

ASPEN  SNOWMASS.®

ASPEN MOUNTAIN

2018 | MASTER  
DEVELOPMENT  
PLAN

January 2018



ASPEN MOUNTAIN

2018 | MASTER  
DEVELOPMENT  
PLAN



January 2018

ACCEPTED BY:

  
\_\_\_\_\_

Scott Fitzwilliams  
Forest Supervisor  
White River National Forest

DATE: 3/2/2018  
\_\_\_\_\_

# CONTENTS

|  |      |
|--|------|
| EXECUTIVE SUMMARY  | ES-1 |
| Key Plan Elements  | ES-2 |
| I. INTRODUCTION  | 1    |
| A. LOCATION  | 3    |
| B. LAND OWNERSHIP  | 3    |
| C. CURRENT RESORT OPERATIONS SUMMARY                     | 3    |
| 1. <i>Winter</i>   | 4    |
| 2. <i>Summer</i>   | 5    |
| D. BACKGROUND  | 6    |
| 1. <i>Chronology of Development</i>                      | 6    |
| E. PAST PLANNING AND ENVIRONMENTAL DOCUMENTATION         | 7    |
| F. VISION AND DESIGN PHILOSOPHY                          | 8    |
| G. STATEMENT OF GOALS AND OBJECTIVES                     | 8    |
| 1. <i>Winter</i>   | 8    |
| 2. <i>Summer</i>   | 9    |
| H. ACCEPTANCE BY THE FOREST SERVICE                      | 10   |
| I. REVIEW BY PITKIN COUNTY AND THE GENERAL PUBLIC        | 10   |
| II. DESIGN CRITERIA                                      | 11   |
| A. DESTINATION RESORTS                                   | 11   |
| 1. <i>Regional Destination Resorts</i>                   | 11   |
| 2. <i>National and International Destination Resorts</i> | 12   |
| 3. <i>Aspen Mountain's Resort "Niche"</i>                | 12   |
| B. BASE AREA DESIGN                                      | 14   |
| C. MOUNTAIN DESIGN                                       | 14   |
| 1. <i>Trail Design</i>                                   | 14   |
| 2. <i>Lift Design</i>                                    | 16   |
| 3. <i>On-Mountain Guest Services</i>                     | 16   |



|      |  |    |
|------|--|----|
| D.   | CAPACITY ANALYSIS AND DESIGN   | 16 |
| E.   | BALANCE OF FACILITIES  | 17 |
| F.   | MULTI-SEASON RECREATION ACTIVITIES   | 17 |
| III. | SITE INVENTORY   | 19 |
| A.   | TOPOGRAPHY AT ASPEN MOUNTAIN   | 19 |
| B.   | SLOPE GRADIENTS AT ASPEN MOUNTAIN  | 19 |
| C.   | SOLAR ASPECT AT ASPEN MOUNTAIN   | 20 |
| IV.  | EXISTING FACILITIES  | 21 |
| A.   | SUMMARY OF THE EXISTING GUEST EXPERIENCE   | 21 |
| B.   | EXISTING LIFT NETWORK  | 22 |
| C.   | EXISTING TERRAIN NETWORK   | 24 |
|      | 1. <i>Terrain Variety</i>  | 24 |
|      | 2. <i>Terrain Parks</i>  | 24 |
|      | 3. <i>Developed Alpine Trails</i>  | 24 |
| D.   | EXISTING CAPACITY ANALYSIS   | 30 |
|      | 1. <i>Comfortable Carrying Capacity</i>  | 30 |
|      | 2. <i>Density Analysis</i>   | 30 |
|      | 3. <i>Lift and Terrain Network Efficiency</i>  | 32 |
| E.   | EXISTING GUEST SERVICES FACILITIES,<br>FOOD SERVICE SEATING AND SPACE USE ANALYSIS     | 33 |
|      | 1. <i>Guest Services</i>   | 33 |
|      | 2. <i>Space Use Analysis</i>   | 33 |
|      | 3. <i>Food Service Seating</i>   | 34 |
| F.   | EXISTING PARKING CAPACITY  | 36 |
|      | 1. <i>Employee Parking and Transportation</i>  | 36 |
| G.   | EXISTING RESORT OPERATIONS   | 36 |
|      | 1. <i>Patrol/First Aid</i>   | 36 |
|      | 2. <i>Snowmaking Coverage</i>  | 36 |
|      | 3. <i>Grooming</i>   | 37 |
|      | 4. <i>Maintenance Facilities</i>   | 37 |
|      | 5. <i>Power and Other Utilities</i>  | 37 |
|      | 6. <i>Culinary Water and Sewer</i>   | 38 |
| H.   | RESORT CAPACITY BALANCE AND LIMITING FACTORS   | 39 |
| I.   | SUMMER OPERATIONS  | 40 |
|      | 1. <i>Summary of the Existing Summer and<br/>        Multi-Season Guest Experience</i> | 40 |
|      | 2. <i>Existing Summer and Multi-Season Facilities</i>                                  | 41 |
|      | 3. <i>Existing Summer Zones</i>  | 42 |
|      | 4. <i>Lifts and Restaurants</i>  | 48 |
|      | 5. <i>Hiking</i>   | 48 |
|      | 6. <i>Miscellaneous Activities</i>   | 50 |
|      | 7. <i>Summer and Multi-Season Guest Service Facilities Use</i>                         | 50 |
|      | 8. <i>Existing Resort Summer Operations</i>  | 50 |

|   |    |
|---|----|
| V. PREVIOUSLY-APPROVED PROJECTS,<br>NOT YET IMPLEMENTED                               | 51 |
| A. LIFT 1A (SHADOW MOUNTAIN) REALIGNMENT<br>AND REPLACEMENT                           | 51 |
| B. FOREST HEALTH PROJECTS   | 52 |
| VI. UPGRADE PLAN  | 53 |
| A. SUMMARY  | 53 |
| B. UPGRADED LIFT NETWORK  | 55 |
| 1. <i>Shadow Mountain Lift</i>  | 55 |
| 2. <i>Pandora Lift</i>  | 55 |
| 3. <i>Gent's Ridge Lift</i>   | 55 |
| 4. <i>Bell Mountain Lift</i>  | 56 |
| 5. <i>Summit Ski Access/Tow</i>   | 56 |
| C. UPGRADED TERRAIN NETWORK   | 57 |
| 1. <i>Planned Pandora Area</i>  | 57 |
| 2. <i>Additional Gladed Terrain</i>   | 57 |
| 3. <i>Terrain Distribution by Ability Level</i>                                       | 62 |
| 4. <i>Planned Terrain Enhancement and Grading Projects</i>                            | 64 |
| D. UPGRADED CAPACITY ANALYSIS   | 64 |
| 1. <i>Comfortable Carrying Capacity</i>   | 64 |
| 2. <i>Density Analysis</i>  | 64 |
| 3. <i>Lift and Terrain Network Efficiency</i>   | 66 |
| E. UPGRADED GUEST SERVICES FACILITIES,<br>FOOD SERVICE SEATING AND SPACE USE ANALYSIS | 66 |
| 1. <i>Guest Services</i>  | 66 |
| 2. <i>Space Use Analysis</i>  | 67 |
| 3. <i>Food Service Seating</i>  | 68 |
| F. UPGRADED PARKING CAPACITY  | 68 |
| G. UPGRADED RESORT OPERATIONS   | 69 |
| 1. <i>Patrol/First Aid</i>  | 69 |
| 2. <i>Snowmaking Coverage</i>   | 69 |
| 3. <i>Grooming</i>  | 70 |
| 4. <i>Dedicated Uphill Routes</i>   | 70 |
| 5. <i>Maintenance Facilities</i>  | 70 |
| 6. <i>Utilities</i>   | 70 |
| 7. <i>Communications</i>  | 70 |
| 8. <i>Culinary Water and Sewer</i>  | 70 |
| H. RESORT CAPACITY BALANCE AND LIMITING FACTORS                                       | 71 |
| I. SUMMER OPERATIONS  | 72 |
| 1. <i>Summer and Multi-Season Offerings – Zones Concept</i>                           | 72 |
| 2. <i>Summer and Multi-Season Activities and Facilities</i>                           | 78 |
| J. IMPLEMENTATION AND PHASING SCHEDULE  | 80 |



## LIST OF TABLES

|   |    |
|---|----|
| <i>Table I-1. Annual Skier Visits (2007–2017)</i>   | 3  |
| <i>Table II-1. Terrain Gradients</i>  | 15 |
| <i>Table II-2. Skier Ability Breakdown</i>  | 15 |
| <i>Table II-3. Skier Density per Acre</i>   | 15 |
| <i>Table IV-1. Lift Specifications – Existing Conditions</i>                                | 23 |
| <i>Table IV-2. Terrain Specifications – Existing Conditions</i>                             | 26 |
| <i>Table IV-3. Gladed Terrain Specifications – Existing Conditions</i>                      | 28 |
| <i>Table IV-4. Terrain Distribution by Ability Level – Existing Conditions</i>              | 29 |
| <i>Table IV-5. Comfortable Carrying Capacity – Existing Conditions</i>                      | 31 |
| <i>Table IV-6. Density Analysis – Existing Conditions</i>                                   | 31 |
| <i>Table IV-7. Industry Average Space Use – Existing Conditions</i>                         | 35 |
| <i>Table IV-8. Recommended Restaurant Seating</i>   | 35 |
| <i>Table IV-9. Snowmaking Operations – Existing Conditions</i>                              | 36 |
| <i>Table IV-10. Maintenance Facilities – Existing Conditions</i>                            | 38 |
| <i>Table IV-11. Domestic Water System – Existing Facilities</i>                             | 38 |
| <i>Table IV-12. Zone Characteristics</i>  | 46 |
| <i>Table IV-13. Existing Summer Zones at Aspen Mountain</i>                                 | 47 |
| <i>Table IV-14. Hiking Trails/Trail Distribution by Ability Level – Existing Conditions</i> | 49 |
| <i>Table IV-15. Hiking Trails/Ability Level Distribution – Existing Conditions</i>          | 49 |
| <i>Table V-1. Previously-Approved Projects, Not Yet Implemented</i>                         | 52 |
| <i>Table VI-1. Lift Specifications – Upgrade Plan</i>                                       | 56 |
| <i>Table VI-2. Terrain Specifications – Upgrade Plan</i>                                    | 58 |
| <i>Table VI-3. Gladed Terrain Specifications – Upgrade Plan</i>                             | 61 |
| <i>Table VI-4. Terrain Distribution by Ability Level – Upgrade Plan</i>                     | 62 |
| <i>Table VI-5. Comfortable Carrying Capacity – Upgrade Plan</i>                             | 65 |
| <i>Table VI-6. Density Analysis – Upgrade Plan</i>  | 65 |
| <i>Table VI-7. Industry Average Space Use – Upgrade Plan</i>                                | 67 |
| <i>Table VI-8. Recommended Restaurant Seating</i>   | 68 |
| <i>Table VI- 9. Zone Characteristics</i>  | 76 |
| <i>Table VI-10. Planned Summer Zones at Aspen Mountain</i>                                  | 77 |

