
Gondola Pub & Grill	171	63	1.5	0.5	257	32	288
Gondola Joe's	11	8	3.0	2.0	33	16	49
Geano's Café	18	8	5.0	5.0	90	40	130
Bear River Bar & Grill	200	284	1.0	0.5	200	142	342
Bear River Umbrella Bar	16		2.0		32		32
KVC (children's program)	179		1.0		179	-	179
Round Up Room (children)	150		2.0		300	-	300
Seven's (Sheraton)	125		0.5		63	-	63
Truffle Pig	218	42	2.0	2.0	436	84	520
Deli at Truffle Pig	8	16	4.0	2.0	32	32	64
Steamboat Grand Roadhouse	45		1.0		45	-	45
Steamboat Grand Chaps	64		0.2		13	-	13
Steamboat Grand Cabin	100		0.1		10	-	10
Slopeside Grill	120	100	2.0	2.0	240	200	440
Tugboat	120		1.0		120	-	120
Outlaw Burgers (trailer)	15	40	4.0	3.0	60	120	180
Total Base Area	1,560	561			2,109	666	2,774
Total Area	4,459	1,443			9,701	2,369	12,069



If all the buildings described above were constructed, Steamboat would have approximately 2,899 indoor food service seats 'on-mountain', capable of serving approximately 7,592 skiers per day. This is equivalent to approximately half of the 'on-mountain SCC' (not including the Headwall area or the Bashor Bowl terrain park lift). If we include the food service seats available around the base area (1,560 existing seats serving 2,109 skiers) the total percentage of skiers served would be approximately 54% of the SCC or 51% of skiers on a peak day. As mentioned earlier, most competing resorts supply indoor food service seats for 60-70% of skiers on a peak day (meaning that only about 10 days per year will be overcrowded). Table IV.7 compares the indoor restaurant seat capacity and the lift capacity by geographical location.

Lift	Indoor Seat	Percent	Seating Required	Seats Over/Under	
Capacity	Capacity	Capacity	@60% Over/Under		
Base					
2,810	2,109	75%	1,686	423	141
Thunde rhe ad/	Bashor/Christ	ie Peak	-		
4,170	3,555	85%	2,502	1,053	351
Four Points/St	orm Peak		-		
4,533	260	6%	2,720	(2460)	(820)
Sundown/Suns	hine				
6,487	3,777	58%	3,892	(115)	(38)
TOTAL	•		•		
18,000	9,701	54%	10,800	(1099)	(366)
Base					
3,050	2,109	69%	1,830	279	93
Mountain					
15 190	7 592	50%	9114	(1522)	(507)

TABLE IV.7 RESTAURANT SEATS BY ZONE

As base area development proceeds in the future, adding accommodation, commercial space will also be developed in conjunction with the beds. It is likely that some of this commercial space will be developed as food outlets with seats available at lunchtime and after skiing. This factor has not been considered in the proposals due to the fact that it is beyond SSRC's control and the fact that there already seem to be more than enough food service seats in the base area to service the lunchtime needs.

The new and renovated mountain restaurants will utilize architectural design and elements from the guidelines contained in "The Built Environment Image for the National Forests and Grasslands". Building siting and orientation will optimize solar exposure and visitor comfort and capitalize on the natural elements of the site, such as mountain and forest views. The arrangement of buildings will be shaped to respond to guest use areas and the natural grades of the site.



I. Proposed Infrastructure

Potable Water

Due to the new facilities planned on mountain and the anticipated increase in skier visits on peak days, there will likely be a requirement for increased volumes of water and sewage generated. Due to its close proximity to Mount Werner Water and Sewer services, the proposed Bashor Bowl Lodge will be able to tap directly into these facilities. The springs that feed the Rainbow Tank are adequate to supply additional water for the expanded Four Points Hut.

