

WOLF CREEK SKI AREA MASTER DEVELOPMENT PLAN

Prepared for:

Wolf Creek Ski Area

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Durango, CO Cortez, CO Pagosa Springs, CO Farmington, NM

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ACRONYMS & ABBREVIATIONS

Built Environment Image Guide Comfortable Carrying Capacity				
Colorado Department of Transportation				
Colorado Passenger Tramway Safety Board				
cubic feet per second				
Environmental Assessment				
Ecosphere Environmental Services				
Environmental Impact Statement				
Kilovolt-amp				
Management Area				
Master Development Plan				
Megawatt				
National Environmental Policy Act				
National Forest System				
People per Hour				
Rio Grande National Forest				
Record of Decision				
Skiers at One Time				
square feet				
Scenic Integrity Objective				
San Juan National Forest				
San Juan Public Lands				
San Luis Rural Electric Cooperative				
Scenery Management System				
Special Use Permit				
United States Forest Service				
Vertical Transport Feet				
Wolf Creek Ski Area				

LETTER FROM THE PRESIDENT



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As the CEO of Wolf Creek Ski Area (WCSA), I believe it is important to review and discuss the work that has been done in creating this 2012 Master Development Plan (MDP). This review will hopefully help both the public and the Unites States Forest Service (USFS) more fully understand the state of affairs regarding the proposed WCSA MDP.

As a business that operates on federal land, WCSA is obligated to inform both the decision makers (USFS) and the public of our intentions well in advance of actually permitting or building anything. The Pitcher family has owned and operated WCSA since 1976, and this process has been taking place for over 36 years.

As part of the process there are some basic assumptions that are shared by the USFS, which has the administrative task of managing public lands, and the business owner, who has the obligation to run a legitimate, safe, and sustainable operation for the public at large. These basic assumptions include, but are not limited to, the following:

- 1. Skiing/snowboarding on public lands is a good thing and a wise use of public lands.
- 2. The operator of a ski area assumes responsibility to use the highest level of care when providing access to the mountain.
- 3. All local, state, and federal regulations are followed and the business owner recognizes their role in being good stewards of public lands.
- 4. The business provides a stable economic basis for its employees and remains affordable to the public at large while still doing what is necessary to stay in business.

Without these mutually acceptable assumptions, planning for the future would be impossible.

During the last 36 years, the Pitcher family has adhered to these principles, and managed to create a winter skiing experience that is recognized as unique in Colorado. We have done this by being thoughtful, truthful, and keeping to a very basic philosophy- skiing is a healthy and excellent use of public lands in the future. We have continued to listen to the public and the Forest Service during our tenure as permit holder, which I believe is recognized.

As part of this organic growth, we spent a lot of time on the mountain watching and participating in the sports of skiing and snowboarding while working closely with all our of departments- from the parking lot, food service, ticket office, marketing, and retail on through mountain operations and ski school. This experience is used in turn to plan and discuss what we feel would be exciting and mutually acceptable future projects.

These future projects are compiled in the MDP which provides a basic view of what <u>could</u> happen in the future.

What makes our latest MDP proposal different from the ones that have been accepted in the past (including our currently accepted 1998 MDP) is the amount of input WCSA has solicited from interested parties. By communicating with these stakeholders and looking at over 3,600 written comments regarding our draft 2011 MDP, we have responded by modifying and custom tailoring the 2012 MDP. We feel this is a planning document that adheres to the basic principles of being environmentally sensitive and financially feasible without undo changes to our existing ticketing practices. This is also very exciting in regards to the quality of skiing that could be experienced at WCSA.

At the beginning of this process, WCSA recognized the need to consult with and utilize the expertise of consultants that specialize in planning, coordinating, and documenting the many interesting facts and figures that go with a well rounded document. We also wanted some assurance that we were proposing feasible ideas, and therefore had it reviewed by a recognized biologist who would alert us to any serious concerns.

During this process WCSA has modified its overall vision of the future by reducing its planned capacity by 17% from our currently accepted MDP based on Skiers at One Time (SAOT), as used in the currently accepted MDP. As a direct response to the public scoping and to CDOT's concerns, we have further reduced our overall capacity by eliminating the Storm Lift from this MDP.

Perhaps most importantly, we have listened to 2,300 interested parties and modified our MDP in response. Based on these comments, we determined that the Storm lift is controversial and did not have adequate support from the public, and henceforth removed it from our MDP. We also learned that a significant amount of guests were uncomfortable with the aging Treasure lift. Because of this, we have decided to replace the current Treasure lift with a high speed quad. I believe we now have a planning document that clearly outlines both near time goals, as well as a future look at a very exciting skiing experience. I believe this will be unique, sustainable, and incredibly fun for the skiing public.

In sum, WCSA now has a clear idea of the modified priorities of our MDP which would be most beneficial for the skiing public.

We have truly thought out and devised a plan that eliminates the need for additional parking on Forest Service lands. This was done after consultation with the surrounding counties in which we verified that there would be additional shuttle parking locations that can be used at the bottom of both sides of the Pass. The public scoping showed a very strong response supporting not only employee shuttles, but also shuttles for the skiing public.

Through these processes WCSA now has a clear idea of modified priorities, which would be most beneficial to the public and would fall well within the guidelines of responsible planning on forest

service lands. This responsibility includes recognizing other stakeholders and working with them to mitigate concerns. It also includes looking at the current Roadless Rule and working to assure the Forest Service and the public that we can create a recreational scenario that adheres to the highest tier of the Roadless Rule.

Since Wolf Creek Ski Area is attempting to expand into the San Juan National Forest (SJNF) we have participated for many years in the San Juan Forest Plan revision process. Our input has reduced the overall proposed ski area expansion from over 3,000 acres, as portrayed in some early drafts, to less than 1,000 acres. We feel that the acreage that we have identified has great potential for the skiing public of the future.

The modifications that we have made to our proposed MDP from the prior iteration (which is currently accepted) in the Rio Grande National Forest are based on our well recognized niche of providing a friendly, affordable, unfettered skiing experience for all levels of skiers, along with continued conversations with the following entities:

- Third Generation Outfitters
- San Juan Citizens Alliance
- SLV Ecosystem Council
- Colorado Wild
- CDOT
- US Fish and Wildlife
- US Forest Service
- Mineral County
- Rio Grande County
- Archuleta County
- and the public at large

In closing WCSA believes it has validated the feasibility of the MDP proposal and been able to develop a fairly succinct timeline for prioritizing purposes.

In response to public input, Wolf Creek's priorities are as follows:

- 1. The top priority is to replace the Treasure Lift with a modern detachable of the <u>same</u> capacity of 1,600 guests per hour. The reasons for this are to eliminate the many loading and unloading related stoppages, and to relieve the inherent pressure on WCSA mechanics using a 30 year old lift as a prime mover.
- 2. Along with the Treasure Lift replacement, WCSA intends to remodel and renovate both the Sport's Center and the Upper Lodge deck. Both of these could use a much needed face lift.
- 3. The next priority would be to re-engineer and reuse as much as possible of the current Treasure Lift (bringing it up to <u>ALL</u> 2012-2013 Colorado Tramway Passenger Safety Board rules and ANSI codes) as a recycled lift in the auxiliary role as the Elma Lift. This lift will act as a reliever to both the Nova Lift and the Raven Lift, along with providing a way back from the Alberta Lift other than the long traverse down Park Ave. It will also help the Patrol staff in providing much needed operational flexibility during high avalanche producing storm cycles.

4. WCSA also wants to build a small 12 x 20 foot Race Hutch replacing the old, decrepit Race Shack that is currently located on Charisma Run.

Hopefully the Rio Grande National Forest will be able to accept these site specific projects and we can do the appropriate NEPA as needed.

While these improvements are being approved, built, and paid for, WCSA will continue working with the SJNF and other stakeholders in the planning and permitting of our proposed expansion into the San Juan Forest. Hopefully, in the not too distant future, we will be able to construct a very unique lift which would service some incredibly exciting terrain in the Matchless Pod, along with some great north facing, traditional skiing in the Pass Pod.

Sincerely yours,

Davey Pitcher, President/CEO Wolf Creek Ski Area

1. INTRODUCTION

"Wolf Creek Ski Area's mission is to ensure a balance of facilities and a variety of amenities to afford an exceptional guest experience in a sustainable manner in regards to business, operations, and the environment."

The purpose of Wolf Creek Ski Area's Master Development Plan (MDP) is to provide future direction for the development of Wolf Creek Ski Area to further its mission statement. Accordingly, this MDP provides an assessment of existing operations and facilities at Wolf Creek and identifies a comprehensive plan for future enhancements to the ski area. MDPs are required to be prepared and periodically updated as a condition of the Special Use Permit Wolf Creek has with the U.S. Forest Service.

Wolf Creek Ski Area's (Wolf Creek's) plans for the next 10 to 20 years reflect their mission of building upon the unparalleled ski experience that guests have come to appreciate by adding exciting new terrain, improving the lift network to expand the usable terrain on the mountain and reduce overall skier density, and make improvements to facilities to provide better guest services across the mountain. Wolf Creek Ski Area firmly believes that all this can be accomplished while fulfilling their role as stewards of public land -- by being environmentally sensitive as well as sensitive to the needs of the public. These plans are quite different when compared to other ski areas, who - when doing long-term planning - often pursue an exponential increase in skier numbers or their bottom line.

The previous MDP for the Wolf Creek Ski Area was completed during the 1997/1998 ski season. A draft update to the late 90s MDP was prepared by SE Group in June 2011. This 2012 MDP is a further update to the late 90s plan, includes consideration of a public outreach and input effort conducted in early 2012, and replaces the previous MDP. This MDP has been prepared in compliance with the terms and conditions of Wolf Creek's 40-year Term Special Use Permit (SUP), which was re-issued by the Rio Grande National Forest (RGNF) in 1997. The relationship of this MDP to the RGNF Forest Plan is discussed in Chapter 1 of Appendix B.

This MDP is a "living document", which may be amended periodically to accommodate technological innovations and evolving guest expectations over an approximate 10- to 20-year planning horizon.

1.1 LOCATION

Wolf Creek is a winter-season, day-use ski area located in Mineral County in southern Colorado, approximately 20 miles northeast of Pagosa Springs (in Archuleta County), and 20 miles southwest of South Fork (in Mineral County) (see Figure 1 for a regional location map). The ski area lies on the Continental Divide, and is immediately accessible from U.S. Highway 160 on Wolf Creek Pass. Elevations range from 10,650 feet elevation at the base area to 11,900 feet at the summit of Alberta Peak.

According to the Special Use Permit, lands within the Wolf Creek ski area permit boundary are composed of 1,581 acres on the RGNF. The SUP area is bordered by the San Juan National Forest (SJNF) to the east, south, and west. Approximately 287 acres of privately owned lands (not owned by Wolf

Creek) exist southeast of the base area, within which Wolf Creek has ski easements for the lower third of the Alberta Lift and associated trails¹. Wolf Creek owns 12.5 acres of deed-restricted private lands (limited to skiing activities only) adjacent to the larger private land parcel, along the *A-way* trail and the base of the Waterfall area. Figure 2 identifies land ownership in relation to Wolf Creek, including RGNF lands, SJNF lands, and private lands.

1.2 MARKET POSITION

There are no other ski areas in the immediate vicinity of Wolf Creek. Primary competition comes from the other southern Colorado resorts (Durango Mountain Resort, Telluride, etc.) and northern New Mexico ski areas (Red River, Taos, Angel Fire, etc.), which cater to a mix of destination visitors and day-skiers. Wolf Creek's location and reputation for abundant snow (widely known as "The Most Snow in Colorado"—averaging 465 natural inches annually), uncrowded conditions, and exciting terrain attract a combination of local, regional and destination visitors.

Locals from surrounding southwestern Colorado communities, including Pagosa Springs, Bayfield, Durango, South Fork, Creede, Del Norte, Monte Vista, and Alamosa represent typical day visitors to the ski area. Regional destination skiers (e.g., from Colorado's Front Range, Breckenridge, Vail, and northern New Mexico) tend to make overnight or weekend trips, particularly when winter storms are forecasted to bring abundant powder snow. It is also common for regional destination skiers to take multiple day tours through southwest Colorado, tying in a day at Wolf Creek with days at other regional ski areas such as Silverton, Durango Mountain Resort, and Telluride. Finally, out-of-state skiers from Texas and Oklahoma (who in many cases require only one day of driving to reach the area) often spend multiple days at Wolf Creek. With no overnight lodging at the ski area, most destination skiers look to Pagosa Springs, South Fork, and surrounding communities for lodging. Multiple-day hotel/ski pass packages are common, and make Wolf Creek an affordable place to ski. Due to Wolf Creek's remote location and market position, it does a large amount of its business during weekends and holiday periods.

1.3 BACKGROUND AND DEVELOPMENT HISTORY

During the 1930s, several large, mountain road projects were constructed in Colorado, including a new road connecting the San Luis Valley to Pagosa Springs. Prior to 1936, Cumbres Pass on the New Mexico border was the only direct east-west route through the South San Juan Mountains in this area and during heavy snow storms it often closed. The construction project between the San Luis Valley and Pagosa Springs was named Wolf Creek Pass.

By 1938, construction of the Pass was complete. That same year, a local entrepreneur named Kelly Boyce installed a rope tow on the north side near the summit of Wolf Creek Pass. The lift was driven by

¹ These easements are recorded with Mineral County.

an old Chevy truck with tickets at \$1 per day. By the summer of 1938, the Civilian Conservation Corps, under contract from the Forest Service, built a warming shelter for the new ski area. That same summer, the Colorado Department of Highways graded a dirt road to the new ski tow and shelter. By 1948, the ski area operated three rope tows and a warming hut serving lunches, and lodging was available in nearby Pagosa Springs, Del Norte, or Monte Vista.

The ski operation on Wolf Creek Pass underwent drastic changes during 1955. Under the control of the Wolf Creek Development Corporation, the ski area moved to its present location across the road. Ed Sharpe, a local resident of Monte Vista, served as an unpaid manager for the ski area until 1959. During Wolf Creek's first year at its new location, the area installed a new platter lift. The following season a lodge was constructed. The ski operations were sold in 1960 to a Dallas based investor group, who held on to the area until 1963 when the area entered foreclosure. The original ski corporation bought back the rights to Wolf Creek and Ed Sharpe resumed his role as manager. Tickets cost \$2.50 for adults and a dollar less for children. The ski area also offered a ski school, volunteer ski patrol, and transportation to hotels. A Heron-Poma high-speed detachable platter lift was installed in 1967 to the summit of the ski area.

Another Dallas investor group purchased Wolf Creek in 1972 for \$275,000. The group consisted of Ben Pinnel, an investment counselor, along with Mike Ditka and Dave Edwards of the Dallas Cowboys. Wolf Creek's first chairlift was installed in 1974 by Borvig, an east coast lift manufacturer. The chair was called the Dickey Lift and provided skiers with a 702-foot vertical drop serving beginner and intermediate terrain. By the 1976/77 season, the owners were struggling to keep the ski area operating. Kingsbury Pitcher stepped forward with an offer to assist with the operation and provide needed equipment and capital. Mr. Pitcher previously had a long history within the ski industry and also owned and operated Ski Santa Fe, in Santa Fe, New Mexico. The Wolf Creek ownership composition began to change when a portion of the ski area was subsequently sold to Mr. Pitcher in 1976. By 1978, Mr. Pitcher had acquired full ownership of the ski area.

During the 1980s, attendance at Wolf Creek skyrocketed. The ski area's facility statistics for 1983 included 5 lifts, 580 skiable acres, \$16 lift tickets, and operated daily throughout the winter. Wolf Creek's second ski lift—the Treasure chair—was installed by CTEC in 1983 and ran parallel to the high-speed platter. By 1985, ticket prices climbed to \$18.50 and the original lodge was torn down and a new one constructed. The area now offered the following services: ski school, ski shop, rentals, restaurant, snack bar, picnic area, with accommodations being provided by existing facilities in South Fork and Pagosa Springs.