## LIST OF CHARTS

|  |    |
|--|----|
| <i>Chart IV-1. Terrain Distribution by Ability Level – Existing Conditions</i> | 29 |
| <i>Chart IV-2. Resort Balance – Existing Conditions</i>                        | 39 |
| <i>Chart VI-1. Terrain Distribution by Ability Level – Upgrade Plan</i>        | 63 |
| <i>Chart VI-2. Resort Balance – Planned Conditions</i>                         | 71 |

## LIST OF FIGURES

*Figure I-1. Vicinity Map*  
*Figure I-2. Property Boundaries*  
*Figure III-1. Slope/Topography Analysis*  
*Figure III-2. Aspect Analysis*  
*Figure IV-1. Existing Conditions*  
*Figure IV-2. Existing Snowmaking*  
*Figure IV-3. Existing Mountain Roads*  
*Figure IV-4. Existing Utilities*  
*Figure IV-5. Existing Summer Use*  
*Figure IV-6. Existing Summer Zones*  
*Figure VI-1. Resort Upgrade Plan*  
*Figure VI-2. Snowmaking Upgrade Plan*  
*Figure VI-3. Planned Summer Zones*

## APPENDICES

*Appendix 1. Aspen Mountain Forest Health Proposed Treatment Map*  
*Appendix 2. 2012 Forest Health Project Environmental Assessment*  
*Appendix 3. Natural Resource Plan*

*Note: all appendices are provided in electronic format only*





# VI. UPGRADE PLAN

This MDP has been prepared in compliance with the terms and conditions of the Forest Service-issued forty-year term SUP for Aspen Mountain. As stated previously, Forest Service acceptance of this MDP does not convey approval of any projects contained herein. Implementation of any projects on NFS lands within the Aspen Mountain SUP area is contingent upon site-specific environmental review and approval via NEPA. Planned projects contained in this Master Plan are conceptual in nature and may be refined in the future, as long as the original intent of a planned project is maintained.

The Upgrade Plan is depicted on Figures VI-1, VI-2, and VI-3.

## A. SUMMARY

This Upgrade Plan focuses on the intentions of ASC to enhance the total guest experience through a series of improvements. This would be achieved by implementation of strategic enhancements across the existing SUP area and private lands that make up Aspen Mountain.

Aspen Mountain strives to exceed its goals and objectives for providing its guests with world class experiences. With this 2017 MDP, ASC wishes to continue meeting those same goals and objectives by completing the remaining far-reaching development plans envisioned as part of the 1997 Aspen Mountain Master Plan.

The Upgrade Plan includes the following elements, which will be discussed at length throughout this chapter.

- Approximately 153 acres of new terrain, 82 acres on 15 developed trails and 71 acres of gladed terrain (60 acres on NFS lands and 93 acres on private lands).
- One new lift is planned, the Pandora lift (2,766 feet on NFS lands and 1,425 feet on private lands), and two existing lifts (Shadow Mountain and Bell Mountain) are planned to be upgraded and/or realigned. Additionally, if it is determined that after the Pandora Lift is installed it is redundant, the existing Gent's Ridge lift will be removed. These improvements would require tree removal and ground disturbance (NFS and private lands).
- New snowmaking coverage is planned on six trails that would cover approximately 53 acres (26 acres on NFS lands and 27 acres on private lands), spanning from the highest elevation of the current snowmaking system capabilities to the top of the mountain. This improvement will require the installation of underground water/air pipe lines and electrical wire, as well as the construction of a booster water pump station and two additional snowmaking storage ponds (NFS and private lands).



- A new Patrol Headquarters Building (PHQ) is planned for the top of the mountain. This facility will be between 1,500 and 2,500 square feet and be located adjacent to the north side of the gondola storage building, generally in the north-east corner. Reconstruction of the Patrol Headquarters, in concert with remodeling of the gondola building may permit and include guest access and an additional scenic observation and event platform incorporated in or on the structure. The existing PHQ will be demolished and removed from the site (private lands). The existing employee apartment on the existing PHQ second floor will be incorporated into the new facility. This unit provides living quarters to staff members required for gondola start-up operations each morning.
- The Ruthie's Restaurant building, which has not been in use for some time, is planned to be renovated and remodeled, upgraded and/or rebuilt on or in close proximity to its current location. In addition to reopening as an on-mountain lunch venue, evening food and beverage offerings with access provided by a realigned Shadow Mountain lift are also planned. Additional plans include offering opportunities for overnight on-mountain accommodations associated with the Ruthie's operation, which might occur on NFS or private lands in the form of or utilizing one or more on-mountain cabins or huts which might be constructed in the vicinity of Ruthie's restaurant. Similar to the 10th Mountain, Braun, and Summit hut systems on NFS lands and alpine huts or refugios found throughout the European Alps, the hut or huts are intended to be modestly sized structures, each offering eight to twenty hikers, skiers, and other mountain visitors comfortable overnight accommodation on the mountain.
- Upgrades, expansion, remodeling and/or redevelopment of the existing Buckhorn Cabin are planned in order to provide an expanded shelter alternative and food and beverage options for daily operations and special events, and include the construction of a deck and viewing platform to enhance the scenic experience of the

site. Refurbishment, reconstruction or redevelopment of the cabin, may include the addition of restrooms and kitchen facilities of a rustic nature, which are contemplated or planned on private lands on or near the Buckhorn Cabin's current location.

- Other projects planned include the installation of additional cell tower sites, data equipment, fiber optic lines, and antennae tower sites (NFS and private lands).
- Summer and multi-season projects, including mountain biking and hiking trails, challenge course, climbing wall, bouldering or climbing features and upgraded music venue, are planned in accordance with the summer zone designations (NFS and private lands).
- Continuation of summit landscaping, including but not limited to improvements in and around art, music, and wedding venues (private lands).

The net result of implementing all planned projects would increase the existing Aspen Mountain CCC by about 320 guests per day to 4,610 guests per day.

## B. UPGRADED LIFT NETWORK

As described in Chapter V, there is one previously approved lift upgrade (Lift 1A realignment and replacement). Additionally, three other lift upgrades are planned as a component of the 2017 MDP.

### 1. *Shadow Mountain Lift*

This project involves the replacement and realignment of the original 1972 double chair with some form of high speed lift. At this time, ASC reserves the option to replace this lift with either a detachable 6-passenger gondola, a detachable quad chairlift, or a combination of the two in what lift manufacturers call a “Chondola” or “Telemix,” with both gondola cabins and chairs on the same lift. The lift will also be realigned to improve access, circulation, and repeat-skiing.

Although still being reviewed by City of Aspen officials, the type of lift and its new bottom terminal is intended to be associated with and incorporated into lodging developments at Aspen Mountain’s western portal. Additionally, the approved lift alignment revision allows the top terminal to be situated approximately 200 feet southwest of its current location to provide direct access to Ruthie’s Restaurant for foot passengers. If the final machinery chosen is a gondola or chondola, a cabin storage building will be required at the top terminal to accommodate cabin storage and maintenance needs.

This lift replacement was previously approved in the 2015 DM and will be installed with an initial capacity of 1,200 pph. However, the ultimate design capacity of the lift is 1,800 pph. ASC plans to assess skier circulation and initial access needs after the lift is installed to determine when the capacity upgrade is necessary. All calculations in this MDP assume the full 1,800 pph capacity, to account for that eventuality. However, it is fully recognized that an upgrade to 1,800 pph would require further approval analysis.

### 2. *Pandora Lift*

The Pandora lift will provide access to the “back-side” of Aspen Mountain and the approximate 150 acres of new trails and gladed terrain planned in this area. The Pandora lift top terminal will be approximately 950 feet south, and slightly east, of the Silver Queen Gondola’s top terminal. The Pandora lift bottom terminal will be approximately 1,500 feet downslope of the existing Walsh’s trail lower boundary. This design characteristic will allow the Pandora lift to also service several existing trails on Aspen Mountain’s east side such as Walsh’s, Hyrup’s and Kristi’s. Users of these trails will be able to continue directly downhill to the Pandora lift bottom terminal via newly developed trail extensions, rather than being required to hike up and/or traverse out to the Gent’s Ridge lift via Lud’s Lane trail.

### 3. *Gent’s Ridge Lift*

The Gent’s Ridge lift was installed in 1985 as a fixed-grip quad, with the option (at that time) to be “converted” to a high-speed detachable that never occurred. Since 1985, this lift has realized relatively small ridership numbers annually because of its perceived long, slow ride. Because the Pandora lift will serve almost 80% of all the existing terrain served by the Gent’s Ridge lift (in addition to 150 additional acres), the Gent’s Ridge lift may be removed. ASC intends to track Gent’s Ridge ridership numbers once the Pandora lift is installed to determine if it is redundant, and if/when removal would be appropriate. Removal is not anticipated to occur until after the Pandora upgrades are complete.



#### 4. Bell Mountain Lift

The Bell Mountain lift was originally installed in 1957 and received a major upgrade in 1990. However, since the installation of the Silver Queen Gondola annual ridership numbers substantially decreased almost immediately because of the perceived long ride time. Due to redundancy with the Silver Queen Gondola, this once iconic lift, which serves all aspects of Bell Mountain’s world-renowned terrain sits idle almost all season long. As a result, a shortening and/or realignment of the current alignment is planned that would provide shortened ride times, improved skier circulation and increased ridership. The alignment shown on Figure VI-1 is likely the longest alignment that would be constructed, however, it is possible that a shorter alignment (with the bottom terminal moved up Copper Bowl run) would be preferred.

#### 5. Summit Ski Access/Tow

In order for skiers from the planned Pandora lift to access the Sundeck Restaurant, grading will need to occur south of the gondola storage facility, in the vicinity of the existing road. However, if that grading is deemed impractical, and/or proves to be insufficient to provide an easy return to the Sundeck, a 200+/-foot-long surface lift would be installed in the area just immediately south of the Silver Queen Gondola Terminal.

Since this lift would be for circulation to the Sundeck Restaurant only, it is not included in any of the calculations or figures.

The upgraded lift configuration is shown on Figure IV-1 and details are specified in Table VI-1.

