



**SUN VALLEY
MASTER PLAN PROPOSAL
2005**

Prepared For:
The Sun Valley Company
Sun Valley, Idaho

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SUN VALLEY MASTER PLAN – EXECUTIVE SUMMARY

.1 Introduction

A Master Plan for the Sun Valley Ski Area was approved by the United States Forest Service in 1989. In 1991, Ecosign completed a study of the Sun Valley Resort area that included several concepts for the development of the Bald Mountain, River Run and Warm Springs base areas and expansions to the Sun Valley Village. This 2005 Mountain Master Plan update is a logical extension of the previously completed and approved 1989 Master Plan, as well as the work completed by Ecosign in 1991. This updated Master Plan will incorporate changes in technology and market conditions that have occurred since the previous work was undertaken. Since the completion of the 1989 Master Plan, substantial lift, trail and snowmaking upgrades were undertaken by the Sun Valley Company. While this Master Plan does propose several small expansions outside of the existing permit area, the majority of the proposed facilities are either upgrades or replacement of aging equipment or facilities previously approved in past Master Plans. The Master Plan that has been proposed for USFS and BLM approval is for the Bald Mountain Winter Recreational Facility and the Dollar Mountain Winter Recreational Facility located on private land. The Dollar Mountain facilities are complimentary to the Bald Mountain Facilities, in that they provide services for the lower skill level skiers.

.2 Existing Area

Ecosign has undertaken a study which includes the identification, analysis and mapping of all on-site and off-site factors which may affect the development potential of the Bald Mountain and Dollar Mountain facilities. The inventory data includes: the land status, climatic, biophysical, and physiographic characteristics of the study area, as well as an analysis of the existing ski areas. The study area identified for mountain planning purposes encompasses about 8,180 acres in and around the Bald Mountain portion of the Sun Valley ski area and 1,030 acres in and around the Dollar Mountain ski area. Through an understanding of the site's existing conditions and natural process, environmentally sensitive areas can largely be avoided and natural development opportunities maximized.

The Sun Valley Ski Area currently operates a total of 14 ski lifts on USFS and BLM lands on Bald Mountain, including 2 double chairlifts, 4 triple chairlifts, 7 detachable quadruple chairlifts and a beginner handle tow. Bald Mountain has a lift serviced vertical of 3,388 feet, stretching from the top of Mayday to the River Run base. The 14 lifts have a total rated capacity of 23,800 passengers per hour and generate a total of 34.5 million vertical transport feet (VTF) per hour. These 14 lifts have a calculated skier carrying capacity of 9,200 skiers per day.

Dollar Mountain, owned and operated by the Sun Valley Company, consists of four chairlifts and moving carpets lifts, servicing terrain in the beginner to high intermediate skill classes. The three double chairlifts, one triple chairlift and moving carpets on Dollar Mountain can transport 5,200 passengers per hour and produce 1.94 million VTF per hour. The total skiable vertical at Dollar Mountain is 645 feet, from the top of the Dollar chairlift to the bottom of the Half Dollar lift. These 4 lifts have a calculated skier carrying capacity of 1,480 skiers per day.

Bald Mountain has a total of 1,024 acres of return cycle skiing trails and skiways, with a total capacity of approximately 9,060 skiers per day. Sun Valley's Dollar Mountain has a total of 69 acres of return cycle skiing trails and skiways, with a total capacity of approximately 1,240 skiers per day. The Bald Mountain ski trails are skewed toward the higher ski skill levels, while the Dollar Mountain trails are skewed toward the low skier skill levels. The combination of the two ski trail systems results in a fairly well balanced trail system by skill level, when compared to the North American market.

.3 Ski Potential

In order to determine the potential skier carrying capacity of the terrain within the Sun Valley study area, Ecosign has evaluated the terrain both within the existing Bald Mountain permit area, as well as that terrain immediately surrounding the permit area. The results of our analysis indicate that, while there is considerable potential ski terrain outside the existing permit area, only two areas just outside the existing permit area are worthy of future development over the next ten years. These two areas include the development of a ski trail on Guyer Ridge, and novice and low intermediate terrain on the south side of Seattle Ridge. Additional undeveloped ski terrain was also identified within the permit area.

.4 Master Plan Goals and Objectives

A ski area master plan involves planning the removal or replacement of existing equipment, integrated with the addition of new facilities over time. Modern mountain resorts require the most efficient and user friendly lift and trail systems possible, with a good balance of terrain type and variety, as well as snowmaking. The Master Plan also addresses the skier service facilities required to adequately service users of the winter recreational facilities

The Mountain Master Plan will be constructed over time, therefore, it is necessary to have a complete understanding of the total project at buildout and in each separate phase, so that facilities can be balanced and capital invested effectively.