The Pitcher family has owned the ski area and has operated and managed every aspect of the ski area since that time. In 1988, CTEC installed the Bonanza triple chair that served the ridge between the Treasure and Dickey Lifts. The Expert-only Montezuma Bowl, east of the Treasure Lift, opened regularly during the 1993 season with the addition of a new winch snowcat, used for avalanche mitigation.

In 1999 the Alberta quad chair was installed, replacing the use of snowcats which previously transported guests to numerous bowls, glades, and the Expert Waterfall area. The installation of the Alberta Lift marked a pivotal change in both the recreation character and development philosophy of Wolf Creek. Prior to the opening of the Alberta Lift, Wolf Creek provided primarily what could best be characterized as traditional/conventional, developed, groomed skiing trails. From its inception, the Alberta Pod was intended to provide something different—a ski lift serving a naturally-occurring gladed forest in a primitive fashion, without developing any traditional ski trails. The subsequent approval document (the 1999 Environmental Assessment (EA)) prepared by the U.S. Forest Service (USFS) was also specific that the Alberta Pod would be developed as a lift-served, quasi-backcountry experience. In the 11 seasons since the opening of lift service in the Alberta Pod, Wolf Creek has become resolute that this area has created a winter recreation experience unlike anywhere else.

During the summer of 2006, Doppelmayr CTEC installed Wolf Creek's first detachable quad chair, the Raven chair. This lift replaced the old Dickey double chair, which had been in operation for 34 years. For the 2009/10 season, a new guest service facility, the Raven's Nest, was opened at the top of the Raven chair. This was the last major upgrade Wolf Creek has undertaken at the ski area.

1.4 COMMUNITY RELATIONSHIP

Since its inception, Wolf Creek has recognized that its role within the communities it serves is unique compared to most Colorado ski areas and resorts. As the last remaining family-owned and operated ski area in Colorado, Wolf Creek is a symbiotic member of the Pagosa Springs and South Fork communities. Wolf Creek believes its role is to support the needs and long-term sustainability of the surrounding communities and businesses. Lodging, tourism and hospitality are significant sectors of the southwestern Colorado economy, and Wolf Creek plays an integral function within these sectors by providing an outstanding recreation amenity which attracts visitors to the communities, and provides locals with employment during the winter months. Contrary to the hyper-growth of other mountain communities, growth at Wolf Creek Ski Area has been in response to immigration and development within the adjacent and surrounding communities which it serves.

The unique and important role that alpine skiing plays in the recreational and socioeconomic composition of southwest Colorado is illustrated in the December 2007 Draft Environmental Impact Statement (EIS)² which was released by the San Juan Public Lands (SJPL) for a Draft Land Management Plan (2007 SJPL Draft EIS), often referred to as the "Forest Plan". Some key points include:

• "The ski industry is the largest seasonal employer in the region."³

² USDA Forest Service. 2007. San Juan Public Lands Draft Land Management Plan, Draft EIS. December.

³ Ibid. p. 3.393.

- "Winter recreation has been affected (impacted) in recent years by the increase in population in southwestern Colorado. This has resulted in an increased demand for access to recreational opportunities on snow."⁴
- "Nationally, the increase in annual skiing days is expected to be approximately 110% by 2050, with the largest increase in the Rocky Mountain Region. Silverton Mountain, Durango Mountain Resort, and Wolf Creek ski areas play an important role in the communities and economies within the planning area."⁵
- "Pagosa Springs, the main urban center, is experiencing rapid growth. Due to the mix of private and public lands, the urban interface is more extensive than in other places within the planning area. Residents value access and proximity to public lands. Consequently, the recreation use of the planning area close to Pagosa Springs is heavy and growing, while recreation public services are lagging."⁶
- "Pagosa residents like to recreate in the winter, and many go to the Wolf Creek Pass area, where the access to higher-elevation snow is easy and snow conditions are good...Wolf Creek Ski Area plays an important role in the otherwise quiet winter months."⁷

This and other valuable data included throughout the 2007 SJPL Draft EIS reinforces the important recreational and socioeconomic role that Wolf Creek plays in southwestern Colorado, and highlights the importance of addressing opportunities and constraints at the ski area which will allow it to remain an economically viable source of developed recreation on public lands.

1.5 ANNUAL SKIER VISITATION TRENDS

In the 2011/12 season, Wolf Creek had excellent early snowfall, and in fact showed the earliest opening day for a ski area in Colorado's history and ended up posting the highest visitation for the season on record for the ski area. In stark contrast, the 2011/12 ski season nationally was the worst recorded season since 1991/92 with approximately 51 million visits, a 15.7% decline from the 2010/2011 record of 60.5 million visits. The low visitation was fueled by the weakest snowfall in 20 years across the country. The season also started very slow nationally with poor snow coverage up to and through the Christmas holiday season.

Aside from the 2011/12 season, national skier visits between 2008 and 2011 have been surprisingly strong in the face of a deep, lingering economic recession and mixed snow conditions—two factors which would normally have been expected to have a dampening effect on visitation. This overall strength in national visitation exemplifies the passion of snowsports participants and the resilience of

⁵ Ibid.

⁴ Ibid.

⁶ Ibid.

⁷ Ibid. p. 3.395.

their participation—even in a suboptimal environment. Since 1999/00, the 57 million-visit threshold has been exceeded eight times, with record years occurring in 2009/10 and then again in 2010/11. The industry has operated at a heightened performance level since the 2000/01 season, achieving 57 to 60 million visits in moderate to good years, and 54 to 55 million visits in poor years, both significantly above the levels recorded in previous decades.

At a regional scale, with 19.13 million visits in 2011/2012, the Rocky Mountain Region (including ID, MT, WY, CO, UT, and NM) was down 4.8% from the 10-year average of 20.05 million visits,⁸ which can be attributed to the lack of snowfall. Wolf Creek visitation was up 18% this year, due to early snowfall and sustained snow cover throughout the season.

As demonstrated in Table 1-1, Wolf Creek's visitation, as calculated by annual growth rate, has fluctuated over the past 15 seasons since the last MDP—from a high of over 227,000 visits in the 2011/12 season, down to 114,000 in the 1999/00 season (which was an exceptionally poor snow year). Growth has remained positive each year when compared with the 1997/98 season, when the MDP was last updated. Wolf Creek typically averages over 165 operational days per season.

Year	Skier Visits	Annual Growth Rate	Growth Compared with 1997/1998 Season
1997/98	158,235		
1998/99	202,053	28%	28%
1999/2000*	114,802		
2000/01	187,116	-7%	18%
2001/02	170,847	-9%	8%
2002/03	183,907	8%	16%
2003/04	210,857	15%	33%
2004/05	215,821	2%	36%
2005/06	197,052	-9%	24%
2006/07	222,979	13%	41%
2007/08	195,583	-12%	24%
2008/09	178,517	-9%	13%

Table 1-1.Wolf Creek Annual Skier Visitation1997/98 through 2011/2012

⁸ National Ski Areas Association. 2012. Kottke National End of Season Survey 2011/12 – Final Report. July.

Year	Skier Visits	Annual Growth Rate	Growth Compared with 1997/1998 Season
2009/10	198,602	11%	26%
2010/11	192,022	-3%	21%
2011/12	227,306	18%	44%
15-Year Average*	190,380	4%	26%

 $^{*1999/2000}$ was an exceptionally poor snow year. For the purposes of this analysis,

the 1999/2000 was removed from the growth rate calculations.

Wolf Creek's annual skier visit growth rate of approximately 4% over the previous 15 seasons is attributable to several factors, including regional and statewide population growth, improved roadway access, growth in more adventurous skiing experiences, general regional growth in the popularity of the ski industry, and a recent trend in skiing smaller, less crowded ski areas. Speculatively, this growth may also be attributable to changes in global climate trends, where the high elevation at the ski area affords Wolf Creek a relatively early, consistent, and skiable snowpack when compared to lower elevation ski areas in the region, as demonstrated during the 2011/12 season described earlier.

1.6 MOUNTAIN DEVELOPMENT PHILOSOPHY

Wolf Creek takes great pride in providing a distinctly different skiing/riding experience, as compared to other ski areas in the Colorado/Northern New Mexico market. Wolf Creek is clearly recognized for its abundant natural snowfall, uncrowded slopes, affordable ticket prices, unique gladed terrain, and lift-assisted quasi-backcountry experience which combine to offer a unique skiing experience which is aggressively sought, yet remarkably rare, within Colorado. As a family-owned and operated ski area, Wolf Creek is resolutely committed to the long-term preservation of these unique attributes that form "the Wolf Creek Experience".

Considerable thought and attention has been placed on devising a plan that will increase the exciting winter recreation opportunities available at the ski area, while preserving the distinguishing attributes for which the area is renowned. Through the Upgrade Plan presented in Chapter 4, Wolf Creek seeks to strategically increase opportunities to utilize lift-assisted, hike-to terrain at the ski area, while ensuring that the position of planned and upgraded chairlifts will protect and enhance the distinctive skiing experience upon which Wolf Creek has built its reputation. Through preservation of the unique "Wolf Creek Experience," it is possible to attract additional visitors to the region and surrounding communities on mid-week days and during the slower portions of the season, as opposed to purposely increasing peak-day visitation. This latter goal directly relates to the importance that Wolf Creek places on supporting the surrounding communities (hotels, motels, restaurants and shops) by increasingly becoming a regional winter destination.

1.7 SKI AREA VISION, GOALS, AND OBJECTIVES

As a result of evolving expectations and demands in today's skier/rider market, ski areas are increasingly focusing on raising service standards, improving the recreational experience, and addressing shortcomings in their terrain offerings and operations. The rapid growth in snowboarding, advances in skiing and boarding equipment, and the resurgence and evolution of backcountry gear have increased the demand for "in-bounds" backcountry and lift-served, hike-to terrain at mountain resorts across the country. In the midst of these technological changes and the shortening of the learning curve, guests are demanding lower trail densities, shorter lift lines, and access to increased terrain variety. Wolf Creek must strive to acknowledge recognized constraints in these areas, and make the most of opportunities in order to remain viable in the competitive Colorado skier/rider market.

Wolf Creek recognizes the need to respond to market demands by providing creative, exciting terrain which accommodates guests' evolving expectations while preserving the very qualities for which the ski area has become known. In-bounds skiable terrain at Wolf Creek is nearly all developed within the existing SUP boundary. While additional lifts or trail clearing could be accomplished within the existing SUP boundary, management is particularly sensitive to altering the current style of the ski area and the quasi-backcountry niche the ski area provides within the Colorado and national market.

Wolf Creek's overarching objective is to preserve the "Wolf Creek Experience" by providing a high quality, recreational offering within its unique market niche. In addition, Wolf Creek does not seek to maximize use on peak days, but instead to create sustainable visitation by providing a draw to skiers to visit Wolf Creek in off-peak times of the year, thus spreading out skier use over the entire ski season. Ultimately, Wolf Creek strives to achieve a balance between the desired skiing experience and comfortable terrain capacities.

The purpose of developing an MDP is to outline necessary improvements to support and achieve the goals for the future. The MDP aims to improve the existing skier experience and expand the breadth and depth of skier experience with exciting new terrain, while preserving Wolf Creek's basic character as a small, uncrowded, and family-oriented destination. Along with conserving these attributes that make Wolf Creek unique, the ski area also needs to look toward the future and identify opportunities to improve operational efficiencies, continue operational sustainability, and allow Wolf Creek to remain competitive in the regional destination skier market.

As part of MDP development, there are some basic assumptions that must be recognized and incorporated into the planning process. These shared assumptions must be mutually acceptable by both the USFS, who has the responsibility for sustainably managing public lands, and the business owner (Wolf Creek), who has the obligation to run a safe and sustainable operation for the public at large. These basic assumptions include, but are not limited to:

- 1. Skiing/snowboarding on public lands is a positive and wise use of public lands.
- 2. The ski area operator assumes responsibility to use the highest level of safety and environmental sensitivity when providing access to the mountain.

- 3. All local, state, and federal regulations are followed and the business owner recognizes their role in being good stewards of public lands.
- 4. The business provides a stable economic basis for its employees and remains affordable to the public at large while still doing what is necessary to stay in business.

In conjunction with these basic assumptions, this MDP was shaped by the following six specific goals, which will continue to guide the future direction of Wolf Creek as it strives to become a model for environmentally- and fiscally-responsible ski area operations and development:

- 1. Preserve the high quality, unique "Wolf Creek Experience" of accessible powder, gladed terrain, and quasi-backcountry style skiing/riding for all ability levels.
- 2. Upgrade and expand skier support and operational facilities in order to improve the quality of the recreational experience commensurate with existing and future visitation.
- 3. Improve Intermediate-level developed skiing opportunities.
- 4. Improve Advanced and Expert in-bounds, backcountry-style skiing/riding opportunities.
- 5. Improve circulation between developed and undeveloped portions of the existing SUP area on the RGNF.
- 6. Ensure that developed portions of the RGNF SUP area remain skiable throughout the season.

Wolf Creek has communicated with key stakeholders and solicited public input throughout the development of the MDP. As a result, Wolf Creek has been able to respond to concerns and incorporate new ideas by modifying and custom-tailoring this final MDP. This process is described in the Public Outreach and Input Process Summary in Chapter 3. The resulting vision for the future of the ski area adheres to Wolf Creek's basic principles of being environmentally sensitive and financially sustainable, while also providing an expanded and enhanced experience for guests.

1.8 SUMMARY OF UPGRADE PLAN

A number of planned projects are included in this Wolf Creek MDP, which are expected to be implemented in a phased approach over the next 10 to 20 years. While all are considered viable and important to the overall vision of Wolf Creek in the future, the timeline is dependent on economics, the outcome of the forthcoming SJNF Forest Plan, the required site-specific permitting, and the associated National Environmental Policy Act (NEPA) analysis required. In summary, the Upgrade Plan includes the following proposed projects:

1.8.1 Special Use Permit Boundary Adjustments

- Adjust the current ski area boundary to include the Matchless Pod, 715 acres of undeveloped, alternate Expert terrain in the Silver Creek drainage along the eastern boundary of the existing RGNF SUP. This area is on SJNF lands and would require a new SUP. (SJNF lands)
- Adjust the current ski area boundary to include the Pass Pod, approximately 200 acres of developed and undeveloped Beginner and Intermediate terrain along the western boundary

of the existing RGNF SUP. This area is on SJNF lands and would require a new SUP. (SJNF lands)

• Adjust the current ski area boundary to include approximately 85 acres of new hike-to terrain south of and above Alberta Park Reservoir. This would require a modification to the existing RGNF SUP. (RGNF lands)

1.8.2 Lift Replacements

- Remove and replace the existing fixed-grip Treasure Lift with the Treasure Express highspeed detachable chairlift. (RGNF lands)
- Remove and replace the existing fixed-grip Bonanza Lift with a high-speed detachable chairlift. Realign the top terminal of the Bonanza Lift 800 feet south and up the ridgeline. (RGNF lands)

1.8.3 Lift Additions

- Construct the new fixed-grip Elma Lift from the re-engineered Treasure Lift to provide additional Beginner and Low-Intermediate terrain as well as access from the bottom of the Alberta Lift back to the main base area. (RGNF lands and private lands)
- Construct the new Matchless Low-Capacity Tram at the east edge of the existing SUP boundary using helicopter transport. The top terminal will be located within the existing SUP; however, construction of this lift will be part of a necessary SJNF SUP boundary adjustment of approximately 715 acres. (RGNF and SJNF lands)
- Construct the new fixed-grip Pass Lift from the re-engineered Bonanza Lift at the west edge of the existing SUP boundary. The top terminal will be located within the existing SUP; however, construction of this lift will be part of a necessary SJNF SUP boundary adjustment of approximately 200 acres. (RGNF and SJNF lands)
- Construct the new fixed-grip Meadow Lift to provide additional Beginner and Low-Intermediate terrain as well as access from the Spooner Hill area to the bottom of the Alberta Lift. (private lands)
- Construct the new fixed-grip Sunset Lift within the eastern portion of the existing SUP to access current hike-to only terrain and the proposed Matchless Pod. (RGNF lands)