Table VI-1. Lift Specifications – Upgrade Plan

| Lift Name,<br>Lift Type  | Top Elev.<br>(ft) | Bottom Elev.<br>(ft) | Vertical Rise<br>(ft) | Slope Length<br>(ft) | Avg. Grade<br>(%) | Actual Design Capacity<br>(pers/hr) | Rope Speed<br>(fpm) | Carrier Spacing<br>(ft) | Manufacturer/<br>Year Installed |
|--------------------------|-------------------|----------------------|-----------------------|----------------------|-------------------|-------------------------------------|---------------------|-------------------------|---------------------------------|
| Silver Queen Gondola/G6  | 11,194            | 7,952                | 3,242                 | 13,061               | 26%               | 2,000                               | 1,000               | 180                     | Poma 1986/2005                  |
| Ajax Express Quad/DC4    | 11,212            | 10,100               | 1,112                 | 4,618                | 25%               | 2,400                               | 1,000               | 100                     | Poma/2003                       |
| Ruthie's Lift/DC3        | 10,664            | 9,328                | 1,336                 | 5,451                | 26%               | 1,800                               | 1,100               | 110                     | Poma/1997                       |
| F.I.S. Lift/C2           | 10,457            | 9,892                | 565                   | 1,365                | 46%               | 1,200                               | 550                 | 55                      | Poma/2004                       |
| Bell Mountain Lift/C4    | 10,610            | 9,109                | 1,501                 | 3,986                | 41%               | 1,500                               | 500                 | 80                      | Planned                         |
| Shadow Mountain Lift/DC4 | 9,375             | 7,952                | 1,423                 | 4,176                | 37%               | 1,800                               | 1,000               | 133                     | Planned                         |
| Little Nell Lift/C4      | 8,498             | 7,997                | 501                   | 2,011                | 26%               | 1,700                               | 450                 | 64                      | Poma/1986                       |
| Pandora's Lift/DC4       | 11,260            | 10,040               | 1,220                 | 4,191                | 31%               | 2,000                               | 1,000               | 120                     | Planned                         |
| Silver Queen Gondola/G6  | 11,194            | 7,952                | 3,242                 | 13,061               | 26%               | 2,000                               | 1,000               | 180                     | Poma 1986/2005                  |

Source: SE Group/ASC

c = conveyor / DCG = Chondola

C2 = fixed-grip double chairlift / C3 = fixed-grip triple chairlift

C4 = fixed-grip quad chairlift / DC4 = detachable quad chairlift

DC3 = detachable triple chairlift / G6 = six-passenger gondola

## C. UPGRADED TERRAIN NETWORK

As discussed in Chapter IV, terrain variety is the key factor in evaluating the quality of the actual skiing and riding guest experience (as opposed to lift quality, restaurant quality, or any other factor). A resort must have a diverse, interesting, and well-designed developed trail system, but also must have a wide variety of alternate style terrain, such as mogul runs, bowls, trees and glades. The reader is referred to Chapter IV (Section C) for an in-depth discussion of the importance of terrain variety.

It is anticipated that upgrades to the developed and alternate style terrain included in this MDP, primarily included in the planned Pandora area will complement the existing terrain network at Aspen Mountain, providing additional variety.

### 1. Planned Pandora Area

As previously mentioned, there are more than 150 acres of developed trails and glades planned for the Pandora area of Aspen Mountain (82 acres of developed trails and 71 acres of glades). This terrain expansion had already been referenced in the 1997 Aspen Mountain Master plan and the Forest Service SUP Area Boundary was revised to include this area in the 2002 WRNF Forest Plan Revision.

Even though this terrain expansion is on the upper mountain, because of Aspen Mountain's unique history during the mining era of the late 1800s and early 1900s, approximately 40% of this area exists on NFS lands and the remaining 60% exists on private lands.

It is anticipated that 15 developed trails are planned for the Pandora area. The general topography of this area is similar to that of the nearby existing east-side trails with the upper third being very steep, with grades accessible to experts only. The lower two-thirds of the area contains moderate intermediate grades. There is an existing topographic feature, near the top of Walsh's run, which, with some grading, would allow intermediate level access to the lower portion of the area. This would provide some excellent opportunities for developed intermediate runs, as well as numerous intermediate level glades, which is a category of terrain that is not currently offered.

In addition, several trail extensions of existing trails such as Walsh's, Hyrup's and Kristi's are planned because the Pandora lift bottom terminal is directly below these trails. Currently, skiing the entirety of these trails typically requires an uphill walk out to the Lud's Lane exit and subsequent return to Aspen Mountain's lift/trail system. The planned lift location and trail extension would eliminate this walk out in the future configuration.

Several trail links (that will require tree removal and some grading) are planned around existing trails such as Northstar, Gent's Ridge, Copper and Lazy Boy that will effectively create repeat skiing of such trails currently accessed by the Gent's Ridge lift. A traversing trail will be graded from the far reaches of the Northstar slope and across Walsh's gully to create a return to the Pandora lift. This trail/road will also function as a lift construction/maintenance access road.

Also planned is the removal of an overhead powerline on private land in the southern portion of the Pandora area. This power line will be buried on nearly the same alignment as the existing overhead line.

### 2. Additional Gladed Terrain

In addition to the 71 acres of glades that would become accessible in the Pandora area, approximately 10 acres of newly-gladed terrain would also be added in two places: 1) on the Silver Queen Ridge adjacent to the Silver Queen trail, and 2) between Glade 1 and Glade 2 on the skier's right side of Copper Bowl. These changes would bring the total skiable area within Aspen Mountain's terrain network to 861 acres. The planned trail configuration under the Upgrade Plan is depicted in Figure VI-1. Planned developed trails and the proposed terrain specifications are detailed in the Table VI-2 and planned gladed areas are depicted in Table VI-3.



Table VI-2. Terrain Specifications – Upgrade Plan

| Trail Area/Name         | Top Elev. (ft) | Bottom Elev. (ft) | Vertical Rise (ft) | Slope Length (ft) | Avg. Width (ft) | Slope Area (pers/hr) | Avg. Grade (%) | Max. Grade (ft) | Ability Level    |
|-------------------------|----------------|-------------------|--------------------|-------------------|-----------------|----------------------|----------------|-----------------|------------------|
| Aztec                   | 9,679          | 9,285             | 395                | 940               | 205             | 4.4                  | 47             | 60              | Expert           |
| Back of Bell 1          | 10,512         | 10,115            | 397                | 958               | 182             | 4.0                  | 46             | 56              | Expert           |
| Back of Bell 2          | 10,373         | 10,006            | 367                | 882               | 126             | 2.6                  | 46             | 51              | Advanced         |
| Bellisimo               | 10,870         | 10,637            | 232                | 1,243             | 96              | 2.7                  | 19             | 34              | Low Intermediate |
| Blazing Star            | 10,599         | 10,343            | 256                | 1,048             | 150             | 3.6                  | 26             | 59              | Expert           |
| Blondie's               | 10,716         | 10,431            | 285                | 994               | 121             | 2.8                  | 31             | 60              | Expert           |
| Buckhorn                | 11,216         | 10,853            | 363                | 1,691             | 124             | 4.8                  | 22             | 44              | Intermediate     |
| Buckhorn Cutoff         | 11,205         | 11,041            | 164                | 820               | 136             | 2.6                  | 21             | 36              | Intermediate     |
| Copper Bowl             | 10,152         | 9,082             | 1,070              | 3,707             | 184             | 11.6                 | 30             | 42              | Intermediate     |
| Copper Connector        | 10,112         | 10,028            | 84                 | 516               | 209             | 2.5                  | 17             | 22              | Intermediate     |
| Deer Park               | 10,646         | 10,147            | 499                | 2,262             | 181             | 9.4                  | 23             | 32              | Low Intermediate |
| Dipsy Doodle            | 11,199         | 10,105            | 1,094              | 4,865             | 228             | 25.5                 | 23             | 45              | Intermediate     |
| Easy Chair              | 11,005         | 10,849            | 156                | 504               | 91              | 1.1                  | 33             | 44              | Intermediate     |
| F.I.S.                  | 10,589         | 10,044            | 545                | 1,558             | 458             | 16.4                 | 38             | 54              | Advanced         |
| Franklin Dump           | 8,665          | 8,361             | 304                | 588               | 71              | 1.0                  | 61             | 77              | Expert           |
| Gent's Ridge            | 10,684         | 9,338             | 1,346              | 6,490             | 164             | 24.5                 | 21             | 53              | Advanced         |
| Gretl's                 | 10,438         | 10,210            | 228                | 690               | 198             | 3.1                  | 35             | 44              | Intermediate     |
| Hyrup's                 | 10,915         | 10,400            | 515                | 1,115             | 159             | 4.1                  | 53             | 79              | Expert           |
| International           | 10,473         | 9,565             | 907                | 3,611             | 82              | 6.8                  | 26             | 55              | Expert           |
| Keith Glen              | 10,091         | 9,779             | 312                | 633               | 171             | 2.5                  | 57             | 65              | Expert           |
| Knowlton's              | 10,580         | 10,211            | 369                | 991               | 138             | 3.1                  | 41             | 65              | Expert           |
| Kristi's                | 10,777         | 10,425            | 352                | 748               | 259             | 4.4                  | 55             | 81              | Expert           |
| Last Dollar             | 9,738          | 9,238             | 500                | 1,019             | 292             | 6.8                  | 57             | 70              | Expert           |
| Lazy 8 Gully            | 8,572          | 8,336             | 237                | 580               | 197             | 2.6                  | 45             | 59              | Expert           |
| Lazy Boy                | 10,592         | 10,425            | 167                | 481               | 222             | 2.5                  | 37             | 45              | Intermediate     |
| Lift 1A Liftline        | 9,060          | 8,915             | 145                | 293               | 52              | 0.4                  | 59             | 56              | Expert           |
| Little Nell             | 8,754          | 7,952             | 802                | 2,984             | 300             | 20.6                 | 28             | 43              | Intermediate     |
| Little Percy's          | 10,675         | 10,439            | 236                | 585               | 200             | 2.7                  | 45             | 63              | Expert           |
| Lower 5th Avenue        | 8,360          | 8,019             | 341                | 1,256             | 271             | 7.8                  | 28             | 42              | Intermediate     |
| Lower Copper Trail      | 10,903         | 10,126            | 777                | 3,815             | 177             | 15.5                 | 21             | 38              | Intermediate     |
| Lower CorkScrew         | 8,339          | 8,130             | 209                | 564               | 212             | 2.7                  | 40             | 47              | Advanced         |
| Lower Corkscrew Gully   | 8,531          | 8,403             | 127                | 347               | 76              | 0.6                  | 40             | 45              | Advanced         |
| Lower FIS Slalom Hill   | 8,283          | 8,216             | 66                 | 140               | 159             | 0.5                  | 54             | 67              | Expert           |
| Lower Lift 1A Liftline  | 8,903          | 8,567             | 336                | 557               | 52              | 0.7                  | 76             | 81              | Expert           |
| Lower Magnifico         | 8,607          | 8,346             | 261                | 613               | 151             | 2.1                  | 48             | 59              | Expert           |
| Lower Roch Run          | 9,183          | 9,034             | 149                | 399               | 182             | 1.7                  | 40             | 45              | Intermediate     |
| Lower Ruthie's          | 9,563          | 9,334             | 230                | 842               | 316             | 6.1                  | 29             | 45              | Intermediate     |
| Lower Schuss Gully      | 8,258          | 8,187             | 72                 | 596               | 25              | 0.3                  | 12             | 17              | Intermediate     |
| Lower Spring Pitch      | 9,233          | 9,014             | 218                | 489               | 396             | 4.5                  | 50             | 52              | Advanced         |
| Lower Strawpile         | 8,467          | 8,415             | 52                 | 162               | 277             | 1.0                  | 34             | 34              | Low Intermediate |
| Lud's Lane              | 10,424         | 10,342            | 82                 | 1,982             | 32              | 1.5                  | 4              | 31              | Expert           |
| Magnifico Road          | 9,026          | 8,806             | 220                | 1,504             | 37              | 1.3                  | 15             | 28              | Low Intermediate |
| Middle CorkScrew        | 8,532          | 8,344             | 188                | 455               | 233             | 2.4                  | 46             | 49              | Advanced         |
| Middle Lift 1A Liftline | 9,142          | 9,078             | 64                 | 181               | 68              | 0.3                  | 38             | 36              | Intermediate     |
| Middle Roch Run         | 9,488          | 9,387             | 102                | 302               | 179             | 1.2                  | 36             | 40              | Intermediate     |