Objectives

The objectives of the Sun Valley mountain development plan are as follows:

- Optimize the utilization and operational efficiency of the existing physical plant
- Balance lift and trail capacities wherever possible
- Provide maximum capacity for minimum capital and operating costs
- Provide base staging facilities in balance with mountain access and capacity requirements
- Continue to increase the quality of the facilities to meet the ever-increasing expectations of the destination skier market
- Provide facilities and capacity that will compliment the proposed River Run development
- Increase the quality of the beginner facilities and terrain
- Each phase of development should provide an optimally balanced facility while at the same time, move towards the ultimate goal
- Define goals and projects to guide management and inform public agencies during the ensuing 10-year period

The following description proposes the installation of new equipment, the upgrading of existing equipment and removal of old and inefficient equipment.

.5 Mountain Development Summary

Bald Mountain Phasing

It is proposed that the development on Bald Mountain be divided into 3 distinct phases. The text below briefly describes the elements of each phase and lists a summary of the facilities present in each phase.

Phase 1

The first phase of the Master Plan envisions improvement to the existing terrain in the form of snowmaking and the addition of new ski terrain on Guyer Ridge and Seattle Ridge. Lift improvements for Phase 1 include the removal of the Exhibition triple chairlift and its replacement with a Gondola from the River Run base to the

Roundhouse. With the installation of the River Run Gondola, Phase 1 includes a more efficient utilization of the Roundhouse facility by extending the operating periods so that the restaurant can be operated on a year-round basis, including evening dining. Figure 15a illustrates the Phase 1 development on Bald Mountain as listed below.

1. Construct Guyer Ridge ski trail
2. Re-align and grade Olympic Lane
3. Construct new Seattle Ridge ski trail
4. Approval of snowmaking on Frenchman's terrain
5. Addition of snowmaking – Olympic Lane/Roundhouse Slope, Upper and Lower Broadway, Guyer Ridge, Upper Cosy, Upper Hemingway, Christmas Bowl and Brick's Island
6. Install River Run Gondola
7. Remove Exhibition
8. Remodel Roundhouse and Expand operating period
9. Adjust permit area to include currently skied Broadway Face (27 acres) and Guyer Ridge (62 acres).
10. Terrain Park on lower Greyhawk

Phase 2

In Phase 2, the Mayday lift is replaced with a detachable quad chairlift. This phase of development also includes the expansion of beginner terrain on Seattle Ridge/Turkey Bowl. This terrain would also have snowmaking coverage. As part of this terrain expansion, the Cold Springs lift is replaced with a detachable quad to facilitate easier egress for beginners and low intermediates and increase the egress capacity.

1. Install Seattle Ridge South (Turkey Bowl) Beginner Detachable Quad Chairlift
2. Construct Seattle Ridge South (Turkey Bowl) Beginner Trails
3. Install Seattle Ridge South (Turkey Bowl) Snowmaking
4. Adjust permit area to include Seattle Ridge/Turkey Bowl Beginner Terrain (72 acres)
5. Replace Cold Springs with Detachable Quad Chairlift
6. Replace Mayday with Detachable Quad Chairlift
7. Remove Lookout Transport Lift
8. Upgrade and expand or replace Lookout Restaurant

Phase 3

The third and final phase of the Bald Mountain Master Plan development includes the replacement of the Christmas detachable quad chairlift with a gondola that is connected to the River Run Gondola with a pass-through mid-station located adjacent to the Roundhouse. The Challenger detachable quad chairlift would also be replaced

with a gondola. With gondola access to the top of Bald Mountain, the improvement and expansion of the Lookout Restaurant to a 25,000 to 30,000 square foot facility would take place. The final terrain development within the permit area would take place on terrain below the snowmaking pump house on the River Run side of Bald Mountain with the installation of a detachable quadruple chairlift and snowmaking.

1. Replace Christmas detachable quad chairlift with Gondola
2. Install detachable quadruple chairlift in the Lift 16 alignment
3. Construct Lift 16 ski trails
4. Install snowmaking on Lift 16
5. Replace Challenger detachable quadruple chairlift with an 8-passenger Gondola

A summary of the three Master Plan development phases is listed in Table 1.