1.8.4 Terrain Enhancements

- Develop approximately 7 acres of Low-Intermediate terrain associated with the new Elma Lift. (RGNF and private lands)
- Add approximately 450 acres of Expert, natural condition, primitive glade skiing terrain in the new Matchless pod. The terrain would be left in its natural/primitive state, with clearing only planned for minor portions of the lift corridor and removal of hazard trees. (SJNF lands)
- Develop approximately 23 acres of new Beginner and Intermediate terrain, and incorporate 110 acres of undeveloped, gladed terrain in the new Pass Pod. (SJNF lands)

- Develop approximately 9 acres of new Beginner terrain associated with the Meadow Lift. (private lands)
- Minimally develop approximately 125 acres of new Intermediate and Expert gladed and developed terrain off the west face of Spooner Hill, associated with the new Sunset Lift.
- Add approximately 85 acres of new, undeveloped hike-to only terrain above Alberta Park Reservoir. (RGNF lands)

1.8.5 Guest Services and Ski Patrol Facilities

- Replace Race Shack.
- Expand and renovate the existing Sports Center, incorporating current Boarder Dome services. (RGNF lands)
- Eliminate the Boarder Dome structure. (RGNF lands)
- Renovate the Upper/Main Lodge deck and stairway. (RGNF lands)
- Install a prefabricated, movable, zero discharge bathroom facility at the base of the Alberta Lift that will replace the portable toilets. (private lands)
- Construct a new 8,500 sf, on-mountain guest services facility at the top of the Alberta Lift. (RGNF lands)
- Construct a new 1,500-3,000 sf on-mountain guest services facility at the summit of the planned Matchless Low-Capacity Tram. (RGNF lands)
- Construct a ski patrol duty station/warming hut at the bottom of the planned Pass Lift to support skiing guests as well as the dispersed snowmobile use occurring in the adjacent area. (SJNF lands)
- Construct a new 1,500-3,000 sf on-mountain guest services facility at the summit of the planned Sunset Lift. (RGNF lands)
- Construct The Den, a 16,700 sf additional base area guest services facility, to provide additional ticketing and food service and serve as a welcome portal for group business. (RGNF lands)

1.8.6 Parking/Access Enhancements

• Develop shuttle busses on both sides of the pass to provide alternate transportation for guests to and from the ski area.

1.8.7 Snowmaking

- Construct a snowmaking system to provide patching coverage as necessary within the Raven, Treasure, and Bonanza Lift pods. (RGNF lands)
- Construct one, 1 million-gallon above-ground water storage tank and one, 500,000-gallon above-ground water storage tank to support the planned snowmaking infrastructure. (RGNF lands)

1.8.8 Operations and Maintenance

- Relocate/construct a new vehicle maintenance building within the base area, between the Tranquility Lot and the Alberta Lot. This facility would additionally accommodate lift maintenance functions, with the option of employee lockers and ski patrol functions in the future. (RGNF lands)
- Construct a permanent helicopter storage facility at the south end of the Snowshed Lot to benefit search and rescue, avalanche control, and personnel transport. (RGNF lands)
- Construct additional heavy equipment maintenance/storage facilities on the north side of US Hwy 160 within existing SUP. (RGNF lands)

2. EXISTING FACILITIES

Completion of a thorough ski area inventory is the first step in the master planning process and involves the collection of data pertaining to the ski area's existing facilities (see Figure 3). This inventory includes ski lifts, ski trails, base area structures, guest services, other ski area functions/activities, day-use parking, operations, and utilities/infrastructure. Analysis of the inventoried data allows for a comparison of the ski area's existing facilities to those facilities commonly found today at ski areas of similar size, style, and target demographic. The following is an overview of existing ski area facilities. A more detailed comparison of Wolf Creek's existing facilities with industry standards can be found in Appendix D: Existing Ski Area Conditions and Analysis.

2.1 EXISTING LIFT NETWORK

Wolf Creek's lift network consists of one platter lift, one beginner conveyor, and five aerial chairlifts. These lifts include:

- The Magic Carpet surface conveyor
- A platter (surface) lift, the D. Boyce Lift
- A fixed-grip double beginner lift, the Nova Lift
- A detachable quad, the Raven Lift
- Two fixed-grip triple chairlifts: Bonanza and Treasure
- A fixed-grip quad chairlift, the Alberta Lift

Figure 3 illustrates the location of existing lifts, and Table 2-1 summarizes the technical specifications for the existing lifts. Full existing lift specifications are available in Table D-1 in Appendix D.

Lift Name	Lift Type	Top Elev. (ft.)	Vertical Rise (ft.)	Slope Length (ft.)	Actual Design Capacity (pers./hr.)	Lift Maker/Year Installed
Raven	DC-4	11,351	704	2,700	2,400	Doppelmayr-CTEC/2006
Bonanza	C-3	11,608	927	3,687	1,800	CTEC/1988
Nova	C-2	10,800	117	627	1,200	Riblet/1991
Magic Carpet	С	10,701	11	85	480	RMCE/1994
D. Boyce	S	11,727	934	3,707	500	Poma/1980
Treasure	C-3	11,771	1,082	4,467	1,500	CTEC/1982
Alberta	C-4	11,465	1,068	5,179	1,800	Garaventa-CTEC/1999

Table 2-1. Lift Specifications Summary – Existing Conditions

S = Surface lift

C-2 = fixed-grip double chairlift

C-3 = fixed-grip triple chairlift

C-4 = fixed-grip quad chairlift

DC-4 = detachable, high-speed, quad chairlift Source: SE Group

2.1.1 Teaching Lifts

The Magic Carpet moving conveyor lift and the Nova Lift combine to provide Wolf Creek's beginner lift offering. The lifts were installed in 1994 and 1991, respectively, and are primarily used by the Wolf Pups and the Beginner ski school programs. The Nova Lift is also used by Novice level skiers and riders, as little Novice level terrain is available higher on the mountain. The two lifts efficiently serve the available Beginner, and some Novice, terrain.

2.1.2 D. Boyce Platter

This lift is similar in alignment to the Treasure Lift and operated infrequently (a few times per year). The D. Boyce platter is typically operated only during holidays and peak weekends; in essence, providing additional capacity to the area served by the Treasure Lift. Originally built in 1967 (and rebuilt in 1980), this is the oldest operating lift at Wolf Creek.

2.1.3 Raven Lift

The Raven Lift is the ski area's only detachable lift, and built in 2006, it is the most recent lift installation at Wolf Creek. The lift caters to Novice through Intermediate skiers/riders, and accesses a significant portion of Wolf Creek's developed and groomed terrain. This is the most popular chairlift for those who prefer this style of terrain; and since it is the only detachable chairlift at the area, it receives high use, which can often result on long lift lines on peak days. There is an on-mountain guest support facility located at the top of the Raven Lift, in the Raven's Nest facility.

2.1.4 Bonanza Lift

Built in 1988, The Bonanza Lift is a relatively long, fixed-grip lift that accesses a point along the ridge between the Raven and Treasure Lifts, leading to mostly Intermediate level terrain. This lift's central location makes it quite popular particularly for groups with mixed ability levels. Additionally, skiers tend to use this lift during periods of high wind when the Treasure Lift is a less desirable experience.

2.1.5 Treasure Lift

Built in 1982, the Treasure Lift was Wolf Creek's second aerial lift. It basically parallels the D. Boyce platter lift, providing direct access from the base area to the highest lift-serviced point at the ski area. This lift is very popular, as it provides access to a very large quantity of terrain—Intermediate-level and above. This lift is also typically used as the primary access to the Alberta Lift. The Continental bathroom facility is located near the top terminal of the Treasure Lift.

2.1.6 Alberta Lift

Built in 1999, the Alberta Lift is the second newest lift at the ski area. It is a long fixed-grip chairlift and the only non-out-of-base lift at Wolf Creek—meaning that the bottom terminal is not in the base area. Except for the ski ways leading in both directions from the top, the terrain that is served by the Alberta Lift is exclusively gladed and undeveloped. It is very rare in the ski industry to find lifts that access only undeveloped style terrain. This lift, and the terrain accessible from it, truly defines "The Wolf Creek

Experience," lending weight to the ski area's reputation of catering to skiers/riders who prefer a more natural, undeveloped style of terrain/ski experience.

2.2 EXISTING TERRAIN

2.2.1 Terrain Variety

Terrain variety is one of the key factors in evaluating the quality of the actual guest experience. Wolf Creek is committed to continuing its efforts to provide a wide range of beginner, intermediate, expert, and pseudo-backcountry skiing.

2.2.2 Developed Terrain

Typically, the developed (formalized) terrain network at a ski area consists of the named, defined, liftserviced, and maintained trails. Despite the importance of undeveloped alternate-style terrain, formalized runs represent the baseline of a ski area's terrain. They are typically where the majority of guests ski and ride, and they are usually the only place to ski/ride during the early season, periods of poor or undesirable snow conditions, avalanche closures, and certain weather conditions.

In the case of Wolf Creek, the definition of "developed terrain" has been expanded slightly to include some of the more developed glades. This is testament to the large portion of Wolf Creek's skiers/riders who come specifically for this style of terrain (and it is the only type of terrain available off the Alberta Lift).

The existing developed trail network is shown in Figure 3. The ski area is served by a network of approximately 90 developed trail segments accommodating a variety of ability levels, as depicted in Table D-2 in Appendix D. The trail system accounts for just shy of 720 acres of developed terrain, as well as additional opportunities for glades and other forms of undeveloped terrain (discussed separately) primarily in the Alberta Pod area.

A summary of Wolf Creek's developed terrain network (organized by area) is provided below.

Teaching and Beginner Area

First-time Beginner skiers are well served by the quantity of Beginner terrain available off the Nova Lift and the Magic Carpet conveyor. The areas served by these two lifts are located adjacent to each other, so the teaching terrain is contiguous.

Raven and Bonanza Areas

The Raven and Bonanza Lifts provide access to most of the developed terrain at Wolf Creek. They are also the only lifts that access Novice level trails other than those in the Teaching and Beginner area. Glade skiing is available in this area by circulating between the developed trails, but the focus is on the groomed terrain.

Treasure and D. Boyce Areas

Higher-ability level developed trails are accessed off these lifts. In fact, most of the developed, groomed Advanced and Expert level trails are found in this area. There are also numerous Intermediate level trails in this area, but no Novice (i.e., green-rated) trails. This area also provides undeveloped terrain, particularly in the areas toward the Alberta Lift. The Advanced and Expert terrain in the Waterfall area is easily accessed from these lifts, as are numerous glades—both named and un-named.

Alberta Pod

As discussed previously, the terrain available off the Alberta Lift is almost entirely undeveloped. As such, the terrain is primarily tailored towards Advanced and Expert level skiers. Numerous upper level routes through the trees can be found to the east of the lift line, located primarily between the upper traverse *(Coyote Park)* and the lower traverse back to the bottom terminal *(Simpatico/ Lower Simpatico/ Lagerfest)*. As discussed above, glade routes such as *Serendipity*, just west of the lift line, are more accessible to more experienced Intermediate level skiers. Between the Alberta Lift area and the trails off the Treasure Lift is the Waterfall area. Also accessible from the Treasure Lift, the Waterfall area drops down towards the Alberta bottom terminal. This area is quite steep and offers tight glades and chutes that challenge Advanced and Expert skiers. Additionally, a short hike east along the ridge from the Alberta Lift top terminal gains access to Advanced and Expert terrain such as *Knife Ridge Chutes, Dog Chutes, Coyote Park*, and *Horseshoe Bowl*.

There are two drawbacks to the Alberta Pod (both of which are being addressed in the Upgrade Plan): one is the return to the base area and the other is the return to the bottom terminal of the Alberta Lift from the east side terrain. Currently, the only way to return to the base area is to take the *Park Avenue* traverse from the top of the Alberta Lift all the way back to the base area. This is a long traverse with only a short section of fall-line skiing on lower *Navajo*. The return to the Alberta bottom terminal is constrained by topography; in order to get back to the bottom terminal from *Shazam* or any area further east, a long traverse of about 1,000 feet on *Lower Simpatico/Lagerfest* is required, with virtually no grade or vertical drop. If skiers/riders drop below that traverse, they will end up well below the Alberta bottom terminal.

2.2.3 Alternate Terrain/Terrain Parks

Alternate Terrain

Wolf Creek is well known for its alternate terrain and it represents a significant portion of the ski area's market niche. In addition to a large quantity of gladed areas, there are open bowls, chutes, cliff bands, natural meadows, and natural openings which have been connected by developed and undeveloped trails. In short, Wolf Creek provides access to virtually every different type of alternate style terrain that exists. Most of this terrain is accessed by hiking out east from the top of the Alberta Lift along the Knife Ridge. Hikers can also continue past Horseshoe Bowl and Casa del Sol all the way out to Spooner Hill and still return to the Alberta Lift bottom terminal; however, in order to reach the traverse back to the Alberta Lift, skiers must descend due west from the top of Spooner Hill. Descending further beyond this traverse will require a hike back to the bottom terminal of the Alberta Lift.

In addition to the abundant, named, lift-served glades that are discussed in the Developed Terrain section, above, Wolf Creek provides additional glades in-between and on the sides of developed trails. Depending on snow conditions and visitation levels, these areas are popular destinations for Wolf Creek's more advanced guests.

Alternate terrain specifications for the existing undeveloped and unnamed gladed areas at Wolf Creek are provided in Table D-3 in Appendix D.

Terrain Parks

Wolf Creek currently does not operate any terrain park areas. This is based on a conscious decision to focus on the quality and quantity of alternate backcountry-style terrain for which the ski area has developed a strong reputation. However, recognizing the growing demand for terrain park opportunities, the ski area may wish to consider installation of terrain park features in appropriate areas in the future.

2.3 EXISTING GUEST SERVICES

2.3.1 Guest Services Locations

Guest service facilities provide functions specifically related to the needs of skiing/riding and non-skiing (non-recreating) guests not directly related to day-to-day operations/management of the ski area. Typical guest services facilities include restrooms, ticket sales, rentals/repair shops, retail sales, public lockers, ski school facilities, food service and restaurants, bar/lounge areas, and ski patrol/first aid facilities. Guest services facilities at Wolf Creek are located at a base area staging location and in on-mountain buildings. Ski patrol services can be considered part of day-to-day operations, but is included here because patrol services are directly related to first aid and safety of guests. Guest services are described below by their general location: base area or on-mountain.

Base area service locations (portals), are 'gateway' facilities that have three main functions:

- To receive arriving guests (from a parked car, bus, or other transport);
- To distribute the skiers/riders onto the mountain's lift and trail systems;
- To provide the necessary guest services (e.g., tickets, rentals, food and beverage, restrooms, and ski patrol/first aid).

Portal-related skier services are currently offered in the main base area location at Wolf Creek.

On-mountain skier service facilities are generally used to provide restaurant seating, restrooms, ski patrol, and first aid services in closer proximity to upper-mountain ski terrain. It has also become common for ski areas to offer demo equipment locations on-mountain, so skiers/riders can conveniently test/try different equipment throughout the day. This service is presently provided in the base area as well as at the bottom of the Alberta Lift.

The following descriptions provide an overview of existing guest support services available at Wolf Creek. Industry average space use for guest services at base areas and on-mountain areas, as well as for an entire ski area, is analyzed in detail and compared to Wolf Creek's current guest services space usage in Tables D-7, D-8, and D-9 in Appendix D.