Table VI-2. Terrain Specifications – Upgrade Plan

| Trail Area/Name        | Top Elev. (ft) | Bottom Elev. (ft) | Vertical Rise (ft) | Slope Length (ft) | Avg. Width (ft) | Slope Area (pers/hr) | Avg. Grade (%) | Max. Grade (ft) | Ability Level    |
|------------------------|----------------|-------------------|--------------------|-------------------|-----------------|----------------------|----------------|-----------------|------------------|
| Midnight               | 10,873         | 10,617            | 256                | 1,116             | 135             | 3.5                  | 24             | 39              | Intermediate     |
| Midway Road            | 10,847         | 10,682            | 165                | 2,683             | 40              | 2.5                  | 6              | 25              | Low Intermediate |
| Niagra                 | 8,587          | 8,459             | 128                | 536               | 152             | 1.9                  | 25             | 56              | Expert           |
| North American         | 10,707         | 10,393            | 314                | 1,146             | 306             | 8.0                  | 29             | 39              | Intermediate     |
| Northstar              | 10,955         | 10,193            | 761                | 3,171             | 161             | 11.7                 | 25             | 61              | Expert           |
| Norway                 | 8,408          | 8,060             | 349                | 867               | 241             | 4.8                  | 45             | 60              | Expert           |
| One & Two Leaf         | 11,180         | 10,632            | 548                | 3,482             | 124             | 9.9                  | 16             | 28              | Low Intermediate |
| Perry's Prowl          | 9,876          | 9,400             | 476                | 930               | 300             | 6.4                  | 60             | 72              | Expert           |
| Pumphouse Hill         | 10,580         | 10,368            | 211                | 939               | 120             | 2.6                  | 23             | 44              | Intermediate     |
| Pussyfoot              | 11,021         | 10,579            | 442                | 1,821             | 110             | 4.6                  | 25             | 46              | Advanced         |
| Rearon's Run           | 9,813          | 9,444             | 368                | 1,118             | 90              | 2.3                  | 35             | 44              | Intermediate     |
| Red's                  | 10,659         | 10,137            | 522                | 1,194             | 260             | 7.1                  | 49             | 57              | Expert           |
| Ridge of Bell          | 10,588         | 9,409             | 1,179              | 3,103             | 222             | 15.8                 | 41             | 65              | Expert           |
| Roch Run               | 9,383          | 9,204             | 179                | 543               | 160             | 2.0                  | 35             | 49              | Advanced         |
| Schiller Road          | 9,545          | 9,414             | 131                | 710               | 30              | 0.5                  | 19             | 20              | Advanced         |
| Seibert's              | 10,566         | 10,257            | 309                | 971               | 205             | 4.6                  | 34             | 56              | Expert           |
| Short Snort            | 9,978          | 9,626             | 352                | 834               | 97              | 1.9                  | 47             | 63              | Expert           |
| Shoulder of Bell       | 9,977          | 9,322             | 654                | 1,472             | 143             | 4.8                  | 50             | 63              | Expert           |
| Silver Bell            | 11,208         | 10,326            | 882                | 4,306             | 169             | 16.8                 | 21             | 31              | Low Intermediate |
| Silver Dip             | 10,742         | 10,354            | 388                | 1,465             | 237             | 8.0                  | 28             | 44              | Intermediate     |
| Silver Queen           | 9,550          | 8,751             | 798                | 1,980             | 149             | 6.8                  | 45             | 78              | Expert           |
| Spar Gulch             | 10,104         | 8,761             | 1,343              | 5,916             | 153             | 15.7                 | 23             | 44              | Intermediate     |
| Summer Road            | 9,735          | 8,213             | 1,522              | 10,179            | 37              | 8.6                  | 15             | 25              | Intermediate     |
| Summit                 | 11,028         | 10,733            | 296                | 777               | 58              | 1.0                  | 41             | 51              | Advanced         |
| Sunrise Sunset         | 10,583         | 10,214            | 369                | 887               | 243             | 4.9                  | 46             | 55              | Advanced         |
| Super 8 Gully          | 8,881          | 8,601             | 281                | 536               | 121             | 1.5                  | 62             | 70              | Expert           |
| Tourtlotte Park        | 10,642         | 10,306            | 336                | 1,433             | 264             | 8.7                  | 24             | 38              | Intermediate     |
| Tower 10 Road          | 8,698          | 8,475             | 223                | 2,564             | 24              | 1.4                  | 9              | 15              | Intermediate     |
| Upper 5th Avenue       | 8,486          | 8,380             | 106                | 279               | 236             | 1.5                  | 42             | 53              | Advanced         |
| Upper Copper Trail     | 11,198         | 10,956            | 242                | 1,393             | 201             | 6.4                  | 18             | 32              | Low Intermediate |
| Upper CorkScrew        | 8,959          | 8,557             | 402                | 769               | 138             | 2.4                  | 61             | 65              | Expert           |
| Upper Corkscrew Gully  | 8,958          | 8,546             | 412                | 988               | 94              | 2.1                  | 46             | 58              | Expert           |
| Upper FIS Slalom Hill  | 8,607          | 8,291             | 316                | 636               | 295             | 4.3                  | 57             | 69              | Expert           |
| Upper Lift 1A Lifeline | 9,364          | 9,161             | 203                | 649               | 81              | 1.2                  | 33             | 47              | Advanced         |
| Upper Magnifico        | 8,821          | 8,620             | 202                | 446               | 257             | 2.6                  | 51             | 53              | Advanced         |
| Upper Roch Run         | 9,998          | 9,510             | 489                | 1,457             | 159             | 5.3                  | 36             | 45              | Intermediate     |
| Upper Ruthie's         | 10,673         | 9,584             | 1,089              | 4,573             | 323             | 34.0                 | 25             | 44              | Intermediate     |
| Upper Schuss Gully     | 8,363          | 8,263             | 100                | 321               | 96              | 0.7                  | 33             | 37              | Intermediate     |
| Upper Spring Pitch     | 9,356          | 9,259             | 98                 | 444               | 162             | 1.7                  | 23             | 28              | Advanced         |
| Upper Strawpile        | 8,853          | 8,494             | 359                | 970               | 267             | 5.9                  | 40             | 45              | Intermediate     |
| Walsh's                | 11,043         | 10,422            | 621                | 1,543             | 397             | 7.1                  | 45             | 72              | Expert           |
| Zaugg Dump             | 9,933          | 9,554             | 379                | 794               | 89              | 1.6                  | 55             | 71              | Expert           |
| P-1                    | 11,260         | 10,537            | 723                | 2,215             | 199             | 10.1                 | 35             | 70              | Expert           |
| P-2                    | 11,240         | 10,655            | 585                | 1,538             | 159             | 5.6                  | 42             | 68              | Expert           |
| P-3                    | 11,164         | 10,902            | 262                | 644               | 129             | 1.9                  | 45             | 69              | Expert           |



Table VI-2. Terrain Specifications – Upgrade Plan

| Trail Area/Name | Top Elev. (ft) | Bottom Elev. (ft) | Vertical Rise (ft) | Slope Length (ft) | Avg. Width (ft) | Slope Area (pers/hr) | Avg. Grade (%) | Max. Grade (ft) | Ability Level    |
|-----------------|----------------|-------------------|--------------------|-------------------|-----------------|----------------------|----------------|-----------------|------------------|
| P-4             | 11,044         | 10,325            | 719                | 3,125             | 122             | 8.7                  | 24             | 45              | Intermediate     |
| P-5             | 10,515         | 10,050            | 465                | 2,200             | 119             | 6.0                  | 22             | 44              | Intermediate     |
| P-6             | 10,686         | 10,084            | 602                | 2,247             | 239             | 12.3                 | 28             | 45              | Intermediate     |
| P-7             | 10,368         | 10,226            | 142                | 486               | 83              | 0.9                  | 31             | 43              | Intermediate     |
| P-8             | 10,409         | 10,072            | 338                | 1,601             | 182             | 6.7                  | 22             | 42              | Intermediate     |
| P-9             | 10,875         | 10,388            | 486                | 1,038             | 335             | 8.0                  | 54             | 70              | Expert           |
| P-10            | 10,793         | 10,147            | 646                | 1,348             | 156             | 4.8                  | 56             | 82              | Expert           |
| P-11            | 10,456         | 10,186            | 270                | 1,055             | 140             | 3.4                  | 27             | 56              | Expert           |
| P-12            | 10,307         | 10,067            | 240                | 2,492             | 55              | 3.2                  | 10             | 16              | Intermediate     |
| P-13            | 10,415         | 10,310            | 105                | 492               | 80              | 0.9                  | 23             | 35              | Low Intermediate |
| P-14            | 11,174         | 10,743            | 432                | 1,324             | 93              | 2.8                  | 36             | 76              | Expert           |
| P-15            | 11,204         | 10,410            | 794                | 2,940             | 97              | 6.6                  | 29             | 72              | Expert           |
| <b>Total</b>    |                |                   |                    | <b>153,689</b>    |                 | <b>556.5</b>         |                |                 |                  |

Note: Planned trails and glades are denoted in gray shaded rows.