Water for the Rendezvous Saddle restaurant is collected in an infiltration gallery and stored in a 55,000 gallon tank near the restaurant. As mentioned in the Inventory section, the volume collected is sufficient for Rendezvous' current needs and can be augmented with the pipe connection between the storage tank located on Upper Rainbow and the Rendezvous tank installed in 2003, With the increased number of people skiing in this zone, the planned expansion of Rendezvous and the construction of a new restaurant at Lower Tomahawk, the water needs in this zone will increase substantially, therefore a larger supply of water must be sourced. Planning is currently underway to drill an exploratory well in the proximity of the Rendezvous tank to augment this water source. As an alternative, it has been established that the water flow for the exiting collection gallery on Sunshine Liftline can be expanded. The Rendezvous tank's capacity will be expanded or supplemented to the storage needs of these two facilities if required. Water for the new restaurant off lower Tomahawk will be pumped (or gravity fed) via the Rendezvous storage tank.

In addition, during design of the expanded and new restaurants, consideration will also be made to installing fixtures and instituting operational procedures which use less water.

Sanitary Sewer

Plans are currently underway to install a sewer line from the expanded Four Points Hut connecting the facility to the sewer main that flows downhill from Rendezvous and Thunderhead to Mount Werner Water and Sewer facilities at the base of the mountain.

The expanded Rendezvous facilities will continue to use the existing underground sanitary sewer pipe which connects into the sewer system operated by the Mount Werner Water and Sanitation District. The new restaurant will also be connected into the Rendezvous' system via a combination of pressurized (pumped) and gravity system.



Electrical Power

Electrical power and communications will be needed to all 3 new facilities. Power and communications for the Sunshine warming hut will be stretched from the top of the Sunshine and Sundown lifts. Lines for the Bashor facility will be stretched from the bottom of the Thunderhead lift. Power and communications for the Tomahawk restaurant will be taken from the Rendezvous restaurant.

The new Sunshine II lift will also require power and communications. Primary power for the lift will be taken from the transformers at the top of Sunshine and Sundown or from the 3 phase powerline on High Noon. Power for the bottom terminal will be taken from the bottom of the Sunshine lift, as will communications lines.

m. Other Winter Recreation

Figure 18 illustrates zones where other winter resort activities could take place, including tubing, snowshoeing, snowplay, etc. Many of these activities are a part of the normal skiing operations described in previous sections, such as the Terrain Parks, Race Centers, Beginner Zones and On-Mountain Dining. Some of the alternatives to alpine skiing and snowboarding, such as Telemark skiing, snow biking, etc., currently take place simultaneously with the skiing activities. Night Skiing

With the revitilization of the base are and construction of the Promenade it is expected that more guests will remain at the base after normal skiing hours. Previously this area has been poorly lit and uninviting since night tubing operations ceased in 2007. Beginning in the winter of 2011-12 Steamboat will be offering more activities at the base to provide opportunities for those wishing to stay after skiing. The Bear Deck and Umbrella Bar will offer entertainment as well as food and beverage service. The new stage facility can be used more frequently to provide enhanced entertainment opportunities. Steamboat plans to experiment with temporary lighting and lift service to the L'll Rodeo Terrain Park to measure the interest in night activities on skis or snowboards.

Christie Peak Express and its associated terrain provide an excellent opportunity for the development of night skiing for all ability levels. Lighting Sitz, See Me and Vogue will offer intermediate and advanced skiing and race training, while novice and beginner skiers can ski Preview and Stampede trails by exiting Christie Peak Express and the midway unloading station.



Snowshoeing

More snowshoe routes could also be developed both in and around the Thunderhead area and around the new Bashor area; several routes could emanate from each site and several loops could be developed.

Zip-line

A zip-line is being evaluated for installation on private land below Christie Peak. (see the summer activities section for details)

Sleigh Rides

Winter sleigh rides are currently offered in conjunction with a dinner at the Rendezvous Lodge (Ragnar's). This could be supplemented or alternated with a sleigh ride dinner using the proposed Four Points restaurant as a destination.