Base Area

Wolf Creek's main base area is the portal to the mountain. Skier service facilities in the base area include day skier parking lots (accommodating roughly 2,000 vehicles) and seven guest service buildings:

- Upper/Main Lodge restaurant/food service, bar/lounge, retail snowboard/ski shop, restrooms, picnic deck
- Prospector Grill restaurant/food service and restrooms
- Wolf Pup Building children's ski school, restrooms
- Boarder Dome snowboard rentals
- Sports Center ski rental/repair shop, retail clothing and specialty item sales
- Base Camp Ski patrol/first aid, warming hut, picnic deck, limited beverage/snack service, restrooms, lockers
- Ticket Office ticket sales

On-Mountain

Wolf Creek currently has four on-mountain guest service facilities. One provides food service, and the other three offer limited guest support functions. These guest service facilities include:

- Raven's Nest On-mountain guest support services are available at the top of the Raven Lift in the Raven's Nest facility. Services available at the Raven's Nest include food service, restrooms, and ski patrol. The second level seating space doubles as a storage area for the detachable carriers from the Raven Lift and the primary summer lift maintenance facility where all "nondestructive testing" of lift equipment takes place. This is a state-of-the-art facility which represents Wolf Creek's long-term commitment to its lift quality assurance safety program.
- Continental Restrooms a new waterless restroom facility was completed at the top of the Treasure Lift in 2012.
- The Alberta Grill The Grill serves a limited grill menu at the base of the Alberta Lift on weekends and peak days during sunny weather.
- Casa del Sol The second floor of the Casa del Sol building serves as a warming hut and ski patrol station, which guests can visit when the facility is manned. The other various ski patrol facilities can also be visited by guests if needed.

2.3.2 Ski Patrol/First Aid

There are five ski patrol/first aid facilities at Wolf Creek: one in the base area in the Base Camp building, and four duty stations on-mountain. The four duty stations are as follows:

- Palace: Located at the top of the Bonanza Lift, this facility is 400 square feet in size. It primarily serves the Bonanza and Raven areas.
- The Summit: This building is located at the top of the Treasure Lift and is three floors with 2,100 total square feet.
- The Outpost: This facility is located at the top of the Alberta Lift and is 350 square feet.
- Casa del Sol: Located near the top of Horseshoe Bowl, Casa del Sol includes 1,248 square feet on two floors. The entire lower floor of this facility is dedicated to Wolf Creek's state-of-the-art avalanche control system which utilizes GazEx exploders. It additionally houses the solar charging and computer systems necessary for the ski patrol to remotely observe avalanche control and skier activity in the Horseshoe Bowl area.

These duty stations effectively serve the terrain around the ski area.

2.4 EXISTING PARKING/ACCESS

All parking at Wolf Creek is located in the base area, with the exception of the Snowshed lot, which is down the hill from the base area along Highway 160. There are approximately 1,985 parking spaces in ten separate parking areas, totaling 14.2 acres:

- the 4x4 lot and road;
- Base Camp;
- the Upper lot;
- the Lower lot;
- the Alberta lot;
- Tranquility road;
- the upper and lower Tranquility lots; and
- the Snowshed lot.

Detailed parking capacity analysis is provided in Appendix D.

In addition to parking, Wolf Creek currently encourages employees to use Wolf Creek's shuttle busses, and has established a successful shuttle program on both sides of the Pass (from Pagosa Springs and from South Fork). Shuttles reduce the number of parking spaces at the ski area used by employees and provide an alternative means of transportation, reducing daily fuel consumption.

2.5 EXISTING ALTERNATE AND NON-WINTER ACTIVITIES

2.5.1 Winter

Wolf Creek's Nordic Center consists of two loops near the base of the Alberta Lift, accessed via a trail from the Tranquility parking lots. There is a shorter loop of 0.9 mile (roughly 1.5km), called the Fun Loop, which is intended for casual recreation. The longer Competition Loop is 3.4 miles (roughly 5.5km) and is intended for serious Nordic skiers. This longer loop heads east and follows the shoreline of the Alberta Park Reservoir. Operating continuously since 1982, these trails accommodate classic and skate

skiing as well as snowshoeing, and are regularly groomed and provided <u>without charge</u> to the public. Wolf Creek plans to continue this program into the future.

2.5.2 Summer

Wolf Creek operates as a day-use, winter sports recreation area, and does not support summer operations such as mountain biking, chairlift rides, special events, etc. Currently, summer activities are limited to non-organized hiking. While no organized summer activities take place at Wolf Creek, we allow the travelling public to use our bathroom facilities.

2.6 EXISTING SKI AREA OPERATIONS

2.6.1 Snowmaking

In the 1990's Wolf Creek acquired adjudicated water rights for snowmaking purposes totaling 2 million gallons. The current ski area operation only uses approximately one-quarter of this amount for snowmaking. Existing storage capacity consists of one 500,000 gallon tank located near the bottom terminal of the Treasure Lift.

Wolf Creek's limited snowmaking facilities are augmented as necessary with manual shoveling of snow from within inter-trail tree islands. While this reduces operating costs and ensures a natural snow pack, the limited snowmaking can restrict Wolf Creek's ability to assure that adequate snow coverage is present throughout the ski area, especially during the early portion of the season.

2.6.2 Grooming

Wolf Creek presently operates five grooming vehicles nightly to prepare approximately 400 acres of terrain. This acreage includes basically all Beginner through Intermediate terrain as well as some upper level trails. Wolf Creek's existing fleet of grooming vehicles adequately maintains this terrain area. Wolf Creek additionally operates two grooming vehicles which service the free Nordic skiing area. Due to the large storms which frequent the area, Wolf Creek additionally owns and maintains a large fleet of auxiliary grooming machines which are only used occasionally.

2.6.3 Maintenance Facilities

Wolf Creek's maintenance facilities include the Upper and Lower Shops as well as Maintenance Buildings 1 and 2. The Upper and Lower Shops are located in the vicinity of the base area, near the Base Camp building. Maintenance Buildings 1 and 2 are located on the north side of Highway 160 across from the main ski area entrance.

The Upper Shop was relocated to its present position in 1980, and was formerly situated where the Upper/Main Lodge is now located. An addition was built on the Upper Shop—referred to as the Annex. The combined total of the Upper Shop and the Annex is 4,331 square feet; and provides a one-bay welding shop, and two bays dedicated to the snow-grooming fleet. The Lower Shop was constructed in

1983 and has 2,592 square feet of space. It originally had three work bays, one of which was converted to an employee locker room with a small loft for the lift department's administrative needs.

Maintenance Building 1 was constructed in 1999 and provides approximately 5,920 square feet of space which houses three bays for snow removal equipment, a small carpentry shop, and the accounting department office. Maintenance Building 2 was built in 2009 and is 2,162 square feet in size. This building provides two bays—one of which is used by the Colorado Department of Transportation (CDOT) to house their large snow blower. The other half of the building is used by Wolf Creek Ski Area to accommodate a stand-by generator to power all of the maintenance facilities located north of Highway 160. Adequate space remains for one additional piece of equipment in the remaining bay.

Wolf Creek's maintenance facilities are adequate for maintaining the rubber-tired and tracked vehicle fleets, but Wolf Creek management has indicated a need for additional indoor vehicle storage. This additional storage is particularly needed during storm events with high snow deposition.

2.7 EXISTING UTILITIES AND INFRASTRUCTURE

2.7.1 Water

Wolf Creek is dedicated to providing the public with safe, clean drinking water and adheres conscientiously to Colorado's strict drinking water regulations. Wolf Creek receives the necessary water for its operation from an unnamed tributary of Pass Creek, a tributary of the South Fork of the Rio Grande River. The water has been decreed by the State of Colorado Water Court in the amount of 0.39 cubic feet per second (cfs) or 250,000 gallons/day (175 gallons/minute), and is to be used for municipal, domestic, industrial, irrigation, piscatorial, recreational, culinary, sanitary, and sewage treatment and disposal uses, but does not include snowmaking (snowmaking water is discussed separately, above). Wolf Creek's actual daily average water use during the ski season is 3,918 gallons per day. This equates to 3.2 gallons per person per day. During the off-season the average daily use is 391 gallons per day.

2.7.2 Sewer

Wolf Creek operates a Class C, Domestic-Minor Municipal Mechanical Plant which discharges into an unnamed tributary to Pass Creek following UV disinfection. This discharge point is currently permitted by the Colorado Department of Public Health and Environment, Water Quality Control Division. Additionally, according to the terms of this permit, Wolf Creek Ski Area receives and processes wastewater from the CDOT facilities located north of Highway 160.

Wolf Creek Ski Area has operated a wastewater treatment plant since 1981. The plant has been modified several times. The latest upgrade in 2004 involved a \$1 million renovation. This state-approved facility has a hydraulic capacity of 20,000 gallons/day and is operated by a state-licensed Classification B Wastewater Facility Operator. On our current peak day of 6,300 skier visits, Wolf Creek wastewater processing facilities used 12,000 gallons of capacity. The remaining 8,000 gallons in reserve would suffice for an additional 4,000 guests on any given day.

2.7.3 Communications

All ski area buildings have telephones installed and working. There is a microwave radio connection to Pagosa Springs, DSL connections with multiple T1's, a radio phone backup, and 200 UHF radios. The communications system is adequate for current demand. In 2010, a Verizon cellular tower located on an adjacent mountain outside the ski area began servicing the area. This has provided an additional method of communication for both the public as well as Wolf Creek staff.

2.7.4 Power

Power is supplied by the San Luis Valley Rural Electrical Cooperative (SLVREC) through a primary overhead line. An approximately 1 megawatt (MW) supply is available, which is adequate for current use. Power is then distributed via 1,484 kilovolt-amp (kVA) underground lines to eight transformers throughout the ski area. Wolf Creek Ski Area sees the importance of using renewable energy sources and feels that businesses should be setting an example in this area. For this reason, Wolf Creek purchases 100 percent of all power usage, mountain wide and year round, from a green power energy supplier, Tri-State Generation and Transmission, who in turn supplies the SLVREC, the local power company for Wolf Creek.

2.7.5 Fuel Storage

Fuel storage is located behind the Upper Shop in above-ground tanks, including 4,000 gallons of diesel fuel and 1,000 gallons of unleaded gasoline. All tanks are double-walled, fully comply with applicable codes, and are adequate for current demand. The ski area maintains a spill prevention and countermeasures plan and completes regular inspections.

2.7.6 Road Network

Approximately 9.6 miles of mountain access roads exist between the SUP area and the private land, and are used to access on-mountain facilities for ongoing maintenance during the off-season. Locations of existing roads are shown in Figure 3.

3. PUBLIC OUTREACH AND INPUT PROCESS SUMMARY

Wolf Creek Ski Area initiated a public outreach effort to share its vision of the future development of the ski area and to receive comments from the interested public regarding this vision. Part of the outreach campaign included creating a 10-minute video describing the components of vision and area enhancement ideas, as well as public meeting opportunities in the region. A survey was created on line and a link to the survey was provided on the Wolf Creek Ski Area website, as well as emailed to all snow report subscribers. A 1-minute video trailer to encourage interested parties to view the 10-minute video and take the survey was emailed to just over 12,000 snow report subscribers.

In addition to the on-line survey, the public had an opportunity to provide input at public information meetings hosted by Wolf Creek Ski Area in March 2012. The public information meetings were held in Durango, Pagosa Springs, Creede, South Fork and at two were hosted at the ski area. In addition to a question and answer session after the project presentation, attendees were also given an opportunity to complete a survey in hard copy format. Addressed stamped envelopes were provided to individuals that preferred to return the surveys at a later date or meeting representatives collected completed surveys at the meeting.

Proposed ski area enhancements included numerous projects within the existing ski area boundary within the Rio Grande National Forest (RGNF) and two areas in the San Juan National Forest (SJNF) that would require expanding the ski area boundary to the east (Matchless Pod) and west (Pass Pod). (The relationship of these proposed enhancements to the RGNF Forest Plan and the SJNF Forest Plan is discussed in Chapter 1 of Appendix B).

3.1 Public Outreach Meetings and Notification Meetings

Wolf Creek Ski Area conducted public information meetings in the region in order to share its long-term plans for ski area enhancements at Wolf Creek and to receive public input on that vision.. The public meetings began with an introduction to the meeting given by Davey Pitcher, Wolf Creek President/CEO, followed by showing the 10 minute video summarizing the ski area enhancements. The last portion of each meeting was designated to questions and answers. Large maps illustrating the ski area enhancement ideas were posted in the meeting rooms. The number in parenthesis following each bullet point below represents the number of people that signed in at each meeting.

Public information meetings were conducted in:

- Durango on March 6 at the Durango public library from 6:30 p.m. to 7:30 p.m. (36).;
- Pagosa Springs on March 7 from 6:30 p.m. to 7:30 p.m. at the Pagosa Lodge (61);
- Ski Area/Base Camp Lodge at the ski area on March 8 from 2:00 p.m. to 3:00 p.m.; pm to 3 pm in the Base Camp Lodge (26);
- Creede on March 8 at the Community Center from 6:30 p.m. to 7:30 p.m.(12)

- Ski Area/Raven's Nest at the ski area March 28 from 2:00 p.m. pm to 3:00 p.m. pm in the Raven's Nest (12); and
- South Fork on March 28 at the Community Building from 6:30 p.m. to 7:30 p.m. (23)

Wolf Creek notified the public about these meetings by publishing display advertisements in area newspapers, providing public service announcements to local radio stations, scheduling interviews on local radio stations, creating colorful posters for display at local area business, and identifying a list of special interest groups and sending a personalized email to each of those groups,

Newspaper display advertisements were published in the following newspapers on the noted dates:

- Pagosa Sun; February 23 and March 1, 2012
- Durango Herald; February 26 and March 4, 2012
- Durango Telegraph; February 23 and March 1
- Valley Papers, Upper Rio Grande Group (Del Norte Prospector, South Fork Tines, Mineral County Miner) February 23, March 1, March 22, 2012

The following radio stations were provided public service announcements that were read periodically on air leading up to the public meetings. Radio stations that conducted on air interviews with Davey Pitcher and the dates of those interview are also noted below:

- KSUT (Durango area) on air interview March 7, 2012
- KWUF (Pagosa Springs area) on air interview February 23, 2012
- KZRM (Northern New Mexico area)
- KALQ (San Luis Valley, Colorado area)

Wolf Creek display colorful, eye-catching, informational posters sized at 11 by 17 inches at local business throughout the area. The posters were provided to the local business the week of February 24 through 29, 2012 as well as were posted in various buildings at the ski area. The following is a list of cities/towns and the number of posters displayed:

- Durango, 20 locations
- Pagosa Springs. 44 locations
- Creede; 12 locations
- South Fork; 14 locations
- Bayfield; 8 locations

For meetings scheduled in late March 2012, revised posters with new meeting information were created and posted at the ski area as well as local businesses in the communities note below followed by the number of posters displayed.

- South Fork; 15 locations
- Creede; 5 locations

- Del Norte; 7 locations
- Monte Vista: an individual with the Rio Grande Headwaters Land Trust took 4 posters to bring to Monte Vista to display at businesses there.

Wolf Creek compiled a list of 43 special interest groups. Generally this list included regional snow mobile groups/clubs/tour companies, outfitters, environmental groups, snowsport and ski groups/clubs, outdoor clubs, an active homeowners group in Pagosa Springs, mountain sport/ski shops, local chamber of commerce offices, Colorado senators and representative, as well as local government offices. Wolf Creek sent individual emails to each of these entities with information about upcoming public meetings.

3.2 Survey

A survey was created on line and a link to the survey was provided on the Wolf Creek Ski Area website, as well as emailed to all snow report subscribers. A 1-minute video trailer to encourage interested parties to view the 10-minute video and take the survey was emailed to just over 12,000 snow report subscribers.

Over 2,300 individuals participated in the survey which provided an opportunity for the public to rate their level of enthusiasm (1 through 5, 5 being highest) for each ski area enhancement idea. Ski are enhancements were broken down by lift name or area, as well as a general category for other enhancement ideas which included projects such as base area building remodels, maintenance facility upgrades, etc. The format of the survey - both on-line and hard copy - also provided survey participants an opportunity to provide written comments following each enhancement idea. A summary of the results from the survey are contained in Appendix F. In addition, a figure illustrating the location of survey participants by county is also included in Appendix F.