Table VI-3. Gladed Terrain Specifications – Upgrade Plan

| Glade Area/Name      | Slope Area (acres) |
|----------------------|--------------------|
| Back of Bell 1 glade | 6.1                |
| Back of Bell 2 glade | 4.8                |
| Bingo Glade          | 13.7               |
| Bear Paw Glade       | 12.8               |
| Bell Meadow          | 18.6               |
| Bonnie Bell Glade    | 4.5                |
| Cone Dump Glade      | 13.1               |
| Face of Bell         | 15.5               |
| Glade 1              | 6.4                |
| Glade 2              | 8.0                |
| Glade 3              | 7.2                |
| Gretl's glade        | 2.8                |
| Jackpot Glade        | 23.9               |
| Knowlton's Glade     | 5.0                |
| Midnight Glade       | 12.2               |
| Northstar Glade      | 4.5                |
| Nose of Bell         | 15.2               |
| Percy Glade          | 2.7                |
| Pink Slip Glade      | 2.2                |
| Rayburn's Glade      | 3.5                |
| S1 Glade             | 5.1                |
| Seibert's Glade      | 2.4                |
| Silver Queen Ridge   | 1.7                |
| Silver Rush          | 2.3                |
| Sunrise glade        | 4.0                |
| Trainor's Glades     | 25.6               |
| Pandora Glades       | 71.0               |
| Silver Queen Ridge   | 4.3                |
| Copper Bowl Glades   | 5.7                |
| <b>Total Acres</b>   | <b>304.8</b>       |

Note: Planned trails and glades are denoted in gray shaded rows.



### 3. Terrain Distribution by Ability Level

This terrain distribution analysis considers existing and planned terrain within the 557-acre developed terrain network of Aspen Mountain. The ideal breakdown of trail capacity by ability level should align with percentages of skiers by ability level, based on the regional destination skier market. The terrain classification breakdown of the Upgrade Plan is set forth in the following table and chart. The last column in this table represents what can be considered the ideal skill level distribution in the relevant market and provides a comparison with the planned conditions.

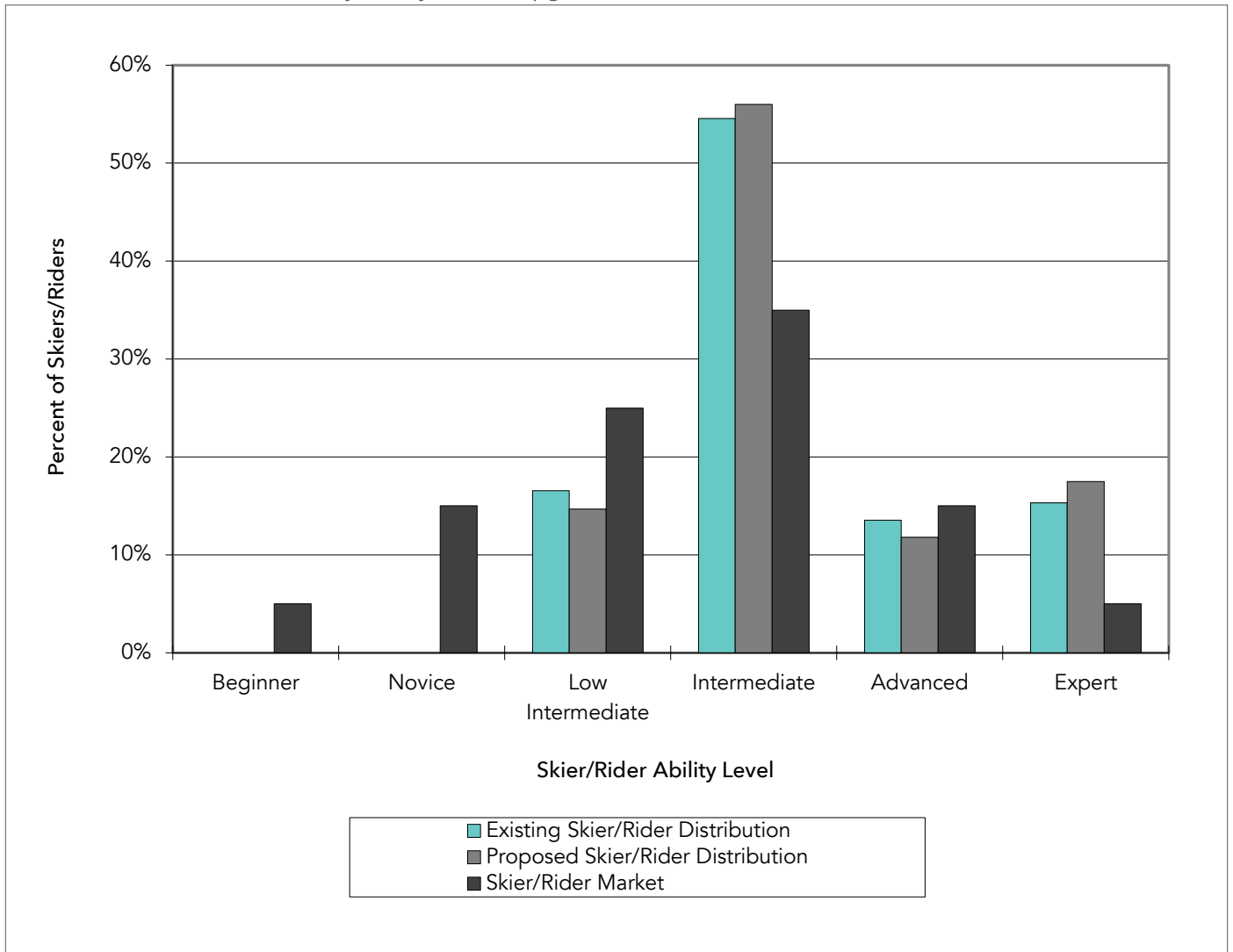
Since the planned enhancements to the terrain network, primarily those associated with the Pandora area, have a similar ability level breakdown as the existing terrain network, there are no significant changes to the ability level distribution planned. This is highlighted by the increase in intermediate trail percentage, which would increase from 55% to 56%. Slight changes to the distribution of both advanced and expert ability levels are also noticeable in Table VI-4. The distribution of advanced ability level terrain decreases commensurate to increases in intermediate and advanced ability level terrain.

Table VI-4. Terrain Distribution by Ability Level – Upgrade Plan

| Skier/Rider Ability Level | Trail Area (acres) | Skier/Rider Capacity (guests) | Actual Skier/Rider Distribution (%) | Relevant Skier/Rider Market (%) |
|---------------------------|--------------------|-------------------------------|-------------------------------------|---------------------------------|
| Beginner                  | 0.0                | 0.0                           | 0                                   | 5                               |
| Novice                    | 0.0                | 0.0                           | 0                                   | 15                              |
| Low intermediate          | 50.9               | 459                           | 15                                  | 25                              |
| Intermediate              | 249.8              | 1748                          | 56                                  | 35                              |
| Advanced                  | 73.7               | 368                           | 12                                  | 15                              |
| Expert                    | 182.1              | 546                           | 18                                  | 5                               |
| <b>Total</b>              | <b>556.5</b>       | <b>3,122</b>                  | <b>100%</b>                         | <b>100%</b>                     |

Source: SE Group

Chart VI-1. Terrain Distribution by Ability Level – Upgrade Plan



Source: SE Group



#### **4. Planned Terrain Enhancement and Grading Projects**

Various areas of grading are planned to facilitate effective skier circulation to and from the new trail and lift complex in the general areas listed below:

- Top and Bottom terminal sites of the planned Pandora lift
- As necessary on the planned developed trail “breakovers” onto the steeper terrain
- Some grading and timber removal will be required from the bottom of Pandora glades along the eastern-most edge of the planned operational boundary to accommodate 20- to 30-foot-wide egress return to the Pandora lift bottom terminal
- A 20- to 25-foot-wide graded road is planned from the existing Northstar Trail to the Pandora lift’s bottom terminal for skier access, as well as lift construction/maintenance access
- The removal of an overhead powerline on private land in the southern portion of the Pandora area. This power line will be buried on nearly the same alignment as the existing overhead line
- In several locations between Northstar and Copper trails to facilitate intermediate accessibility to Loushin Traverse and the Pandora lift bottom terminal
- As necessary for the planned realigned Bell Mountain chair top and bottom terminal sites

Additionally, a public “Snow Road” is planned to be constructed annually around the Pandora top terminal site to facilitate wintertime public access between Richmond Ridge and Midnight Mine Road.

Historically the lands south of the Aspen Mountain summit are a mix of private and public properties to which the general public has access for winter travel. The planned Pandora lift and trail network will be developed over approximately 1,000 feet of the Richmond Ridge access to where it meets the Midnight Ridge intersection. There is currently no planned grading associated with the creation of the planned public access snow road. However, some grading will take place immediately south of the gondola terminal to facilitate return skier access from the top of the Pandora lift to the Sundeck Restaurant.

#### **D. UPGRADED CAPACITY ANALYSIS**

##### **1. Comfortable Carrying Capacity**

The planned upgrades to the lift network would increase the existing CCC at Aspen Mountain from 4,290 guests (refer to Chapter IV for details regarding existing calculation) to 4,610 guests. Table VI-5 details the calculated CCC under upgrade conditions.

##### **2. Density Analysis**

As discussed in Chapter IV, an important aspect of resort design is the balancing of uphill lift capacity with downhill trail capacity. Trail densities are derived by contrasting the uphill, at-one-time capacity of each lift system (CCC) with the trail acreage associated with each lift pod. The trail density analysis considers only the acreage associated with the developed trail network. The density analysis for the Upgrade Plan is illustrated in Table VI-6.

Table VI-6 shows that the overall existing density of 4 skiers-per-acre will remain the same after the upgrades are completed. This indicates that the lift and trail upgrades are balanced well with each other.