**TABLE 1
BALD MOUNTAIN
DEVELOPMENT SUMMARY**

PHASE	LIFTS	NUMBER OF LIFTS	SCC	SKI TRAILS	SNOWMAKING	SKIER SERVICES
Existing	Lift 1 - River Run - D4C - 2400pph Lift 2 - Exhibition - 3C - 1500pph Lift 3 - Christmas - D4C - 2400pph Lift 4 - Cold Springs - 2C - 1200pph Lift 5 - Lookout - D4C - 1800pph Lift 6 - Sunnyside - 3C - 1500pph Lift 7 - Greyhawke - D4C - 2400pph Lift 8 - Frenchman's - D4C - 1800pph Lift 9 - Flying Squirrel - 2C - 1080pph Lift 10 - Challenger - D4C - 1500pph Lift 11 - Lookout - 3C - 1800pph Lift 12 - Seattle Ridge - D4C - 2400pph Lift 13 - Kinderspieplatz - HT - 300pph Lift 14 - Mayday - 3C - 1800pph	14	9,200	1,024 acres		
PHASE 1	Install: Lift 2R - River Run Gondola - D8G - 2800pph Remove: Lift 2 - Exhibition - 3C	14	9,460	1,062 acres Add: Guyer Ridge Olympic Lane Regrade New Seattle Ridge Trail Terrain Park Lower Greyhawke	Guyer Ridge Olympic Lane Regrade New Seattle Ridge Trail Upper and Lower Broadway Upper Cozy Upper Hemingway Christmas Bowl Brick's Island Frenchman's Zone	Extend Roundhouse Operating Hours
PHASE 2	Install: Lift 14R - Mayday Express - D4C - 2400pph Lift 17 - Turkey Bowl - D4C - 2000pph Lift 4R - Cold Springs - D4C - 2800pph Sun Valley-River Run Access Gondola Remove: Lift 14 - Mayday - 3C Lift 4 - Cold Springs - 2C - 1200pph Lift 11 - Lookout Transport Lift - 3C - 1800pph	14 + Access Gondola	10,470	1,082 acres Add: Turkey Bowl	Turkey Bowl	New Lookout Restaurant
PHASE 3	Install: Lift 3R - Christmas Gondola - D8G - 2800pph Lift 10R - Challenger D-8G - 2,800 pph Lift 16 in Pod G - D4C - 2000pph Remove: Lift 3 - Christmas - D4C - 2400pph	15 + Access Gondola	11,740	1,126 acres	Lift 16 Terrain	

Dollar Mountain Phasing

It is proposed that the development on Dollar Mountain be divided into 4 distinct phases. The text below briefly describes the elements of each phase and lists a summary of the facilities proposed in each phase. Detailed specifications for the mountain facilities are listed in the Appendix titled "Technical Supplement".

Phase 1

The first phase of the Dollar Mountain redevelopment commenced during the summer of 2004. This development included the replacement of the Dollar Mountain Cabin with the new Dollar Mountain Daylodge, formalizing the parking, regrading of the Quarter Dollar slope, installation of new beginner carpet lifts, and the installation of a tube lift and hill.

1. Replace Dollar Mountain Cabin with new state-of-the-art facility
2. Reconfigure parking lot
3. Install new beginner carpet
4. Replace Quarter Dollar chairlift with new detachable quad chairlift
5. Construct tubing hill
6. Install permanent snowmaking on the Quarter Dollar trail and tubing hill
7. Construct snowboard half pipe on Graduation

Phase 2

1. Replace Dollar Mountain lift with detachable quad chairlift
2. Install permanent snowmaking to the Sepp's Bowl and Face of Dollar
3. Move the bottom terminal of Half Dollar to facilitate the grading required to new Dollar chairlift

Phase 3

1. Replace Half Dollar mountain lift with detachable quad chairlift
2. Install permanent snowmaking to the Graduation and Half Dollar Bowl
3. Sun Valley to River Run Gondola with an angle-station on Telegraph Hill near the top of the Half Dollar Chairlift and an off-load station at the top of Hidden Valley
4. Hidden Valley Terrain Park, serviced by the Dollar-Hidden Valley section of the gondola

Phase 4

1. Replace Elkhorn chairlift with a detachable quad chairlift
 2. Install permanent snowmaking on Joint Venture and Elkhorn Bowl
- A summary of the Dollar Mountain Master Plan phasing is listed in Table 2.