3.3 Review/Response to Public Input

Based on comments received at the public meetings and from the survey, Wolf Creek's vision of a Storm Lift did not garner significant support from the general public. As a result, Wolf Creek has removed the Storm Lift from inclusion in its vision for future development at Wolf Creek and therefore it is not included in this MDP.

Although upgrades to the Treasure Lift were not originally part of the vision being considered by Wolf Creek or shared with the public, the public raised concerns about the safety and comfort of the Treasure Lift. Wolf Creek carefully reviewed the existing and proposed facilities, and has included a ski area enhancement associated with the Treasure Lift. Wolf Creek proposes to replace it with a high speed quad, and re-engineer and re-install the lift as the new Elma Lift.

Concerns raised by outfitters who have had long-term permits in the Matchless Pod area were voiced during the Pagosa Springs public meeting. Wolf Creek has worked diligently with the outfitters since March 2012 to find mutually acceptable installation and operational techniques that will minimize impacts to hunting from the Matchless low-capacity tram.

Other minor modifications to the long-term vision that was shared with the public reflect Wolf Creek's commitment to presenting a MDP that works for Wolf Creek visitors as well as other USFS permittees and adjacent land uses.

4. UPGRADE PLAN

This Upgrade Plan provides direction and illustrates the vision for the future of Wolf Creek, ensuring a balance of guest amenities and opportunities with facilities and operational efficiency. Wolf Creek's plan reflects their mission of building upon the unparalleled ski experience that visitors have come to appreciate by adding some exciting new terrain, improving the lift network to expand the usable terrain on the mountain and reduce overall skier density, and make improvements to facilities to provide better guest services across the mountain. Wolf Creek Ski Area firmly believes that all this can be accomplished while fulfilling their role as stewards of public land -- by being environmentally sensitive as well as sensitive to the needs of the public. This plan will allow Wolf Creek to continue operational sustainability while remaining competitive in the regional destination skier market by retaining existing guests and attracting new visitors. The Upgrade Plan is depicted on Figure 7.

4.1 SKI AREA BOUNDARY ADJUSTMENTS

Wolf Creek would like to add approximately 1,000 acres of new terrain to its current permitted boundary. To incorporate some of the proposed ski area enhancements, Wolf Creek's existing 40-year Term Special Use Permit (re-issued in 1997) would require a boundary adjustment within RGNF lands. In addition, key planned ski area enhancements onto the adjacent SJNF would also require a new Term Special Use Permit with the SJNF.

4.1.1 Rio Grande National Forest

The existing ski area boundary lies entirely on RGNF lands, encompassing 1,581 acres. Approximately 85 acres of new, undeveloped terrain above Alberta Park Reservoir (see Figure 7) is proposed for ski area terrain expansion, requiring a boundary adjustment to the existing SUP boundary. No new lifts or facilities are planned within this boundary expansion area. Ski terrain would be hike-to and hike-from access only, with minimal tree clearing planned.

4.1.2 San Juan National Forest

Two planned ski area expansions onto the SJNF would require a new SUP with the SJNF: the Matchless Pod and the Pass Pod.

The Matchless Pod is located along the east edge of the existing ski area boundary, and encompasses approximately 715 acres of planned, lift-assisted backcountry skiing. One low-capacity tram is planned to access the area, and would be constructed using helicopters with no roads cut. No snowcat trails or snow grooming are planned. Wolf Creek expects to need Gazex exploders installed in more critical avalanche areas to ensure skier safety. Limited tree clearing will be necessary for the tram's terminal locations, and minimal clearing will be required to develop entry points and egress routes back to the tram. Aside from this minimal tree clearing, Wolf Creek plans to leave all terrain in its current, natural/primitive state.

The Pass Pod is located along the west edge of the existing ski area boundary. The planned expansion area covers approximately 200 acres of predominantly north-facing terrain. Wolf Creek plans to develop a portion of this area as traditional, lift-accessed terrain with several new trails cut. Other portions would remain as undeveloped glades between defined trails, or as undeveloped open areas in the area known locally as the Rock Garden. One new lift, the Pass Lift, would access the area, and would host a small guest services structure at its bottom terminal for restrooms and ski patrol. There would be no connection to or skier access from Wolf Creek Pass on U.S. Highway 160.

Terrain associated with the Matchless Pod and Pass Pod expansion areas and the bottom terminals of both the Matchless Low-Capacity Tram and the Pass Lift are located on the SJNF. A small portion of terrain in the Pass Pod would be located on the RGNF. The upper terminals of both lifts will be located within the existing ski area boundary.

4.2 LIFT NETWORK ENHANCEMENTS

A significant component of the Upgrade Plan is a substantial upgrade to the ski lift network. Overall, two lift replacements and five new lifts are planned.

Lift Replacements:

- Treasure Lift- replaced with a high speed detachable quad chair
- Bonanza Lift replaced with a high speed detachable quad chair; top terminal realigned

Lift Additions (New Lifts):

- Elma Lift triple chair (re-engineered Treasure lift)
- Matchless Tram Low-capacity tram
- Pass Lift triple chair (re-engineered Bonanza lift)
- Meadow Lift double chair
- Sunset Lift double chair

Each proposed new or replaced lift is described in further detail below. Figure 7 illustrates the location of the proposed new and replaced lifts, and Table 4-1 summarizes the technical specifications for all lifts. Full lift specifications (Table E-1) and analysis of the expanded lift capacity are available in Appendix E.

Lift Name	Lift Type	Top Elev.	Vertical Rise	Slope Length	Average Grade	Actual Design Capacity	Lift Maker/ Year Installed
		(ft.)	(ft.)	(ft.)	(%)	(pers./hr.)	
Raven	DC-4	11,351	704	2,700	27%	2,400	Doppelmayr- CTEC/2006
Bonanza	DC-4	11,775	1190	5,450	26%	1,800	Proposed New
Nova	C-2	10,800	117	627	19%	1,200	Riblet/1991
Magic Carpet	С	10,701	11	85	13%	480	RMCE/1994
D. Boyce	S	11,727	934	3,707	26%	500	Poma/1980
Treasure Express	DC-4	11,771	1,082	4,467	25%	1,600	Proposed New
Alberta	C-4	11,465	1,068	5,179	21%	1,800	Garaventa-CTEC/1999
Elma	С-3	10,834	428	2,375	18%	1,500	Proposed Reengineered CTEC
Meadow	C-2	10,494	180	1,720	12%	1,200	Proposed New
Pass	С-3	11,550	739	3,740	20%	1,800	Proposed Reengineered CTEC
Sunset	C-2	11,077	819	3,742	23%	1,200	Proposed New
Matchless Low- Capacity Tram	Tram	11,497	1,961	5,778	38%	685	Proposed New

Table 4-1. Lift Specifications Summary – Upgrade Plan

Italicized text identifies planned lifts.

S = Surface lift

C2 = fixed-grip double chairlift

C3 = fixed-grip triple chairlift

C4 = fixed-grip quad chairlift

DC-3 = detachable, high-speed triple chairlift *DC-4* = detachable, high-speed quad chairlift Source: SE Group

4.2.1 Lift Replacements

4.2.1.1 Treasure Express Lift

"A top priority would be to replace Treasure with a high speed detachable quad. The best inbound skiing is there but the ride up is slow and extremely cold."

"I hope you consider a detachable replacement of the Treasure Lift soon. The runs from it are awesome but most of my family members are intimidated by the aggressive pick up and dump off."

"Consider changing the Treasure Lift to a high speed quad. I know this is expensive but it would allow a person that goes non-stop all day long a couple of more laps of the mountain."

During the public input period, the existing triple-chair, fixed-grip Treasure Lift received many unsolicited comments related to age, speed, comfort, and ease of off-loading. In response to this input,

Wolf Creek is proposing to replace the existing Treasure Lift with a high-speed, detachable quad chairlift (the Treasure Express), with the top and bottom terminals in the same locations. The lift capacity would remain the same. Replacement of the Treasure Lift is considered a high priority.

Wolf Creek plans to re-engineer the old Treasure Lift for use as the Elma Lift. As part of the reengineering process, it will be brought up to all current safety and engineering codes as required by the Colorado Passenger Tramway Safety Board (CPTSB).

4.2.1.2 Bonanza Lift

"The realignment and recycling of the Bonanza is a great idea."

"The speed at which Bonanza operates provides for too short of a chair-loading interval for beginner and low-intermediate skiers. This is a constant source of concern to my children when we load on that lift."

"Moving Bonanza over a bit to the left would allow for access to B 19 and other runs off the ridge to the left; this is good."

The existing fixed-grip, triple-chair Bonanza Lift is planned for replacement with a high-speed, detachable lift of the same capacity, to provide easier loading and unloading for Beginner and Intermediate skiers. By realigning the top terminal approximately 800 feet east up the ridge towards Bonanza Bowl, the staging area at the top will be increased, and will create a better launch site for skiers going down *Divide* trail. This will also provide access for the upper sections of the proposed Pass Pod, and minimize congestion with the top of the proposed Pass Lift. The bottom terminal would remain in the same location. These changes would better serve the Beginner/Low Intermediate skiers that frequent this part of the mountain, as well as facilitating the use of the upper sections of the proposed Pass Pod.

Wolf Creek plans to re-engineer the existing triple-chair, fixed-grip Bonanza Lift for use as the new Pass Lift. As part of the re-engineering process, it will be brought up to all current safety and engineering codes as required by the CPTSB.

4.2.2 Lift Additions

4.2.2.1 Elma Lift

"Pro, that last return road traverse from Alberta Lift side is not a thrilling way to end the day. Con, the glades this would make more accessible are a hidden gem at Wolf Creek."

"I really like the idea of [the Elma lift] for riding Waterfall when the Alberta lift is not open."

"I would be more excited about [the Elma lift] if it would take you farther up the mountain for better access to some quality runs, but I am still in favor of this lift. Primarily so boarders and young/old skiers aren't so dissuaded by the slog back to civilization. This lift would greatly increase the use of the Waterfall area." The proposed Elma Lift is a fixed-grip, triple chairlift that would use the re-engineered equipment from the Treasure Lift; therefore, construction of the Elma Lift would occur only after removal and replacement of the Treasure Lift is complete. Design capacity of the lift will be reduced from when it served as the Treasure Lift due to the increased loading time it will use. The Elma Lift is planned with the base terminal on private land and the top terminal on NFS lands within the existing RGNF Special Use Permit area. It is also considered a high-priority project under the Upgrade Plan. This lift was designed with three operational purposes in mind:

- 1. It will open up some additional Beginner and Low Intermediate developed terrain and provide some new intermediate gladed skiing to complement the existing Beginner/Intermediate terrain on the mountain. The existing *Flim Flam* trail will also be accessible from this lift.
- 2. During large storm periods, operation of the Elma Lift will allow guests to access the Waterfall Area, while the ski patrol is still engaged in avalanche mitigation within the Alberta Lift Pod.
- 3. It will add an important link in the circulation between the Alberta Lift Pod and the base area by eliminating the long traverse back to base on *Park Avenue*. The top of the lift will deliver skiers to lower *Navajo Trail*, whose run terminates at the base area. It will also allow access to the Alberta Pod in a shorter amount of time for ski school lessons.

The Elma Lift will be approximately 2,400 feet in length, with a bottom terminal located near the existing bottom terminal of the Alberta Lift, and topping out where *Flim Flam* branches off *Navajo Trail*. From this location, it is a short, easy descent to the base area. The Elma Lift would provide good Beginner/Intermediate terrain and would serve as a reliever for similar terrain served by the Raven Lift, including the popular *Bunny Hop*.

As mentioned, the base of the Elma Lift would be located on private land owned by others; however, Wolf Creek has an open space easement already in place that is designed to maintain skier access to the proposed Elma and Meadow Lifts. The easement is recorded at the Mineral County Clerk and Recorder's Office, and is attached to the length of Wolf Creek's SUP with the RGNF.

4.2.2.2 Matchless Low-Capacity Tram

"I think some of the proposed lifts to access some of the currently more difficult accessible areas would greatly change the terrain variety at Wolf Creek, especially the Tram! If these enhancements can be done while limiting the inevitable ticket price increase I think it is a win-win situation!"

"I like the idea of expanding out to the Matchless Pod, but I don't like the idea of a tram. I would suspect long waits vs. skiing right up to a chair."

"Appreciate the idea of access beyond Horseshoe Bowl. Increasing accessibility over there is great."

"I like the idea of the [Sunset} lift; however I think that the access to the Matchless Pod Area should not be too easy. Having to work to get to the Matchless Pod Area will keep the snow better for longer and keep people that aren't ready for that type of terrain from getting hurt."

"Please add the Matchless Pod and Pass Pod. These are major improvements that really need to be made."

The Matchless Low-Capacity Tram is planned to access purely undeveloped/natural terrain, located to the east of the existing ski area, on the backside of the ridge between Horseshoe Bowl and Spooner Hill. Access to the Matchless Low-Capacity Tram would be possible by two routes: by hiking the ridge from the existing Alberta Lift, or from the top of the proposed Sunset Lift.

The tram would be located entirely on NFS lands. The top terminal would be located on the Rio Grande National Forest near the existing Casa del Sol facility. The bottom terminal would be located on the San Juan National Forest in the Silver Creek drainage, at roughly 9,500 feet elevation. Virtually all of the skiable terrain is also located on the San Juan National Forest. As such, construction of the tram would require an adjustment to Wolf Creek's ski area boundary, and a new SUP since the boundary does not currently incorporate any San Juan National Forest lands.

The Matchless Low-Capacity Tram is planned to be the longest lift at Wolf Creek, at approximately 5,800 feet in length. The tram would require four towers, and would be broken into two segments with a midway unloading/loading station. Each segment would have three 15-passenger tram cars, and the tram would have a total uphill transport capacity of approximately 700 people per hour. The midway structure would be designed to resemble a mining-style structure, and would be used to store trams in the off-season. Guests will be able to load and unload the tram from the midway structure, which will allow for terrain management within the Matchless Pod. The tram is designed to allow operation with lower horsepower, to minimize the footprint with only four towers, and to withstand high winds for operation during storm cycles. This low-capacity tram also would have special triple-redundant drive systems reducing the possibility of an evacuation to almost 0%.

This lift has been carefully designed to minimize the need for tree clearing, to have nominal ground impacts, to operate efficiently in high wind conditions, and to strategically host a low hourly capacity in balance with the vision of creating an exceptional lift-assisted backcountry skiing experience. No roads, including temporary roads, will be built as part of the Matchless Tram project. Instead, the four towers required for the tram would be placed by helicopter. Wolf Creek will not clear trails, create snowcat trails, or do any snowmaking or snow grooming in the Matchless Area. The majority of the tram line will be above the existing trees and therefore nominal clearing will be required for the tram corridor. Limited tree clearing will be necessary for the terminal locations, and minimal clearing will be required to develop entry points and egress routes back to the lift. However, other than that minimal amount of work, all of the terrain will be left in its current, natural/primitive state. Wolf Creek did a preliminary engineering study on building this low-capacity tram in a Roadless Area, and determined that it could be

accomplished without constructing any roads, and that all equipment, including a very simple bottomreturn bullwheel assembly, could be physically placed with a helicopter within the design parameters.