Tubing

Steamboat used to operate a small tubing operation in the Headwall area prior to 2007, when that whole area was regarded. It only operated in the afternoon and evening, after the ski area closed, and although it was less than ideal setup, without easy access or dedicated tubing lanes, it was still quite a significant recreational draw for visitors and locals alike. Steamboat would like to reintroduce tubing into its variety of activities, but currently lacks the space in which to offer it.

A new dedicated tubing facility is proposed to be part of the re-developed Bashor/Roughrider facility. As illustrated in Figure 21, 4 lanes of tubing are proposed to be added to the south of the proposed Bashor/Roughrider beginner zone. The tube facility should be serviced with a moving conveyor lift to service approximately 48 feet of vertical.

Mountain Coaster/Alpine Slide

The modern Mountain Coaster is designed so that it can be used in both summer and winter. If this type of coaster is installed, it could be used year round. (see a more detailed description in the summer activities section).

Other Activities

Steamboat would like to offer more non-skiing/snowplay activities to visitors in winter with features and activities potentially including snow forts, animation, sledding, ice skating, mini Z's (mini ski doo), etc. These activities would ideally be



located in the base area and/or the Roughrider Learning Center areas. It is also possible that these activities could take place on empty development properties in the short term.

n. Summer Recreation

Summer activities are extremely important to the success of a ski area's year round recreational operations. These activities can make use of some of the infrastructure and facilities already in place for winter recreation, as well as other improvements which add diversity to the overall recreation potential. Steamboat Springs and the Routt National Forest currently experience moderate utilization in summer and Steamboat has a limited summer recreation program including sightseeing, gondola rides, on-mountain dining, hiking, mountain biking and USFS interpretive activities (talks and hikes). The surrounding forest contains many mountains, lakes and trails and activities including sightseeing, scenic drives, hiking, camping, fishing, cross-country mountain biking, horseback riding, boating, etc. A wide variety of guided adventure tours will also be staged out of the village, taking place both on the mountain and in the valley. In the future, Steamboat proposes to increase the diversity of the summer recreational activities offered to supplement the region's attractiveness. The following is a list which describes anticipated or potential summer activities within the ski area boundaries for Steamboat, supplementing the activities and festivals already occurring at the ski area.

Several specific activities that Steamboat has explored in some detail are listed below.

Scenic Lift Rides

It is anticipated that the Thunderhead Gondola will continue to be utilized to transport foot-passengers up the mountain to the lodge for sightseeing and dining during the day and in the evening, in both the winter and summer seasons.

The Bashor gondola will also be used after hours in the winter and in summer to access the year round activity zone proposed for the area surrounding the proposed Roughrider Learning Center. In winter this area will contain a tubing zone and could also include sledding, etc. In summer, this area could contain a mountain biking learning center and skills development park, climbing walls, summer tubing, a hiking center, zip lines, etc.



Hiking and Walking/Nature Interpretive Hikes

During the summer, foot-passengers venture out from the Thunderhead Lodge location for hiking. The hiking program will continue to include nature and interpretive talks and hikes, with a Steamboat Ambassador and/or a Yampatika member assisting with these activities. Indoor and outdoor interpretive displays could also be installed in and around the lodge facilities. The hiking trail from the base to Thunderhead is not complete. Hikers will continue to be encouraged to use the hiking and multi-use trails that stretch from the top to bottom of the mountain.

On-Mountain Dining and Activities

The existing mountain restaurants will continue to be used for social events such as weddings, parties, conferences, seminars and group dinners associated with these gatherings. Proposed on-mountain facilities may be used for this purpose as well. The opportunity to meet and have a meal in a unique setting with spectacular views for one day of a multi-day conference provides a unique attraction for groups coming to the Steamboat Springs area.

Recreational events, festivals or specific events associated with regional festivals and gatherings could take place at Steamboat on selected weekends and/or weeks (such as sporting events, art, crafts and cultural events, social or music gatherings, etc.). Some of the activities associated with these events are anticipated to take place on the mountain, as well as in the base area.