**TABLE 2
DOLLAR MOUNTAIN
DEVLEOPMENT SUMMARY**

PHASE	LIFTS	NUMBER OF LIFTS	SCC	TRAIL AREA	SNOWMAKING
Existing	Lift D1 - Half Dollar - 2C - 1000pph Lift D2 - Dollar - 2C - 1200pph Lift D3 - Quarter Dollar - 2C - 1200pph Lift D4 - Elkhorn - 3C - 1400pph Lift D5 - Accelerator - MC - 400pph	5	1,480	69.1 acres	
PHASE 1	Install: Lift D3 - Quarter Dollar - D4C - 1000pph Lift D5 - MC - 400pph Remove: Lift D3 - 2C - 1200pph Lift D5 - Accelerator - MC - 400pph	5	1,520	75.2 acres Tubing Hill Snowboard Half-pipe on Graduation	Quarter Dollar Tubing Hill
PHASE 2	Install: Lift D2 - Dollar - D4C - 2000pph Remove: Lift D2 - 2C - 1200pph	5	1,850	77.9 acres Re-Grade Snow Apron at Dollar Base	Sepp's Bowl Dollar Face
PHASE 3	Install: Lift D1 - Half Dollar - D4C - 2000pph Sun Valley-River Run Access Gondola Remove: Lift D1 - 2C - 1000pph	5 + Access Gondola	1,950	84.9 acres Hidden Valley Terrain Park	Hidden Valley Terrain Park Graduation Half Dollar Bowl
PHASE 4	Install: Lift D4 - Elkhorn - D4C - 1800pph Remove: Lift D4 - 3C - 1400pph	5 + Access Gondola	2,310	84.9 acres	Joint Venture Elkhorn Bowl

.6 Summer Activities

Summer activities are extremely important to the success of the recreational facility. These activities can make use of the infrastructure and facilities in place for the winter recreation. Sun Valley, Ketchum and the Big Wood River Valley currently have quite heavy summer use in the valley which includes mountain biking, fishing, whitewater sports, horseback and wagon rides, tennis, swimming and aquatic activities, festivals and shows and conferences and retreats. In the future, the diversity of the summer use will increase and expand to include other activities. The following is a list which describes anticipated on-mountain summer activities for Bald Mountain.

- Lift accessed sightseeing and hiking
- Mountain top dining
- Mountain biking
- Hiking
- Horseback rides
- On-mountain concerts
- USFS Nature Interpretive Hikes

With the installation of the River Run Gondola and the Roundhouse restaurant, dining and sightseeing can be offered both during the day and in the evening. When the Christmas lift is replaced with a gondola, the top of Bald Mountain would make an ideal location for evening star gazing when conditions are suitable.

The existing mountain biking and summer hiking will utilize the existing trails already in place on Bald Mountain. No new hiking trails or mountain biking trails are proposed in this Master Plan.

.7 Infrastructure

The majority of infrastructure required to implement the proposed Master Plan improvements is already in place on Bald Mountain.

Electrical power to all of the restaurant locations and skier service buildings is already in place. Existing electrical power is already in place for all of the proposed lifts except Lift 16. Lift 16 will require approximately 550 feet of primary electrical feed, stretching from the mid-mountain snowmaking pumphouse located below the Roundhouse to the top terminal of the lift.

As is the case with the electrical system on Bald Mountain, the majority of the communication system is already in place. Communication lines to Lift 16 would be installed in the electrical powerline trench from the snowmaking pump house to its top terminal.

There is an extensive mountain road system on Bald Mountain. This road system provides access to all major lift terminals and on-mountain buildings. Many of these roads are also used as skiways during winter operations. The only new roads proposed in this Master Plan include a road from the bottom of the proposed Lift 17 in South Seattle Ridge (Turkey Bowl), to the bottom of Seattle Ridge Lift in Phase 2. This road is effectively a 4,600-foot extension of the “Fire Road” from the 7,640-foot elevation to the 8,220-foot elevation at the bottom of Turkey Bowl. This road would be used during the construction of the lift, as well as for on-going maintenance of the bottom station of the lift. During the winter, this road will be used as skiway for beginner skiers to access Lower Broadway and the Cold Springs lift and then download on the River Run Gondola. Additionally, this skiway can be used to evacuate skiers from the South Seattle Ridge (Turkey Bowl) zone should the lift experience mechanical difficulties.

In Phase 3, a 500-foot section of road is proposed to access the top terminal of Lift 16.

The existing potable water infrastructure on the mountain is adequate for the proposed improvements outlined in the Master Plan. As such, no new potable water systems are proposed for this Master Plan.

The existing sewage infrastructure on the mountain is adequate for the proposed improvements outlined in the Master Plan. No new sewage disposal systems are proposed for this Master Plan.