Wolf Creek is committed to an Upgrade Plan that works for all stakeholders, including adjacent land uses. In response to public concerns about the Tram potentially affecting the successful business of Third Generation Outfitters in the Silver Creek drainage, Wolf Creek will incorporate spring and early summer construction and maintenance schedules for the Tram, visual mitigation for the Tram, and specifically defined seasons of use and snow conditions that don't interfere with wildlife use in the Matchless Pod area. The Matchless Pod Tramway will begin operations only after 42 inches of snow can be measured at the Wolf Creek midway stake, and Wolf Creek will show good faith efforts to complete all maintenance prior to July 15th. A summary of this agreement can be found in Appendix G

Several comments from the public posed questions about whether a tram was really required or desired to access the Matchless Area. The total isolation of the site and the desire to preserve its undeveloped characteristics creates challenges in lift design. Traditional lift designs were considered, but would be accompanied by limitations that are incompatible with Wolf Creek's stated goals of backcountry lift access. Due to the challenging terrain and the desire to minimize site disturbance, a traditional mono-cable chairlift system was not considered a viable option as towers would need to be spaced roughly every 350 feet. Conversely, bi- or tri-cable systems have the ability to span much longer distances and withstand much higher wind speeds, and therefore a tri-cable tram system was decided upon. Another major benefit of a tram is the ability for ski patrol to stabilize and administer aid to injured skiers during transport. The midway transfer would also allow earlier opening of the Divide reach during avalanche hazard mitigation periods.

4.2.2.3 Pass Lift

"The Pass Pod would be a fantastic beginner and intermediate area to develop."

"I like the side country (not back country) aspect of this area. It would be better to keep that experience & feel, but make it a little more accessible for the adventurous intermediate skiers"

"This area seems to be a solution to crowding within the ski area especially with the high number of beginner and intermediate skiers at Wolf Creek"

Construction of the Pass Lift and realignment of the Bonanza Lift would happen at the same time. The Pass Lift would be a fixed-grip, triple chairlift that would use the re-engineered equipment from the Bonanza Lift. This lift would be roughly 3,700 feet long, and would access developed terrain targeted at the Low-Intermediate and Advanced Intermediate ability levels, with some Beginner terrain. The top terminal would be along the ridge at the *Divide Trail*, above the top terminal of the Raven Lift, and below the top terminal of the realigned Bonanza Lift. Wolf Creek defined the bottom terminal location and downslope ski area boundary of the Pass Pod to minimize impacts to snowmobile users on Wolf Creek Pass.

Terrain off the Pass Lift is largely north-facing; this aspect typically creates consistently good snow quality, providing skiable terrain earlier in the season than other areas in the ski area as well as in lower snow years. The Pass Lift and associated terrain expansion showed strong public support during the public input process, predominantly for providing additional beginner/intermediate terrain that was separated from the expert terrain, and relieving some pressure on the areas served by the Raven and Bonanza Lifts. There would be no connection or access to the Pass Lift from the highway, only from the ski area.

As with the Matchless Tram, the Pass Lift is planned entirely on NFS lands. While the top terminal is located on the Rio Grande National Forest, most of this expansion area is on the adjacent San Juan National Forest, requiring an adjustment to Wolf Creek's ski area boundary and a new SUP with the SJNF (see Figure 7).

4.2.2.4 Meadow Lift

"Very interesting terrain expansion. I hate worrying about staying above the lift after ending a run down Abracadabra or Tsunami. "

"I think this would be the more important of the two lifts near Alberta. Mostly because this traverse is much worse than Park Avenue."

"I'm split here ... love the elimination of a traverse ... but more beginner terrain is unnecessary."

The planned Meadow chairlift, located entirely on private land, is designed with two functions in mind:

- 1. Primarily, it will provide additional circulation within the southern portion of the Alberta Lift Pod, below the Horseshoe Bowl and Spooner Hill areas. It will allow skiers/riders to avoid the long, flat traverse of *Lower Simpatico* back to the bottom terminal of the Alberta Lift when using the terrain to the east of *Shazam*, and will allow for easier return from points further down the ridge towards Spooner Hill.
- 2. It will also complement the existing Beginner and Low Intermediate terrain at the ski area by providing two new trails and a meadow area that skiers/riders can use exclusively by riding the Meadow Lift. This area would also be used by the ski school.

The Meadow Lift is planned to be a fixed-grip, double chairlift approximately 1,700 feet in length. The bottom terminal would be located below and to the south-east of the bottom terminal of the Alberta Lift. The top terminal would be located near the Alberta Lift line between *Bankshot* and *Serendipity*.

The bottom and top terminals of the Meadow Lift would be located on private land owned by others; however, as discussed as part of the Elma Lift, Wolf Creek has an easement already in place designed to maintain skier access to both top and bottom terminals of the Meadow Lift.

4.2.2.5 Sunset Lift

"Love the idea of lift service on Spooner."

"I've always been intrigued by the Spooner Hill area, so I like the concept of this lift."

"Why not expand the area with the Sunset Lift but keep the terrain natural, without clearing trees and adding a terrain park?"

"I've never ventured over to that area. Have always wanted to ski the eastern side, but just can't handle the hike or want to spend the time to do so."

The proposed fixed-grip, double chair Sunset Lift was designed with two operational purposes in mind:

- 1. It would provide access to Intermediate-level terrain on Spooner Hill that is currently only available via hiking, as well as additional hike-to terrain in the proposed SUP expansion on the RGNF. This lift would support groomed skiing and a possible future terrain park for Beginner and Intermediate skiers/boarders.
- 2. The Sunset Lift would also serve as an access point into the Matchless Pod, and the upper end of the Silver Creek drainage. Skiing off the backside of Spooner Hill from the Sunset Lift top terminal will provide enough vertical for skiers to return to the base of the Matchless Tram.

The Sunset Lift would be approximately 3,700 feet long, and access would be via the Alberta Lift. It is planned entirely on NFS lands within the existing ski area boundary. Minimal tree clearing would be required for the trail grooming and a potential future terrain park. Full overstory clearing would only be necessary for the lift corridors and access and egress routes, while the remainder of the terrain would be gladed. There would also be a new, multi-use guest service and ski patrol duty station constructed at the top of the Sunset Lift, which is discussed separately.

4.3 TERRAIN ENHANCEMENTS

4.3.1 Terrain Variety

Because terrain variety is so important, a ski area must have a diverse, interesting, and well-designed developed trail network, but also have a wide variety of alternate style terrain.

Wolf Creek's existing developed terrain, as well as its in-bounds, hike-to, and gladed alternate terrain areas are widely regarded as providing an exceptional skier experience. Through this Upgrade Plan, Wolf Creek seeks to carefully preserve the unique attributes of the "Wolf Creek Experience" by strategically increasing terrain opportunities for all types and levels of skiers/riders.

This plan provides for convenient access to developed terrain, as well as large areas of alternate style terrain. Wolf Creek is dedicated to providing a premier undeveloped, backcountry-style ski experience, so the majority of the planned upgrades are geared towards this backcountry-style terrain.

4.3.2 Developed Terrain

Overall, 154 acres of terrain are planned for addition to the developed trail network. Most of these acres are a result of shifting existing undeveloped terrain in the proposed Sunset Lift area to terrain that will be developed to some degree and will become directly lift-served. This terrain would then be considered 'developed terrain' under Wolf Creek's definition. Of the 154 acres, only the 23 acres of new trails off the Pass Lift would be new developed terrain.

Under the Upgrade Plan, Wolf Creek's developed trail network would increase from approximately 717 acres to 855 acres. The areas of terrain expansion are discussed separately below. Table E-2 in Appendix E details the specifications of the upgraded developed terrain network.

4.3.2.1 Pass Pod Area

"I love the idea of opening the north face. So many times I have come to the top of the Bonanza lift and wanted to ride down that side of the mountain."

The Pass Pod encompasses land at the top of Wolf Creek Pass in the San Juan National Forest. The SJNF originally identified over 400 acres on the west side for ski area use in their 2007 SJPL Draft EIS; however, Wolf Creek does not believe that 400 acres are needed. Wolf Creek also wanted to avoid extending into areas such as the Hourglass that are currently used by others, such as snowmobilers and backcountry skiers.

A boundary adjustment of approximately 200 acres onto the SJNF is proposed to accommodate this new ski pod. The majority of the new, traditionally-developed terrain proposed for the ski area would be located in the Pass Pod. This area is north-facing, would provide good snow quality throughout the ski season, especially in early season, and would provide the opportunity for a top-to-base, north-aspect ski trail. Six new trails would be developed: one Beginner, two Low Intermediate, two Intermediate, and one Advanced Intermediate, complementing the traditional skiing already in place along the west side of the ski area. Wolf Creek received many comments from family skiers in support of more intermediate terrain. The Pass Pod would increase the amount of Beginner and Intermediate terrain, relieving some of the pressure on the Raven and Bonanza areas. It would also create a groomable, park-like mosaic of skiing spaces, providing an opportunity for Intermediate skiers to experience terrain similar to that offered in the more advanced Alberta Pod. The trails would be somewhat similar to *Kelly Boyce* and *Bunny Hop*, which have similar topographic limitations. The trail network would be developed to alleviate the flatness of the terrain to the extent possible. There would be no connection to or from Wolf Creek Pass on U.S. Highway 160; the only skier access would be from the ski area.

The terrain planned for the new Pass Lift area would require an adjustment to Wolf Creek's current ski area boundary, and a new SUP with the SJNF. While the top 200 feet (approximately) of the planned trails are located on the Rio Grande National Forest, most of this expansion area is on the San Juan National Forest.

4.3.2.2 Meadow and Elma Areas

"This seems to really stretch out the resort...putting to use terrain in the area that otherwise doesn't get much traffic seems like a good idea before expanding outside the existing area."

The Meadow Lift will serve four new Low-Intermediate trails, and the Elma Lift would serve three new additional Low-Intermediate trail. The Elma Lift will additionally serve three existing Intermediate trails (*Summer Day, Flim Flam, and S'Wonderful*).

4.3.2.3 Sunset Lift (Spooner Hill) Area

"I think that Spooner Hill would make some excellent intermediate terrain and a lift there makes sense."

Serving the gentle, gladed terrain on Spooner Hill, the Sunset Lift would provide an excellent "first time powder experience" for intermediate level guests. The terrain was part of a 1960/70s era forest clearcut unit and presents excellent glade skiing opportunities in its current condition. The planned Sunset Lift would provide access to current hike-to only terrain along Spooner Hill. This terrain would be slightly more developed, with defined access and egress routes as well as expanded gladed skiing.

Thirteen new trails would be developed: five Advanced Intermediate, one Expert, two Gladed Expert, and five Gladed Advanced Intermediate trails. Overall, roughly 125 acres of terrain will be added to the developed trail network as a result of the new Sunset Lift. This terrain is entirely within the existing ski area boundary on the RGNF.

4.3.3 Alternate Terrain/Terrain Parks

Wolf Creek has an abundance of gladed areas, open bowls, chutes, cliff bands, natural meadows, and connected natural openings. The Upgrade Plan calls for more of that terrain style to be added, primarily in the Matchless Pod, the Sunset hike-to terrain above Alberta Lake, and minimally, in the Pass area. Note that some of the existing alternate terrain would be considered 'developed' under this Upgrade Plan, due to new lift access from Sunset Lift.

Table E-3 in Appendix E details the specifications of the upgraded developed terrain network at Wolf Creek

4.3.3.1 Matchless Pod Area

"I like the backcountry terrain without removing any trees. Requiring some terrain to be hike-to only is one reason I like Wolf Creek."

The Matchless Pod in the Silver Creek drainage would provide Wolf Creek's advanced and expert skiers 715 acres of lift-assisted backcountry experience in primitive, gladed terrain to the east of Horseshoe Bowl. Terrain is oriented to the east and northeast. The area would essentially be left in its natural state, which includes complicated terrain, hidden chutes, old-growth skiing, and variable features to explore. It fits well with the existing ski experience in the area, such as in the Horseshoe Bowl and along the Alberta Lift. It would provide a ski experience similar to a large version of the Waterfall area, or somewhat like upper *Holy Moses* on steroids. The Matchless Pod would add vertical drop to the ski area, bringing the total to about 2,300 vertical feet of skiable terrain.

The Matchless Pod contains mostly north- and east-facing slopes, which hold the snow well. There are no dominant flat areas that require traversing. Current spacing of the trees in the area is wide enough that additional thinning is not necessary to make it skiable, and no trails would be cut. No snowcat trails or snow grooming are planned for the Matchless Pod. There is no current avalanche program in the Matchless Pod area. Wolf Creek expects to install Gazex exploders in more critical avalanche areas, and the ski area would need to see a significant increase in patrol staff to complete avalanche control work in the Matchless Pod.

The Matchless Pod fits with current, industry-wide trends in skier use such as the side-country or slackcountry style of skiing, where lift-accessed backcountry-style skiing is becoming more and more desirable. The additional terrain would spread skiers at Wolf Creek out over both space (by increasing acreage of this style of terrain) and time (by serving as a regional draw during off-peak days and nonholiday weeks). The Matchless Pod would offer skiers the chance to experience new terrain at the ski area, but would also be an economic boost for the surrounding communities as this style of skiing is becoming more sought-after and is not readily available at more traditional ski areas.

The addition of the Matchless Pod would be a new and exciting draw for people who want to experience lift-assisted backcountry-style skiing. It would have the added benefit of spreading skiers out across the mountain, preventing over-utilization of the fresh powder in the Alberta Lift area.

A preliminary biological study was completed during the last two years and is available upon request. The findings were encouraging, reflecting that this area could be used for winter recreation with a minimum impact to the flora and fauna. Prior to or upon initiation of the ski area expansion onto the SJNF, further biological studies will be completed as part of the NEPA (National Environmental Policy Act) process.

The terrain planned for the new Matchless Pod area would require an adjustment to Wolf Creek's ski area boundary, and would require a new SUP since this entire expansion area is in the San Juan National Forest.

4.3.3.2 Alberta Lake Hike-to Terrain

Approximately 85 acres of new undeveloped terrain above Alberta Lake (a.k.a. Alberta Park Reservoir, see Figure 7) would be hike-to and hike-from access only. It would need to be brought into the existing RGNF SUP area through a boundary expansion. The terrain would be accessed by hiking north along the ridge from the Sunset Lift, to the sub-ridge above the lake. These north-facing slopes retain snow depth and quality, providing a good base on which to ski throughout the season. After descending the short, steep pitch down to Alberta Lake, skiers/riders would be required to hike back to the base of the Alberta Lift.

4.3.3.3 Pass Pod Area

Undeveloped glades will be available between the defined trails under the Pass Lift. Additionally, some open rock field areas west of the lift in the Rock Garden may be skiable. These runs would become available as yearly snowfall accumulates and would provide a wide-open skiing experience for Beginning and Intermediate skiers. This would add roughly 200 acres of skiable terrain, and would need to be brought into the existing ski area boundary, and would require a new SUP with the San Juan National Forest.

4.3.3.4 Terrain Park

"Love the terrain park idea... It will bring in a lot of freestyle skiers and snowboarders that rarely come to Wolf Creek."

Recognizing the growing demand for, and interest in, terrain parks and terrain features, Wolf Creek will continue to evaluate public demand and interest in these features. If interest continues to increase, Wolf Creek would consider potentially installing and operating future terrain features in the area accessed by the proposed Sunset Lift. Any terrain enhancements in the Sunset Lift area would be timed with construction of the lift.

4.4 GUEST SERVICES ENHANCEMENTS

4.4.1 Guest Services Locations

Wolf Creek will continue to function with a single base area guest services portal under the Upgrade Plan. The Upper/Main Lodge will continue to serve as the main guest services facility for the ski area, and on-mountain guest services will continue to be offered at the Raven's Nest facility. The Upgrade Plan proposes upgrades to two of the base area facilities and a new facility.

For on-mountain services, the Upgrade Plan proposes five new guest services facilities, each associated with an existing or proposed ski lift. These new guest services facilities are discussed below, and detailed space-use specifications and analysis of the facilities are provided in Tables E-7 to E-11 in Appendix E.

4.4.1.1 Base Area

All base area facilities being considered under the Upgrade Plan are currently or would be located within the ski area's existing boundary, and are covered under the existing SUP with the RGNF.

Sports Center Remodel / Boarder Dome Removal:

The Sports Center would be one of the higher priority facilities improvements. This would include the tasteful expansion of the existing facility into a two-story building. The current Boarder Dome Demo Center (roughly 650 square feet) will be eliminated, with its functions being incorporated into the remodel/enlargement of the Sports Center facility.