Mountain Biking

Steamboat has received approval for construction of its Hiking and Biking Trail Master Plan by the USFS. The approved plan allows for construction of 20 miles of trails with the ability to expand further in the future. Construction on Phase One began in August of 2011.

Disk Golf

Disk golf has been offered previously in Steamboat, a course first located on the lower mountain on the old Headwall trail was abandoned during the regrading that took place in 2007. A second course located near the base of Thunderhead Express lift was also abandoned during the extensive logging that took place in the area as a result of the mountain pine beetle epidemic. There remains significant interest in disk golf at the ski area and a course design has been laid out near the Thunderhead Lodge intended to encourage players to ride the gondola and play on a unique alpine



disk golf course. It is also possible that a new course could be developed in the Roughrider/Bashor area serviced by the new Roughrider Daylodge and Café. Base Area Events and Activities

Gondola Square has historically been used to stage continuous activity zone in the summer containing a bungee trampoline, climbing wall, rope climbing apparatus, gyro, mechanical bull, etc. This area is also commonly used to stage major events, festivals and concerts in both summer and winter. It is Steamboat's intention to continue this providing this amenity and increasing the number of activities offered as demand warrants.

With the construction of the "Promenade" (a feature creek and walkway along the front of the base area) and permanent stage, more people will be congregating in this area increasing the 'energy' in the Steamboat base area in the summer. As the activities grow and need more space, they will likely spread up the hill, particularly if activities such as a low impact mini golf, Rock Climbing, etc. are desired.

Zipline

A zipline is essentially a pulley suspended on a wire cable on an inclined slope which allows the user to traverse from the top to the bottom of the cable at speed, suspended above the ground. This has become a popular recreational activity at many mountain resorts as it allows the user to get an exciting experience while traversing through the forest. Steamboat proposes to install a series of zip lines on the front side of the mountain, traversing across the mountain eventually dropping from the Thunderhead Lodge down to the base area. The proposed lines would travel over and through forest and cleared areas alike, ideally visiting interesting natural features along the way, offering a unique way to view the forest and expansive views.

Alpine Slide/Mountain Coaster

A full range of "Alpine Slide" devices are available. The "Toboggan Run" has small carts that are gravity powered and run in a stainless steel flume set into the ground. The track is made up of sharp curves, gradual bends and straight sections. The cart can accommodate up to two passengers. Track lengths vary between 250 and 2,000 meters.

The "Alpine Coaster" is a high-tech version of other gravity slides that runs on a steel tubular track. This type of coaster can be used on a variety of grades and can be run in both summer and winter. Being raised off the ground also allows it to have a variety of features including banked turns, 360 degrees turns, bridges, etc.



.5 Master Development Plan Amendment – Summary

The previous sections have described, in words and illustrations, the projects proposed for the next 10 years under this Master Development Plan Amendment. The purpose of this section is to simply summarize the projects described previously in a very brief list, as shown below:

Sunshine Bowl

- o Install Sunshine II detachable quadruple Chairlift
- Develop new trails in Sunshine II zone
- Build new skiway from mid Tomahawk to lower Rendezvous Way
- Install Snowmaking
 - Sundial
 - Extend approximately 1,500 feet further down Tomahawk
 - Lower High Noon,
 - Daybreak
 - West Side
 - Spike/Lower Tomahawk
- o Replace Southpeak with a detachable quadruple chairlift
- o Regrade Broadway trail

Elkhead

- o Replace Elkhead lift with a detachable six passenger chairlift
- o Re-align and recontour Spur Run and Huffman's
- o Install snowmaking on Spur Run and Huffman's

Bashor Bowl

- Replace and realign Bashor lift
- Construct new skiways from the top terminal of Bashor
- Remove hill near bottom of Bashor lift
- Extend Rabbit Ears Terrain Park uphill
- o Move half pipe
- o Install snowmaking in zones not serviced
- Widen Short Cut and install snowmaking