## VI. UPGRADE PLAN

Table VI-5. Comfortable Carrying Capacity – Upgrade Plan

| Lift Name,<br>Lift Type  | Slope<br>Length<br>(ft) | Vertical<br>Rise<br>(ft) | Actual<br>Design<br>Capacity<br>(guests/hr) | Oper.<br>Hours<br>(hrs) | Up-Mtn.<br>Access<br>Role<br>(%) | Misload/<br>Lift Stop<br>(%) | Adjusted<br>Hourly Cap.<br>(guests/hr) | VTF/<br>Day<br>(000) | Vertical<br>Demand<br>(ft/day) | CCC<br>(guests) |
|--------------------------|-------------------------|--------------------------|---|-------------------------|----------------------------------|------------------------------|--|----------------------|--------------------------------|-----------------|
| Silver Queen Gondola/G6  | 13,061                  | 3,242                    | 2,000                                       | 7.00                    | 40                               | 5                            | 1,100                                  | 24,963               | 21,402                         | 1,170           |
| Ajax Express Quad/DC4    | 4,618                   | 1,112                    | 2,400                                       | 6.50                    | 0                                | 5                            | 2,280                                  | 16,479               | 14,946                         | 1,100           |
| Ruthie's Lift/DC3        | 5,451                   | 1,336                    | 1,800                                       | 6.50                    | 0                                | 5                            | 1,710                                  | 14,845               | 20,710                         | 720             |
| F.I.S. Lift/C2           | 1,365                   | 565                      | 1,200                                       | 6.50                    | 75                               | 10                           | 180                                    | 661                  | 23,860                         | 30              |
| Bell Mountain Lift/C4    | 3,986                   | 1,501                    | 1,500                                       | 6.50                    | 0                                | 10                           | 1,350                                  | 13,169               | 26,463                         | 500             |
| Shadow Mountain Lift/DC4 | 4,176                   | 1,423                    | 2,000                                       | 7.00                    | 50                               | 5                            | 900                                    | 8,966                | 28,665                         | 310             |
| Little Nell Lift/C4      | 2,011                   | 501                      | 1,700                                       | 6.50                    | 50                               | 10                           | 680                                    | 2,213                | 13,654                         | 160             |
| Pandora's Lift/DC4       | 4,191                   | 1,220                    | 2,000                                       | 6.50                    | 0                                | 5                            | 1,900                                  | 15,068               | 24,500                         | 620             |
| <b>Total</b>             | <b>38,859</b>           |                          | <b>14,600</b>                               |                         |                                  |                              | <b>10,100</b>                          | <b>96,364</b>        |                                | <b>4,610</b>    |

Source: SE Group

Notes:

C2 = fixed-grip double chairlift / C4 = fixed-grip quad chairlift

DC4 = detachable quad chairlift / DC3 = detachable triple chairlift

G6 = six-passenger gondola

Table IV-6. Density Analysis – Upgrade Plan

| Lift Name,<br>Lift Type  | Daily Lift<br>Capacity | Guest Dispersal                     |                           |                        |                           | Density Analysis           |                                   |   |                |                         |
|--------------------------|------------------------|-------------------------------------|---------------------------|------------------------|---------------------------|----------------------------|-----------------------------------|---|----------------|-------------------------|
|                          |                        | Support<br>Fac./Milling<br>(guests) | Lift<br>Lines<br>(guests) | On<br>Lift<br>(guests) | On<br>Terrain<br>(guests) | Terrain<br>Area<br>(acres) | Terrain<br>Density<br>(guests/ac) | Target<br>Trail<br>Density<br>(guests/ac) | Diff.<br>(+/-) | Density<br>Index<br>(%) |
| Silver Queen Gondola/G6  | 1,170                  | 293                                 | 92                        | 239                    | 546                       | 119.9                      | 5                                 | 5   | 0              | 100                     |
| Ajax Express Quad/DC4    | 1,100                  | 275                                 | 190                       | 175                    | 460                       | 92.7                       | 5                                 | 6   | -1             | 83                      |
| Ruthie's Lift/DC3        | 720                    | 180                                 | 86                        | 141                    | 313                       | 104.5                      | 3                                 | 5   | -2             | 60                      |
| F.I.S. Lift/C2           | 30                     | 8                                   | 6                         | 7                      | 9                         | 8.9                        | 1                                 | 1   | 0              | 100                     |
| Bell Mountain Lift/C4    | 500                    | 125                                 | 23                        | 179                    | 173                       | 49.2                       | 4                                 | 4   | 0              | 100                     |
| Shadow Mountain Lift/DC4 | 310                    | 78                                  | 30                        | 63                     | 139                       | 59.2                       | 2                                 | 4   | -2             | 50                      |
| Little Nell Lift/C4      | 160                    | 40                                  | 11                        | 51                     | 58                        | 10.8                       | 5                                 | 7   | -2             | 71                      |
| Pandora's Lift/DC4       | 620                    | 155                                 | 63                        | 133                    | 269                       | 111.4                      | 3                                 | 5   | -2             | 40                      |
| <b>Total</b>             | <b>4,610</b>           | <b>1,154</b>                        | <b>501</b>                | <b>988</b>             | <b>1,967</b>              | <b>556.5</b>               | <b>4</b>                          | <b>5</b>                                  | <b>-1</b>      | <b>77%</b>              |

Source: SE Group

Notes:

C2 = fixed-grip double chairlift / C4 = fixed-grip quad chairlift

DC4 = detachable quad chairlift / DC3 = detachable triple chairlift

G6 = six-passenger gondola



### 3. **Lift and Terrain Network Efficiency**

As discussed in Chapter IV, overall resort efficiency is becoming an increasingly important factor in the industry, relating not only to energy/operational efficiency, but also to efficiency of the design and layout of the resort. The idea behind resort design efficiency is to have a well-balanced lift and trail network (i.e., the uphill lift capacity balances with the downhill trail capacity that it serves) that is efficiently served by the fewest number of lifts possible, while maintaining desired CCC rates, circulation routes, and service to the full spectrum of ability levels and types.

#### a. Lift Network Efficiency

As discussed in Chapter IV, this document analyzes lift network efficiency by calculating the average CCC per lift. Optimally, and in general, the average CCC per lift would likely be close to 1,000. Industry-wide, the average CCC per lift is approximately 650. The existing average CCC per lift for Aspen Mountain is well above average at 536, meaning that Aspen Mountain is slightly below average in terms of lift network efficiency. With the reconfiguration of the lift network under upgraded conditions, the average would increase to 576, reflecting a more efficient lift network than is currently available.

#### b. Terrain Network Efficiency

As discussed in Chapter IV, Terrain Network Efficiency refers to the amount of effort required to properly maintain a resort's terrain. From this standpoint, the most efficient scenario is to have a quantity of terrain that closely meets the target density requirements. As discussed, ASC has a policy to intentionally maintain lower trail densities than industry standards to ensure the higher quality experience expected by its destination guests. Also, as discussed in Chapter IV, an effective way to review terrain efficiency is to interpret the density analysis. Under the Upgrade Plan, the overall "Density Index" figure remain at the already-high figure of 77%, maintaining an excellent, low density, ski experience.

## E. **UPGRADED GUEST SERVICES FACILITIES, FOOD SERVICE SEATING AND SPACE USE ANALYSIS**

### 1. **Guest Services**

Aspen Mountain is planning several guest service projects as a part of this MDP—a remodel and return-to-use of the Ruthie's Restaurant, renovations to Bonnie's, an expansion and upgrade to Buckhorn Cabin, and on mountain huts capable of housing overnight guests and a remodel of the existing Aspen Mountain Club.

Ruthie's Restaurant was taken out of service approximately ten years ago because of the lack of need; however, ASC anticipates that a food and beverage guest service at this location will once again become a viable service with the upgrade of the Shadow Mountain lift. In addition, ASC plans to offer this facility for special event use, both for daytime and evening events, on a year-round basis. Lastly, the remodel will include accommodations offering a truly unique opportunity for overnights guests.

On-mountain huts, modeled after the popular 10th Mountain, Braun, Friends, and Summit huts system on private lands, near the existing Buckhorn Cabin are planned for Aspen Mountain. These huts are intended to offer guests, who may not have the proper equipment or sufficient stamina to utilize other backcountry huts systems, a similar on-mountain, overnight experience. The huts are planned to be simple structures capable of sleeping eight to twenty people with bedding and various supplies provided. The huts will include kitchen facilities for food and beverage preparation and service.

## 2. Space Use Analysis

A distribution of CCC is utilized to determine guest service capacities and space requirements for guest services at base area portals and on-mountain facilities. The CCC should be distributed between each guest service facility location according to the number of guests that would be utilizing the lifts and terrain associated with each facility. Sufficient guest service space should be provided to accommodate the planned CCC of 4,610 guests per day.

Table VI-7 addresses the Upgrade Plan's space use needs at the base area and on-mountain facilities, under the planned CCC. The space recommendations are directly related to the distribution of the resort's capacity to the various guest service facilities located in the base area and on-mountain. Table VI-7 shows recommended size ranges for the facilities, based on industry averages for space use by service function.

Facilities at Aspen Mountain are below the recommended range for every service function; however, this analysis does not consider local proprietors in close proximity but outside of Aspen Mountain. As discussed in Chapter IV, with Aspen Mountain's proximity to the City of Aspen and several private restaurants, rental shops, retail stores, and others within a few blocks of the gondola bottom terminal, it is reasonable to assume that these third-party restaurants and stores will continue to provide skier services; therefore, addressing the deficiency of recommended space at Aspen Mountain.

The planned upgrades to the above discussed facilities will bring them more in line with the recommended ranges.

Table VI-7. Industry Average Space Use – Upgrade Plan

| Service Function                                  | Existing Total (sq. ft.) | Recommended Range (sq. ft.) |                        |
|---|--------------------------|-----------------------------|------------------------|
|   |                          | Recommended Low Range       | Recommended High Range |
| Base Area (Ajax Tavern and other ASC-owned space) | 24,000                   | 46,640                      | 58,400                 |
| Sundeck Restaurant/Aspen Mountain Club            | 28,130                   | 25,330                      | 32,220                 |
| Bonnie's Restaurant                               | 5,420                    | 8,250                       | 10,308                 |
| Ruthie's Restaurant*                              | 6,100                    | 5,910                       | 7,374                  |
| <b>Total Resort</b>                               | <b>63,650</b>            | <b>71,970</b>               | <b>90,620</b>          |

Source: SE Group

\* Ruthie's Restaurant has been closed for the past ten years, but is contemplated to be reopened and possible remodeled or rebuilt in the MDP



### 3. Food Service Seating

Seating and restaurant space recommendations are directly related to the lunchtime capacity. The lunchtime capacity is determined by the distribution of each lift pod's CCC. It is assumed that guests would prefer to dine at the facility closest to the area they are using. To allow for this convenience, it is important to provide restaurant seating to accommodate the lunchtime capacity requirement of the area. Restaurant seating should be supplied per the recommendations in Table VI-8.