Upper/Main Lodge Upgrades

The deck on the Upper/Main Lodge is in poor condition and needs to be replaced, as well as the staircase. These minor improvements would be considered a priority under the Upgrade Plan.

The Den Facility

A new guest support building is planned for the base area called "The Den". This approximately 16,700square foot facility would be located between the upper parking lot and the existing Base Camp building within the existing SUP boundary. It will provide additional ticketing and food service, increase the lunchtime seating capacity, serve as a welcome portal for group business, and house other needed guest services. As other, higher-priority guest services facilities are implemented under the Upgrade Plan, Wolf Creek may re-evaluate the size and services needed at the facility.

4.4.1.2 On-Mountain

In order to provide lunch time service to skiers utilizing the Alberta Lift and the proposed lifts that are even further from the base area, Wolf Creek is planning on two new on-mountain guest service facilities at the Alberta Lift top terminal and the proposed Matchless Tram top terminal. Both facilities would be located within the existing ski area boundary. The existing Raven's Nest facility will continue to serve the needs of guests in the existing Raven and Bonanza Lift areas, in addition to skiers in the new Pass area.

A prefabricated, movable, zero discharge bathroom facility is planned at the base of the Alberta Lift that will replace the portable toilets.

Two additional guest support facilities are proposed for location at the new Pass and Sunset Lifts. Both of these facilities would provide restrooms, warming areas, and ski patrol stations. The Sunset facility would have the option for future food services.

The architectural design of planned new structures on NFS lands would be subject to Forest Service review and approval at the time of a specific project proposal. The Forest Service will utilize the Built Environment Image Guide (BEIG) in any respective review of these facilities, as defined in Chapter 1 of Appendix B of this document.

Alberta Building

On-mountain guest support for skiers in the Alberta Pod will be greatly improved with the addition of a multi-use guest services facility located at the top of the lift. This facility will meet the existing high demand for on-mountain lunch service in the Alberta Pod, allowing skiers to spend the entire day in the Alberta Lift area without having to return to the base area for services. A duty station for ski patrol and restrooms would also be part of the facility. Construction of the facility near the top of the lift would occur below the ridgeline, and would not remove any skiable terrain.

The Alberta Building has been designed and engineered to integrate with the existing upper terminal of the Alberta Lift to minimize the overall footprint and replace the current scaffolding structure at the top terminal of the lift. The new design has been reviewed and approved by the Colorado Passenger Tramway Safety Board. This new facility would be sized at roughly 8,500 square feet and provide

approximately 320 seats in addition to the current number of restaurant seats. Additionally, the Alberta Building would host the equipment demo center that is presently operated at the base of the Alberta Lift. The Alberta Grill at the base of the lift would remain in operation until conditions change.

Public response during scoping supported a facility at the base of the Alberta Lift. While that location was initially favored by Wolf Creek, the ski area had a hard time finding an appropriate location for the facility between the limitations of private property, County open space restrictions, and the wetlands located in that area. In the end, placing the facility at the top of the lift was determined to be the best solution. Based on public response for services at the Alberta Lift, the Alberta Building is considered a high priority within the Upgrade Plan.

Refer to Table E-9 and Table E-12 in Appendix E for specifications and analysis of the proposed Alberta Building.

Alberta Restroom Facility

A zero discharge restroom facility is planned for installation at the base of the Alberta Lift, which would also be made available to the Nordic Center users. In contrast to the issues surrounding placing a multiuse facility at the base of the lift, the restroom facility has a small footprint that can be placed outside of the wetland areas, and does not provide any commercial services, which would be in violation of the County's open space restrictions.

Matchless Low – Capacity Tram Facility

An additional on-mountain facility will be constructed at the top of the Matchless Low-Capacity Tram, as shown in Figure 7. This facility will meet the future demand for on-mountain lunch service that will result from the two new remote lifts (the Matchless Tram and the Sunset Lift). Skiers on the Matchless Low-Capacity Tram in particular, would be almost 3 miles from the base area—making a trip back to the base area for lunch undesirable. The building is recommended to be between 1,500 to 3,000 square feet with approximately 70–130 restaurant seats, including limited storage and ski patrol operations. It would be located within the existing ski area SUP boundary, just north on the ridge from the existing Casa del Sol warming hut.

Pass Pod Facility

A multi-use restroom/ski patrol station/warming hut is planned for the bottom of the Pass Lift, for use by skiers and other recreational users in the Wolf Creek Pass area such as snowmobilers. Because of its location on the Pass, the Wolf Creek Ski Patrol is frequently one of the first responders to any accident in the area. The Pass facility would have a ski patrol duty station to facilitate fast medical response for skiers and snowmobilers. It would be brought into the existing SUP area as part of the boundary expansion onto the San Juan National Forest for the entire Pass Pod.

Sunset Facility

The Spooner Hill area is currently a 45 minute hike from the top of the Alberta Lift, and is therefore isolated from existing guest services in the ski area. A multi-use facility is planned for the summit, to house a ski patrol duty station, restroom facilities, a warming hut, and operations storage. The facility

would be located within the existing ski area boundary, and would be approximately 1,500 to 3,000 square feet in size, with the possibility of expansion to incorporate food services if deemed desirable in the future.

4.4.2 Ski Patrol/First Aid

As noted in Chapter 2, Wolf Creek's existing ski patrol facilities on-mountain and in the base area effectively serve the existing skied terrain. Additional ski patrol duty stations would be added at the Sunset Lift, the Matchless Tram, and the Pass Lift to serve the proposed new terrain in those areas. An existing duty station exists at the Knife Ridge Outpost at the top of the Alberta Lift; this facility would be moved into the new Alberta Building.

Additionally, the ski area may decide to locate additional ski patrol functions within the new maintenance building planned for the area between the Tranquility and Alberta parking areas. A multistory structure in this location would accommodate on-grade entry from the Tranquility parking lot for the lower level, and allow for on-grade entry on the upper level in the Alberta lot. This facility would house much needed staff lockers and ski patrol functions, including an additional trauma room for guest accidents occurring in the southern region of the resort. This location complements the present use of the Alberta parking area by employees, which leaves the parking areas more proximate to the base area for guests.

4.5 PARKING/ACCESS ENHANCEMENTS

Wolf Creek has carefully evaluated increased visitation and associated parking capacity, with the goal to eliminate the need for additional parking on USFS lands. The Upgrade Plan does not include any additions or improvements to Wolf Creek's parking lots other than paving and continued maintenance. The ski area's Special Use Permit is limited in terrain that is suitable for parking areas, and Wolf Creek believes that the point of diminishing returns has been met in regards to parking lot construction. Current parking capacities are shown to be more than adequate in the MDP and the existing surplus of parking spaces are expected to be sufficient for increased visitation associated with terrain expansion and improvements under the MDP. More detailed analysis of parking capacity is provided in Appendix E.

Wolf Creek currently encourages employees to use Wolf Creek's shuttle busses, with great success. Wolf Creek believes that developing guest shuttle services on both sides of the Pass would be better for the environment, reduce fuel costs, minimize traffic on the Pass, and would be convenient for guests who may be intimidated by mountain driving. Wolf Creek management has been working with the Chamber of Commerce in Mineral County and with the Archuleta County Commissioners to find locations to use as off-site parking hubs for guest shuttles. Incentivizing guest carpooling and/or modifying peak day ticket pricing will also mitigate increased visitation and parking.

4.6 PROPOSED ALTERNATE AND NON-WINTER ACTIVITIES

4.6.1 Winter

Wolf Creek's existing Nordic trails accommodate classic and skate skiing, as well as snowshoeing, and are regularly groomed and provided without charge to the public. Wolf Creek plans to continue this program into the future with no current plans for changes to the Nordic trail system.

4.6.2 Summer

As noted in Chapter 2, Wolf Creek does not currently offer any on-going summer activities or opportunities to the public. There are no current plans to offer any organized summer activities.

4.7 SKI AREA OPERATIONS ENHANCEMENTS

4.7.1 Snowmaking

Presently, Wolf Creek has only limited snowmaking facilities augmented as necessary with manual shoveling of snow from within inter-trail tree islands. Wolf Creek frequently experiences periods during the early season where the majority of select trails are well-covered except for critical "hot spots" that prevent the trail from being opened.

In the 1990's Wolf Creek acquired adjudicated water rights for snowmaking purposes totaling 2 million gallons. The current ski area operation only uses approximately one-quarter of this amount for snowmaking, and has one 500,000 gallon storage tank. Wolf Creek proposes the construction of two additional storage tanks, one with a 1 million gallon capacity, and one holding 500,000 gallons. One tank would be located under the relocated Bonanza chair near the intersection of the *Turnpike* and *Powder Puff* trails, and the other at the head of the *Patina* tree trail below *Alberta Face*. It should be noted that many snow making systems in Colorado use up to 1 to 2 million gallons per 24-hour period, and Wolf Creek's total planned water use is 2 million gallons per season.

Wolf Creek relies primarily on natural snowfall, and would utilize expanded snowmaking facilities only to supplement the natural snowfall. While future snowmaking is not planned on any given trail "from top to bottom," providing coverage on select trails to allow these various spots to be augmented with machine-produced snow would allow the remainder of the connected trails to be opened for skiing earlier in the season and/or under low snow conditions. Wolf Creek plans to construct a snowmaking system to provide patching coverage as necessary within the Raven, Treasure, and Bonanza Lift Pods, including select areas on *Turnpike, Tranquility, Silver Streak, Legs, Nova, Powder Puff Valley, Bunny Hop*, and *Susan's* trails (see Figure 7).

In all, snowmaking capabilities would be installed on approximately 38 acres of terrain. However, only select patches of any of a combination of these trails might be covered during any given season depending on how natural snowfall and ablative windscour may affect the ability to open these trails, and where the critical links need augmented coverage.

4.7.2 Grooming

Additions to developed terrain are limited in the Upgrade Plan; therefore, it is not anticipated that significant additions to the grooming fleet will be required. Since the total developed trail acreage increase is less than the 40 to 60 acres that a single grooming vehicle can cover in a night, Wolf Creek expects that only one additional groomer would be required.

4.7.3 Maintenance Facilities

As previously described, Wolf Creek's maintenance facilities include the Upper and Lower Shops as well as Maintenance Buildings 1 and 2. The Upper and Lower Shops are located in the vicinity of the base area, near the Base Camp building. While this location allows for both road access and snow-front access for the grooming vehicles, it is presently located in an area with high public use and may present future safety concerns. In recognition of this, Wolf Creek Ski Area and the U.S. Forest Service (RGNF) identified potential building sites that would allow Wolf Creek to eventually phase out the Upper and Lower Shops as vehicle maintenance facilities. Adequate space remains for additional maintenance and shop space on the north side of U.S. Highway 160 near Maintenance Buildings 1 and 2. This area falls within Wolf Creek's existing SUP on the RGNF.

Other planned maintenance buildings include:

- An additional vehicle maintenance and storage building in the vicinity of the Tranquility lot, as shown in Figure 7. As detailed above under the description of ski patrol functions, the additional maintenance building may be developed to additionally house ski patrol, employee lockers and other necessary functions.
- An additional maintenance facility is planned for construction on the north side of U.S. Highway 160 for Wolf Creek's snow removal equipment.
- In conjunction with the U.S. Forest Service, Wolf Creek will look at several potential sites for a future new snowcat maintenance facility.

As part of the MDP Upgrade Plan, a need has been identified for a permanent helicopter storage facility. Having a helicopter located on Wolf Creek Pass during the winter months benefits the public in the following ways:

- 1. Search and Rescue: A helicopter would aid not only in ski area rescue but also in assisting Mineral County in finding lost snowmobilers and backcountry skiers. This service is already being provided on an annual basis.
- Avalanche Control Work: Helicopter-assisted avalanche control work would benefit not only Wolf Creek's operations but also the Colorado Department of Transportation's (CDOT) avalanche control work along the highway.
- 3. Emergency Personnel Transport: With backcountry use on the rise in the Wolf Creek Pass area, Wolf Creek's ski patrol have been called upon to partake in dog-assisted avalanche

victim locates. Time is of the essence in these cases, and helicopter transport of teams would be extremely beneficial.

 Personnel Transport:-During the sometimes extended length of Wolf Creek Pass closures, it may become necessary to provide transportation of ski area personnel to the surrounding communities.

The helicopter storage facility would be located at the south end of the Snowshed parking lot along U.S. Highway 160. Placement of the facility would not reduce the number of available parking spaces.

4.8 UTILITIES AND INFRASTRUCTURE ENHANCEMENTS

No specific independent utility or infrastructure projects are included in the Upgrade Plan. Upgrades and improvements to existing infrastructure such as power, water, and sewer (e.g., the new on-mountain food and beverage facilities) will take place commensurate with the individual project.

4.8.1 Water

Additional domestic water service to the new base and on-mountain guest services facilities will be required. Wolf Creek's current domestic water rights of 250,000 gallons/day are far more than adequate to accommodate any new water demands at the new facilities. Wolf Creek currently averages an actual daily water use of only 3,918 gallons per day during the ski season.

4.8.2 Sewer

Composting toilets have already been installed at the Raven's Nest facility and the Continental facility at the top of the Treasure Lift, and planned zero discharge movable toilets are planned at the bottom of the Alberta Lift. New sewer service to the planned on-mountain facilities may be required if composting toilets are not used. The current wastewater treatment plant has available capacity to treat any new wastewater from the planned facilities.

4.8.3 Power

Power will be required for the new lifts as well as other planned projects. Power needs will be assessed and addressed on a site-specific basis, in conjunction with each given project.

4.8.4 Fuel Storage

Fuel storage is considered adequate for current and anticipated near-term future use. If additional fuel storage is required in the future, the need will be addressed at that time and any new facility would comply with applicable codes.

4.8.5 Road Network

Mountain road access will be required for construction and maintenance to the top and bottom terminals of the Pass Lift, the Elma Lift, and the Meadow Lift, and to the bottom terminal of the Sunset Lift. Access will require new road construction to the bottom terminals of the Pass, Sunset, and Meadow

Lifts, with the rest of the required access being along existing roads or ski trails. Total length of new mountain roads would be less than 1 mile. Improvements to existing roads or ski trails may be required for the other listed terminals. The top terminal of the Sunset Lift, as well as the top, middle, and bottom terminals of the Matchless Low-Capacity Tram, will be constructed with helicopter access only.

5. SUMMARY OF MODIFICATIONS MADE IN RESPONSE TO PUBLIC INPUT

5.1 Treasure Express

As part of the public input process, Wolf Creek received numerous, unsolicited comments regarding the age, speed, comfort, and ease of off-loading of the existing Treasure Lift. As a result, Wolf Creek management carefully reviewed the comments, interviewed lift operators and ski patrol staff, and reviewed accident data from the lift. Management re-evaluated the lift addition priorities under the MDP and determined that replacing the existing Treasure Lift with a high-speed quad in the same location needed to be a much higher priority than initially planned.

With the planned replacement of the Treasure Lift with a new Treasure Express quad, the old Treasure Lift is available for re-use as one of the other proposed new fixed-grip triple chairlifts. Ultimately, Wolf Creek management determined that the lift would be best suited for use as the Elma Lift. The old Treasure Lift will undergo a full engineering and safety review and will be brought up to all current codes as required by the Colorado Passenger Tramway Safety Board prior to installation as the Elma Lift.

5.2 Matchless Pod and Low-Capacity Tram

Wolf Creek Ski Area hopes to work together with all stakeholders, including other permittees on the National Forests as well as other public lands users in an effort to move ahead with a development plan that everyone can support. As an example of this, during one of the public meetings, Third Generation Outfitters, a hunting outfitter/guide operating in the Silver Creek drainage, voiced concerns about how the proposed Matchless Low-Capacity Tram could affect wildlife usage of the area, and in turn, his business. Since that meeting, Wolf Creek has worked directly with this other public land permit-holder and the Forest Service to alleviate concerns and find solutions that can work for all parties. It was critical to the success of both businesses that this potential conflict was identified early on, allowing adequate time for meaningful discussions and finding solutions before this final MDP was submitted to the National Forests.