Rough Rider Learning Center

- o Install Bashor Gondola for access
- o Install Bashor Children's Facility and Café
- o Install 2 or 3 moving carpets and grade associated terrain
- o Install Rough Rider fixed grip chairlift and grade associated terrain
- o Install Swinger fixed grip chairlift and grade associated terrain
- Construct snow tubing area and install moving carpet

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- o Install snowmaking on all Learning Center terrain including Swinger and tubing
- Build new bypass connecting Boulevard with Lower Vagabond (& install snowmaking)

Thunderhead Lift

- o Install new Thunderhead detachable six passenger chairlift
- o Install snowmaking on lower Boulevard

Install Snowmaking

- Lower Rainbow
- o BC Skiway

Skiway Re-grading

- Regrade Why Not switchback
- Regrade Boulevard

Pony Express Zone

- Renovate trails serviced by Pony Express recontour, summer groom, revegitate, widening, selected tree removal, etc.
- Increase capacity of Pony Express lift to 1,800 pph by adding carriers
- Add winch cat anchors
- Construct skiway from the Crux to lower Buddy's Run and Storm Peak Chair and add snowmaking
- Add snowmaking to Middle Rib, the Crux, Longhorn, Lower Pony Express Liftline and Chaps

Pioneer Ridge Zone

- Install a bridge over Burgess Creek at the bottom of the pod for 'gravity' egress
- Construct 'collector' skiway connected to the bridge
- Construct a groomable skiway from the top of Pony Express into the Pioneer Ridge area
- Selectively remove trees to create more uniform, skiable glades within this zone

On Mountain Skier Services

- Expand the Rendezvous Lodge
- Reconfigure the layout of the Thunderhead restaurant
- New Sunshine Peak Hut
- New Tomahawk Restaurant
- New Christie Peak Club facility
- o Rough Rider Children's Facility and Café
- o Add Patrol Hut at top of Sunshine II



Maintenance and Storage

- Construct grip maintenance buildings for the existing Christie Peak Express, Thunderhead, Sunshine II and the proposed Elkhead and Southpeak detachable chairlifts.
- Expand outdoor storage area at Thunderhead Maintenance shop
- Construct outdoor and/or covered storage area at Bashor Gondola top terminal

Infrastructure

- Expand the water supply in Sunshine Bowl
- Build electrical, communication, water and sewer lines to new restaurant sites
- Build snowmaking infrastructure for expansion including water lines, powerlines, air lines, pump stations, valve houses, hydrants, etc.

Other Recreation Opportunities

- Construct trails for mountain biking, hiking, snowshoeing, etc.
- Construct skills areas and pump tracks for mountain biking
- Construct support facilities for summer and winter activities
- Construct alpine coaster, low impact mini golf, disc golf course and zipline

Expand Operations Boundary to encompass Pioneer Ridge

Previously Accepted Master Plan Unbuilt Items

As time goes on, Steamboat's lifts will be aging and will need replacement. As these lifts are replaced, the capacity needs and the bottom and top terminal sites will be re-evaluated and the appropriate lift installed in a similar location.

As operations continue and skiing/snowboarding trends emerge and get established, some trail characteristics may become inadequate for the intended use, and therefore, Steamboat will want to make changes to the trail system, which may include grading, tree removal, snowmaking installation, etc. The trails in the Pony Express zone in particular are quite narrow and should be widened, to the degree practical, in a significant number of locations to reduce the skill class if possible, encourage more use and increase the comfortable skier flow capacity.















Legend

Existing and Proposed Summer Trails

- Downhill Bike Existing Converted
- Downhill Bike Designed
- Nownhill Bike Conceptual
- Multi-Directional/Multi-Use Existing
- Multi-Directional/Multi-Use Designed (Authorized)
- Uphill/Multi-Use Existing Converted
- ─── Uphill/Multi-Use Conceptual
- 🔦 🛶 Hike Existing
- Hike Conceptual (Authorized)
- 🕈 💊 🎍 Ski Area Existing Trails

Trail Level