Table VI-8 summarizes the seating requirements for Aspen Mountain. As with the total guest use space analysis, it is important to note that this analysis only accounts for restaurant seats that are owned and operated by ASC. Since ASC does not own or operate any of the food and beverage facilities in the City of Aspen, none of those seats are taken into account and shown in Table VI-8. It is reasonable to assume that this deficiency will continue to easily be made up by the numerous private restaurants in the City of Aspen.

### F. UPGRADED PARKING CAPACITY

No changes are planned for the parking scenario at Aspen Mountain. The slight increase in visitation and demand for parking generated by the planned upgrades on Aspen Mountain would still be accommodated by the City of Aspen's existing parking infrastructure for guest parking and would not require dedicated parking options of its own.

Parking would continue to be available for guests of Aspen Mountain within the City of Aspen, including:

- The existing parking Aspen City streets and parking structure
- Parking associated with all lodging properties
- The Park & Ride lots associated with RFTA transfer nodes

Table VI-8. Recommended Restaurant Seating

|   | Base Area | Sundeck/ AMC | Bonnie's | Ruthie's | Total Resort |
|---|-----------|--------------|----------|----------|--------------|
| Lunchtime Capacity (CCC + other guests)               | 1,170     | 293          | 92       | 239      | 546          |
| Average Seat Turnover                                 | 1,100     | 275          | 190      | 175      | 460          |
| Existing Indoor Seats                                 | 720       | 180          | 86       | 141      | 313          |
| Existing Outdoor Seats                                | 30        | 8            | 6        | 7        | 9            |
| Existing Total Seats                                  | 500       | 125          | 23       | 179      | 173          |
| Required Seats  | 310       | 78           | 30       | 63       | 139          |
| <i>Difference</i>                                     | 160       | 40           | 11       | 51       | 58           |
| Existing seating capacity (existing seats x turnover) | 620       | 155          | 63       | 133      | 269          |

Source: SE Group

Notes:

CCC + other guests is accounting for the non-skiing guests who come to Aspen Mountain with larger groups or families that use the guest service facilities just as the skiing guest does. Other guests are being calculated at 5% of CCC.



## G. UPGRADED RESORT OPERATIONS

### 1. Patrol/First Aid

The existing Patrol Headquarters (PHQ) adjacent to the Sundeck Restaurant at the summit will be replaced with a new facility. The exact size and location of the new facility are not yet determined but it will be appropriately sized in a nearby location that meets the needs of ski patrol. The current plan, as discussed previously, is to place the ski patrol building adjacent to the northern wall of the gondola storage building, near the north-east corner of the building. The existing employee apartment on the existing PHQ second floor will be incorporated into the new facility. This unit provides living quarters to staff members required for gondola start-up operations each morning.

A new, relatively small (less than approximately 500 square feet) patrol duty station will be required as a component of the planned Pandora lift and terrain, located at the top of the Pandora lift.

Both planned Patrol facility upgrades would occur on private lands.

### 2. Snowmaking Coverage

The existing snowmaking system at Aspen Mountain provides coverage on 168 acres of terrain on the lower two-thirds of the mountain (below approximately 10,600 feet AMSL). This provides critical coverage, especially at the lowest elevations, to ensure adequate skiing/riding conditions both in the early and late parts of the season. It also ensures the minimum conditions required to host the World Cup ski races, typically scheduled in late November. However, during seasons with marginal early season snowfall, top to bottom skiing can be delayed from the planned opening day, causing a burden on the overall resort and community economy. To respond to this issue, ASC plans to extend snowmaking capabilities to the summit of Aspen Mountain, which includes snowmaking on approximately 53 acres on One and Two Leaf, Copper Trail, Silver Bell, Dipsy Doodle, Buckhorn, and North American trails.





The system components required to execute the planned snowmaking improvements include:

- New 1,800 gpm pump station near Gent's Ridge Pond (NFS lands)
- Gent's Ridge 2 storage pond – a second 3.5 million-gallon pond uphill of the existing pond (NFS and private lands)
- Two-million-gallon storage pond near the Midnight ski trail (private lands)
- 15,861 feet of snowmaking pipeline on trails with planned snowmaking coverage (NFS and private lands)

The locations of these facilities are identified in Figure VI-2.

### **3. Grooming**

It is anticipated that implementation of the planned Pandora lift and trails that there will be an increase in grooming operations. Approximately one-half of the planned 150 acres of new developed trails in Pandora will be groomed on a regular basis, which will likely require another snow groomer.

### **4. Dedicated Uphill Routes**

Dedicated and designated uphill routes are planned to allow uphill ski access for guests during operating hours. These routes would be provided to minimize conflicts between uphillers and downhillers. These routes could be located on NFS and private lands within the SUP, but would be designed not to interfere with existing ski operations. Currently, no uphill travel is allowed on Aspen Mountain during operating hours due to the probability of conflicts in the Copper Bowl and Spar Gulch areas.

### **5. Maintenance Facilities**

No changes to on-mountain maintenance facilities are anticipated at this time.

### **6. Utilities**

Planned utility upgrades include power lines to the Pandora lift top and bottom terminals. Additional power line facilities will be necessary for the snowmaking and storage pond additions.

### **7. Communications**

Continuous maintenance and improvements are planned for all communication infrastructure components, many of which are shared with city, county, state and federal agencies. Improvements may include the installation of cell towers, broadband/data equipment, conventional antennae and fiber optic lines.

### **8. Culinary Water and Sewer**

Upgrades to culinary water and sewer facilities includes the replacement of the water storage tanks above Bonnie's Restaurant (private lands).

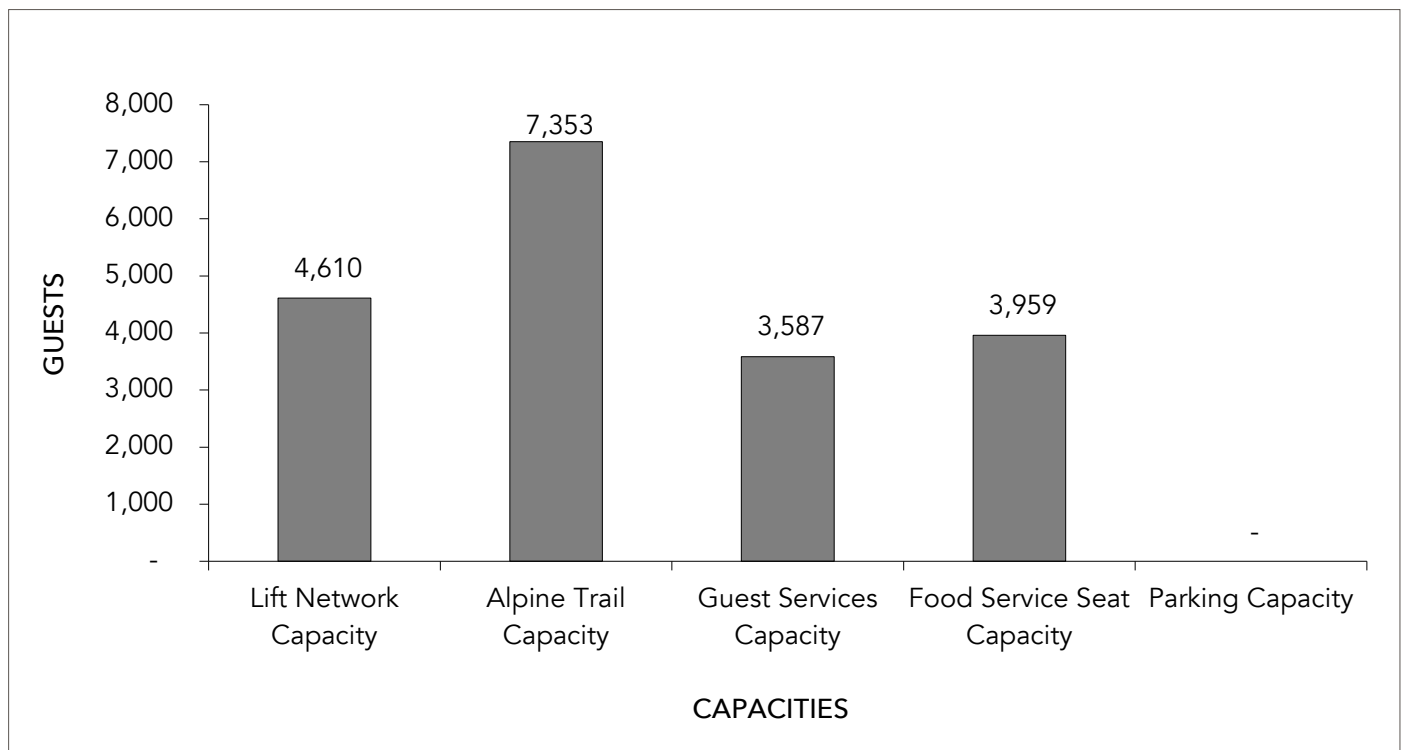
The Pandora Patrol Duty station will be serviced with a potable water tank (to be filled by snowcat as necessary) and a vault toilet that will be pumped annually. Routine maintenance to all waterlines, sanitary line, storage tanks, pumping stations and storage tanks will continue to take place as necessary.

## H. RESORT CAPACITY BALANCE AND LIMITING FACTORS

The overall balance of the existing resort is evaluated by calculating the capacities of the resort's various facilities and comparing those facilities to the resort's CCC. The upgraded capacities discussed above are shown in Chart VI-2.

This chart indicates that most of Aspen Mountain's capacities will remain fairly well-balanced. The surplus of terrain network capacity is reflected in overall low skier densities at all four Aspen Snowmass mountains, does not present a particular issue, and is certainly not negative from guests' standpoint. As is currently the case at Aspen Mountain, guest services capacity and food service seating capacity remain low, since they do not account for the third-party guest service space and restaurant seats that are available nearby in the City of Aspen. As parking capacity would continue to be solely provided within the City of Aspen, capacities for parking are not provided in Chart VI-2.

Chart VI-2. Resort Balance – Planned Conditions



Source: SE Group



## I. SUMMER OPERATIONS

### 1. Summer and Multi-Season Offerings – Zones Concept

Under the planned upgrade conditions, only three summer activity zones on Aspen Mountain have been identified, which distinguish four separate characteristics (*access, remoteness, naturalness, and infrastructure*) that define the summer and multi-season setting and guest experience within different landscapes across the SUP area. Even though the NFS lands within the SUP area are very fragmented by the large amount of privately owned properties that exist on Aspen Mountain, ASC has chosen to map these zones over the entire operational boundary as if it were all NFS lands. Doing so would seem to help manage the overall visitor experience and perhaps address similar concerns that may surface during the MDP amendment review by Pitkin County.