In agreement with the outfitter/guide, Wolf Creek will incorporate spring and early summer construction and maintenance schedules for the Tram, staying entirely out of the Matchless Pod area during late summer and into the fall elk rut. Tram construction will be done entirely using helicopter transport, and no roads or trails will be constructed into the Matchless Pod/Silver Creek drainage area. Tram cars will be stored inside at the midpoint facility, and no cars would be run during the summer and fall season to reduce visual impacts to wildlife. The Tram will only be operated after 42 inches of snow can be measured at the Wolf Creek midway stake, at which time most elk will have descended to lower terrain for the winter season. All these considerations will reduce the impacts to hunting outfitter/guides while still allowing ski area expansion into the Matchless Area. A summary of this agreement can be found in Appendix G

5.3 Pass Pod

Many comments were received that reflected concern over the potential conflicts between existing snowmobile users in the proposed Pass Pod area and future skiers in that area. As a result of the comments and in an effort to maintain separation between the two uses and minimize impacts to snowmobile users, Wolf Creek specifically revised the downslope boundary of the Pass Pod to avoid the meadow area near the base of the Pass Lift to the extent possible, and allow snow play in that area to continue unimpeded.

The proposed multi-use guest support facility/warming hut at the base of the Pass lift would also be a benefit not only to skiers, but to snowmobilers and other recreational users in the Wolf Creek Pass area. The building would have a ski patrol duty station to facilitate fast medical response for all recreational users including skiers and snowmobilers.

5.4 Upgrades Considered but Ultimately Not Pursued

Storm Lift

A 1,200-person per hour fixed-grip double chairlift—the Storm Lift—was initially planned to serve the Horseshoe Bowl area during heavy snowfalls. This lift would have provided lift access to a large area of undeveloped, backcountry-style terrain that is currently hike-to only, and direct fall-line access to the terrain at the far (eastern) end of the area accessed off the Alberta Lift.

The Storm Lift was proposed for operation only during snowfall events, allowing guests and patrol to more easily access the existing terrain and provide the added snow-safety advantage of maintaining a modest level of skier traffic on the snowpack during the storm cycle. It was intended that once the snowfall subsided, the lift would not operate and the terrain would return to a hike-to experience preserving the newly fallen powder.

As part of the public scoping review of the draft MDP, Wolf Creek management determined that the public didn't necessarily understand or support the addition of the Storm Lift. Concern was voiced repeatedly about potential overuse in the area the lift would serve. Knowing that for the "Wolf Creek Experience", demand for powder is extremely high, Wolf Creek management decided to eliminate the Storm Lift from further consideration.

6. IMPLEMENTATION AND PHASING

"I really appreciate the opportunity to participate in this process. Wolf Creek is the primary reason I am still skiing; the combination of affordability, excellent terrain, and snow make it a great experience."

"Excellent ideas! Wolf Creek is such a great place. Been skiing there for 26 years. I'm glad to hear that Wolf Creek's vision is not the same as other resorts, and that they still don't consider themselves a resort. That's exactly what we love about it. Keep expanding on the ski experience, NOT expanding on the crowds, hotels, shopping, etc. It's a skier's mountain, and I'm glad to see them keeping it that way. Love you Wolfie :)"

"Since the day I started riding at Wolf Creek in 1997 it has been my favorite ski area (I've ridden about 30 different ski areas). The ideas and plans in this video are very much what I love about Wolf Creek. It's all about maximizing the skier/rider experience, while minimizing the environmental impact. Well planned Pitcher family and everyone involved, we love your ski area!"

Wolf Creek would like to move forward with elements of the MDP as soon as possible in order to begin enhancing the "Wolf Creek Experience" in the next several seasons. As such, Wolf Creek has requested approval of the MDP from the Rio Grande National Forest in order to begin removal, relocation, and reengineering of the Treasure Lift to the Elma configuration, and construction of the Treasure Express, a detachable quad, in the summer of 2013. Wolf Creek is also prepared to move forward with the Sports Center renovation upon approval, completion of which would result in the removal of the Boarder Dome facility, with services moved into the renovated Sports Center.

Other priority elements in the Upgrade Plan include expansion of existing shuttle services for employees, initiation of guest shuttle services, and improvements to the Upper/Main Lodge.

Public input has reflected strong appeal and support for the proposed expansion onto the San Juan National Forest through the Matchless Pod and Pass Pod areas. It is important that Wolf Creek doesn't lose the public momentum garnered this year for these two proposed expansion areas. Wolf Creek recognizes that this will be a lengthy process, but should a Record of Decision be published in support of these expansions, Wolf Creek will begin National Environmental Policy Act (NEPA) work at once for the proposed upgrades on the San Juan National Forest.

Other proposed improvements described in this MDP are currently planned for implementation after these initial enhancements; however, since the MDP is a planning document Wolf Creek reserves the right to prioritize projects based on operational needs.

7. GLOSSARY

Ability Level: The relative rank of a skier or snowboarder, or the relative rank given to alpine terrain. The ten ability levels relied upon by SE Group are as follows: first-time beginner, beginner, advanced beginner, novice, low intermediate, intermediate, advanced intermediate, expert, advanced expert, and extreme.

Acceptable Trail Density: The maximum number of skiers and snowboarders that can slide on an acre of trail at any given time without causing uncomfortable crowding on the trail. Acceptable trail density is measured in skiers and snowboarders per acre. As a general rule, the difficulty of the trail and acceptable trail density share an inverse relationship.

Active Skiers and Snowboarders: Skiers and snowboarders are considered active if they are: (1) waiting in a lift line, (2) riding a lift, or (3) enjoying a downhill descent. Depending primarily upon weather and snow conditions, 70 to 85% of a resort's skiers and snowboarders are active. The remaining 15 to 30% of a resort's skiers and snowboarders are either using a resort's support facilities and amenities or are circulating in a resort's various staging and milling areas. These guests are considered non-active.

Best Management Practices (BMPs): Methods, measures, and practices specifically adopted for local conditions that deal effectively and practically with a given problem. BMPs include, but are not limited to, construction practices, structural and nonstructural controls, operations protocol, and maintenance procedures.

Comfortable Carrying Capacity (CCC): Comfortable Carrying Capacity is a planning tool used to determine the optimum level of utilization that facilitates a pleasant recreational experience. This is a planning figure only and does not represent a regulatory cap on visitation. CCC is used to ensure that different aspects of a resort's facilities are designed to work in harmony, that capacities are equivalent across facilities, and sufficient to meet anticipated demand. CCC is based on factors such as vertical transport and trail capacities.

Conveyor Lift: A conveyor is a type of surface lift used to transport passengers in a standing position. Passengers slide onto the belt at the base of the conveyor and remain standing on the moving belt to the top, where they slide off the belt onto the snow. They are the easiest, least threatening form of lift, and as such are ideal for first-time beginner skiers or snowboarders and children's ski school. Typically installed at snow level, the machinery and return belt are located below the surface. Options include covers or enclosures and raised sections. Maximum speed is 200 feet per minute and maximum (practical) length is around 1,000 feet.

Cubic Foot Per Second (cfs): The unit used to measure stream flow or similar discharge. One cfs is equivalent to 449 gallons per minute, or approximately 2 acre feet per day.

Day-Use Skier/Snowboarder: Generally speaking, a skier or snowboarder that lives within the resort's day-use skier/snowboarder market. Given normal road and weather conditions, the day

skier/snowboarder market is defined as the geographic area found within a 100-mile radius, or two hour drive, of the resort. Day-use skiers and snowboarders drive to the resort and park in day-use lots.

Destination Skier/Snowboarder: Generally speaking, a skier or snowboarder that resides beyond a 250mile, or five-hour, drive from the resort. On average, destination skiers and snowboarders stay at a resort for longer periods of time (i.e., ranging from three to seven days) and commonly comprise a majority of a resort's mid-week visitation. Destination skiers/snowboarders typically rely upon air travel and shuttle service for transport to the resort, and obligate overnight lodging and numerous other resort amenities.

Detachable Grip Chairlift: An aerial tramway system on which chairs circulate around the system alternately attaching and detaching from a moving haul rope. Chairlift detachment occurs at the lower and upper terminals for ease of lift loading and unloading.

Developed Trail Network: The trails and other named terrain delineated on a resort's trail map. In addition to traditional trail corridors, the network might include named and patrolled bowls, glades, chutes, couloirs, hike-to areas, and tree skiing/snowboarding areas.

Express Lift: A chairlift that is comprised of detachable grip technology and the rope typically moves at a faster speed than fixed-grip chairlifts. Also see Detachable Grip Chairlift.

Fall-Line: The path an object would naturally take as it descends a slope under the influence of gravity. Fall-line paths indicate the natural flow of potential trails, from the top of ridges to the elevations below. Fall-line terrain allows skiers and snowboarders to make equally weighted, left and right turns.

Fixed-Grip Chairlift: An aerial tramway system on which chairs remain attached to a haul rope.

Food Service Seat Turnover Rate: The turnover rate is used to evaluate a resort's aggregate food service seating capacity. The turnover rate is the estimated number of times a food service seat is used during a resort's peak food service operations. Sit-down dining at a resort lodge typically has a turnover rate of 3, while cafeteria-style dining is characterized by a turnover rate in the range of 4 to 5. In addition to the type of food service, a resort's climate also impacts turnover rate (i.e., cold and snowy climates have lower turnover rates).

Forest Plan: A comprehensive management plan prepared under the National Forest Management Act of 1976 that provides standards and guidelines for management activities specific to each National Forest.

Formal Trail Network: The trails and other named terrain delineated on a resort's trail map. In addition to traditional trail corridors, the network might include named and patrolled bowls, glades, chutes, couloirs, hike-to areas, and tree skiing/snowboarding areas.

Glades: Tree stands that have been thinned specifically in varying degrees to improve the skiing experience by increasing the spacing between individual trees. Stands with less thinning are sometimes

described as "tree skiing" areas. Stand with tree clearing to the extent that they can be groomed are described as "groomable glades"

Glading: The removal of a slope's trees, which enables a tree stand to be skied or ridden by a larger percentage of a resort's guests. Varying degrees of tree removal can be conducted to achieve a positive guest experience, based on existing stand structure.

Gradient: The vertical distance divided by the horizontal distance (i.e., commonly known as "rise over run"), which is measured as a percent, or a degree. Slope gradient is used to determine the ability level distribution of a resort's alpine terrain.

Grooming: The preparation and smoothing of the developed trail network's snow surface, using large, over-the-snow vehicles (commonly referred to as "snowcats" or "grooming machines"). Grooming machines are equipped with front-mounted blades to push snow and a rear-mounted implement to flatten and/or till the snow to an improved consistency.

Guest Services Facilities or Guest Services: Facilities or services that are supplied by a resort to accommodate guests and enhance the quality of the recreational experience. Examples of guest services facilities include: restaurants, warming huts, general information desks, resort lost and found departments, restrooms and lounges, ski school, daycare, public lockers and ski-check facilities, ski patrol, first aid clinics, etc.

High-Speed Chairlift: See Express Lift.

Management Area: Used by the Forest Plan to define where different management activities may be carried out and to show where different kinds of public uses occur.

Maze: A waiting area used to line up skiers and snowboarders just prior to lift loading (i.e., the corral area immediately adjacent to the loading point of the lift).

Mitigation: Actions taken to avoid, minimize, or compensate for adverse environmental impacts.

Mountain Roads: On-mountain primary and secondary roads that provide summertime access (for rubber tire vehicles) to mountain buildings and lift terminal locations.

National Environmental Policy Act of 1969 (NEPA): A law enacted by Congress in 1969 that requires federal agencies to analyze the environmental effects of all major federal activities that may have a significant impact on the quality of the human environment.

National Forest System (NFS) Lands: National Forests, National Grasslands, and other related lands for which the Forest Service is assigned administrative responsibility.

Off Fall-Line: The path an object takes as it crosses the fall-line slope. Off fall-line terrain compels skiers and snowboarders to make alternating long and short turns (turns that are not equally weighted) in

order to accommodate the off fall-line condition. In some instances, and if properly designed, off fall-line terrain can be enjoyable to snowboarders.

Off-Piste: Alpine terrain not associated with a named and maintained ski trail.

Peak Day Carrying Capacity (PDCC): The anticipated visitation for holiday periods and for winter weekends with optimal snow and weather conditions (i.e., powder days). PDCC is estimated after a resort has established its Resort Comfortable Carrying Capacity (RCCC) threshold. In addition to RCCC, PDCC must reflect historic visitation records (i.e., the frequency with which attendance exceeds RCCC and the magnitude by which peak visitation exceeds RCCC). PDCC typically exceeds RCCC by anywhere from 105 to 150%.

Pod: A delineated parcel of land that, due to its favorable terrain characteristics, is suitable for lift and trail development. Pods are areas of relatively consistent terrain (both slope gradient and fall-line) that may be serviced by one or more lifts and may be easily integrated into the existing skier and snowboarder circulation patterns.

Quad: A common abbreviation for a four-passenger chairlift.

Rider: A commonly used term for a snowboarding guest.

Ridge: The line of separation (i.e., a divide) between drainage basins.

Round-Trip Interval (RTI): The round-trip interval represents the aggregate time spent waiting in the lift line, riding the lift, and skiing or riding a particular trail of the lift. The RTI is used to calculate the number of runs an average skier/snowboarder is expected to take on a particular lift over the course of a day. Ultimately, the RTI is used to calculate the daily vertical demand of an average skier/snowboarder.

Snowcat: See Grooming.

Special Use Permit (SUP): A legal document, similar to a lease, issued by the U.S. Forest Service. These permits are issued to private individuals or corporations to conduct commercial operations on National Forest System lands. They specify the terms and conditions under which the permitted activity may be conducted.

Staging: An area, or zone, where guests assemble and are prepared for a particular recreational pursuit. Examples of staging areas include milling and maze areas, check-in and guest drop-off areas, plazas, etc.

Surface Lift: A lift on which passengers are propelled by means of a circulating overhead wire rope while remaining in contact with the snow surface. Connection between the overhead wire and the passenger is by means of a towing device (e.g., T-bar, J-bar, platter, etc.) attached and circulating with the lift's haul rope. (Note: For definitional purposes, conveyor and belt lifts are considered surface lifts.)

Target Trail Density: The maximum number of skiers and snowboarders that can slide on an acre of trail at any given time without causing uncomfortable crowding on the trail. Acceptable trail density is

measured in guests per acre. As a general rule, the difficulty of the trail and acceptable trail density share an inverse relationship.

Terrain Park: An area dedicated to the development and maintenance of a collection of alternative terrain features, which may include, but is not limited to, elements like halfpipes, quarterpipes, big air hits, ollies, spines, jibbing elements, barrel bonks, table tops, etc.

Trail Density Per Acre: The number of skiers and snowboarders that occupy an acre of trail at any one given time. Trail density is reported in a guest-per-acre ratio.

Traverse: A trail that allows skiers and snowboarders to traverse the mountain and avoid additional chairlift rides. Traverses are also used in pods of intermediate, advanced intermediate, and expert terrain to provide an appropriate descent for guests of beginner and novice ability levels.

Uphill Hourly Capacity: A calculation of the number of skiers and snowboarders transported—per hour—from the lower to the upper terminal of the lift. A resort's combined uphill hourly capacity is the aggregation of the resort's individual lift capacities.

Vertical Demand: The vertical demand of a lift is the by-product of the lift's vertical rise, the average round-trip interval (i.e., number of runs per hour), and the number of hours the lift is used by an average skier or snowboarder. In short, vertical demand is the product of the lift's vertical rise and the number of runs skied/rode in a day of typical operation.

Vertical Transport Feet per Hour (VTF/hr.) (000): The number of persons a lift is able to transport 1,000 vertical feet in 1 hour. VTF/hour is derived by multiplying a lift's uphill capacity (measured in persons per hour) by the lift's vertical rise (measured in feet) and dividing by 1,000.