The first step in designating specific activity zones is a careful consideration of the setting and the proximity to infrastructure supporting snow sports. Features such as watersheds, topography, vegetation structure, level of existing disturbance, and existing infrastructure were considered in establishing zone boundaries across the entire SUP area.

The exercise resulted in the creation of eleven areas unique in their location and/or features. The second step in designating specific activity zones is applying a score for each characteristic on a scale of 1 to 3, with 1 being the most disturbed and 3 being the least disturbed. Figure IV-6, Existing Summer Zones, illustrates the existing zone designations within the Aspen Mountain SUP area and Figure VI-3, Planned Summer Zones highlights the three summer zones under the upgrade conditions described in this chapter.

Because summer and multi-season uses are continually being developed and activities that do not currently exist may be popular within the next several years, a list of compatible activities is provided for each zone. The intent of the list of compatible activities is to allow for a certain amount of flexibility, since it is impossible to foresee exactly what new activities will be developed over this time. ASC will continue

to work with the Forest Service to ensure that proposed summer and multi-season activities are suitable for the setting and desired experience within each zone.

#### a. Zone 1

##### *Setting*

The existing setting of Zone 1 is highly developed and disturbed. Within Zone 1, the built environment dominates the landscape. Within the context of the overall SUP area, the following summarizes the setting in Zone 1:

- Road access and roads are prevalent;
- Considerable human activity (people recreation and/or resort operations) occurs within and proximate to this setting—there is little to no feeling of remoteness;
- Terrain modifications (ground disturbance and vegetation removal) dominate the area; and
- Infrastructure, including chairlifts and buildings, are present.

Zone 1 is located at and adjacent the base area, at the summit, and along a contiguous area centered around the Aspen Mountain Summer Road, which accommodates a significant amount of continuous public motorized traffic. The Aspen Mountain Summer Road is a public County Road that traverses the mountain from bottom to top, connecting the City of Aspen with a comprehensive road system to the south and outside of the SUP Boundary. The vast majority of Zone 1 is comprised of private lands, although there are slight overlaps with NFS lands.

##### *Desired Experiences*

Within Zone 1, guests are expected to encounter a high concentration of other guests. The level of development will reflect the current setting and function of these areas as hubs of activity and portals to other activities across the mountain. Most guests visiting Zone 1 will initially access it via the base area, the Aspen Mountain Summer Road, or by riding the Silver Queen Gondola to the top. Within the portions of NFS lands within Zone 1, the concepts in the BEIG will be followed to ensure appropriate design guidelines for both landscape architecture and built architecture are followed.

Zone 1 abuts Zone 2 on the fringes of developed on-mountain areas. This allows guests to experience a gradual transition between the built environment (Zone 1) and more-natural areas that still contain activities and facilities blending with the area's natural setting (Zone 2). Zone 1 will offer interpretive opportunities in a developed setting, with goals of enhancing guests' understanding of the natural environment as they prepare to venture into less developed areas. The educational focus will leverage existing partnerships with ACES and other organizations.

#### *Compatible Activities and Facilities*

Services and activities in Zone 1 include food and beverage operations, shelter and emergency services, restroom facilities, landscaped areas, and other activities. On Aspen Mountain, Zone 1 serves as the on-mountain hub, from which guests will access surrounding activities and refuel between activities. Typically, guests will first access these areas after riding the Silver Queen Gondola; however, guests could also access Zone 1 on their own from the surrounding trails network and/or Aspen Mountain Summer Road. Aspen Mountain already hosts several multi-season recreational activities, including live music, a playground, and others. In addition, there exists a wide variety of other separately owned and operated activities such as guided ATV Tours, para-sailing, etc. A host of private individuals engage in similar activities as well without any association with ASC.

Proposed activities on NFS lands overlapping Zone 1 could include a challenge course, climbing wall, mountain bike trails and hiking trails, as well as other natural resource-based recreation activities. The activities will not compromise the existing skiing which occurs in Zone 1 during winter months.

#### b. Zone 2

##### *Setting*

The setting of Zone 2 is less disturbed when compared with Zone 1 and provides more naturalness due to a lesser degree of disturbance from the surrounding ski area. Within the context of the overall SUP area, the following summarizes the setting in Zone 2:

- Road access and roads are present;
- Human activity (people recreating) occurs within and proximate to this setting—there is little feeling of remoteness;
- Terrain modifications (ground disturbance and vegetation removal) are evident in the area, but past disturbance blends with the landscape; and
- Infrastructure, including chairlifts and buildings, are present.

Under upgrade conditions, five large areas on either side of the Aspen Mountain Summer Road are designated as Zone 2. These areas include the vast majority of ski area infrastructure and terrain network at Aspen Mountain that are still separated from the most highly developed Zone 1 areas. Areas designated as Zone 2 include a mix of private and NFS lands.

##### *Desired Experiences*

Most guests will access Zone 2 from Zone 1. In moving between these zones, guests will transition from the built environment to a setting characterized by both developed and passive activities proximate to existing infrastructure and facilities, but still offering a more natural feel. For many guests visiting Aspen Mountain, this may be their first real experience in the mountains, and providing a safe, comfortable environment for exploration which is critical to the success of Zone 2 and the overall plan. Zone 2 provides the initial opportunity for guests to learn about and engage in their natural surroundings through hands-on recreational, interpretive, and educational offerings. In addition to hosting activities such as guided hikes and various trails, Zone 2 serves as a buffer between higher levels of development within Zone 1, and the more natural settings of Zone 3.



### *Compatible Activities and Facilities*

Passive activities within Zone 2 include educational/interpretive opportunities, sightseeing and light hiking, or simply visiting with friends and family. Zone 2 will provide enhanced sightseeing opportunities when compared to Zone 1. Activity offerings include access to the challenge course, climbing wall, guided hikes and interpretative opportunities, extended hiking trails, mountain biking trails, and other natural resource-based activities.

As mentioned above, the Zone 2 serves two primary purposes—to provide activities in a natural setting in proximity to existing infrastructure and services, and to provide a buffer between Zone 3 and the more developed areas within Zone 1. Thus, areas within Zone 2 serve as transitional zones, encouraging guest exploration into more natural portions of the National Forest in a setting that still feels comfortable for less-experienced Forest users. The setting of Zone 2 and the activities that occur within will offer sufficient challenge for first-time guests, and will prepare others to venture into the less developed areas of Zone 3.

### c. Zone 3

#### *Setting*

The setting of Zone 3 contains areas of disturbance from ski trail and chairlift development, but guests can still find a greater degree of remoteness and naturalness depending on their location within the zone. Generally speaking, Zone 3 includes areas where existing chairlifts are present or visible; however, this was not the determining factor for the designation. Within the context of the overall SUP area, the following summarizes the setting in Zone 3:

- Road access and roads are present, but limited to certain areas;
- Human activity (people recreating) can be seen at a distance or is out of site from within this setting—a stronger feeling of remoteness is present;
- The area is moderately disturbed by ski area activity, including vegetation removal from ski trail development and some ground disturbance; and
- Infrastructure, including chairlifts and buildings, are present.



Four areas of Aspen Mountain would be designated as Zone 3 under the planned upgrade conditions. These areas are typically located in the furthest extents of Aspen Mountain, with a greater degree of separation from ski area activity than Zone 1 and Zone 2. The largest area of Zone 3 overlaps the planned Pandora area, which is anticipated to provide a more remote experience and different character as it is shielded from the rest of the mountain. Like Zone 2, Zone 3 contains a mix of NFS and private lands.

#### *Desired Experiences*

The majority of guests will initially experience Zone 3 via a hike and a lift ride from Zone 1 and Zone 2; however, guests could also access Zone 3 from private lands via the existing road and trails network from the south. Once in Zone 3, guests will have a variety of opportunities to engage in their surroundings in a more natural and remote environment.

The desired experience in Zone 3 will be achieved through the activities offered there. Guests will enjoy nature hikes with interpretive signage that will provide education on their biological, cultural, and historical surroundings. Guests will hike to locations with views up Independence Pass toward the Continental Divide. Zone 3 offers a diverse set of experiences for guests, which will promote the WRNF as a recreationally-, biologically-, and geographically-diverse landscape.

#### *Compatible Activities and Facilities*

Activities include developed and maintained hiking trails, bike trails and similar natural resource-based activities. Select activities such as interpretive tours may occur on a year-round basis. Activities within Zone 3 will not require substantial modifications to natural topography to facilitate construction.

#### d. Other Zones

There are no Zone 4 or Zone 5 areas located on Aspen Mountain that would exist under the planned upgrade conditions. Table VI-9 describes the characteristics of each zone, and Table IV-10 provides information about each zone at Aspen Mountain under the planned upgrade conditions.





Table VI-9. Zone Characteristics

| Zone Characteristics                          | Scores             |
|---|--------------------|
| <b>Access</b>                                 |                    |
| Road Access within Area                       | 1                  |
| Limited Road Access/Trails                    | 2                  |
| No Road Access                                | 3                  |
| <b>Remoteness</b>                             |                    |
| Proximate to Human Activity                   | 1                  |
| Distant Sight of Human Activity within SUP    | 2                  |
| Out of Sight of Human Activity within SUP     | 3                  |
| <b>Naturalness</b>                            |                    |
| Heavily Disturbed by Ski Area Activity        | 1                  |
| Moderately Disturbed by Ski Area Activity     | 2                  |
| Undisturbed by Ski Area Activity              | 3                  |
| <b>Infrastructure</b>                         |                    |
| Adjacent to 2 or More Ski Area Infrastructure | 1                  |
| Ski Area Infrastructure in Area               | 2                  |
| Out of Site of Ski Area Infrastructure        | 3                  |
| <i>Minimum Score Possible</i>                 | 4                  |
| <i>Maximum Score Possible</i>                 | 12                 |
| <b>Zones</b>                                  | <b>Score Range</b> |
| 1   | 4                  |
| 2   | 5 to 6             |
| 3   | 7 to 9             |
| 4   | 10 to 11           |
| 5   | 12                 |



Table VI-10. Planned Summer Zones at Aspen Mountain

| Area Boundaries    | Score    | Appropriate Zone | Area Boundaries    | Score    | Appropriate Zone |
|--------------------|----------|------------------|--------------------|----------|------------------|
| <b>Area 1</b>      |          |                  | <b>Area 7</b>      |          |                  |
| Access             | 1        |                  | Access             | 1        |                  |
| Remoteness         | 1        |                  | Remoteness         | 2        |                  |
| Naturalness        | 1        |                  | Naturalness        | 2        |                  |
| Infrastructure     | 1        |                  | Infrastructure     | 2        |                  |
| <b>Total Score</b> | <b>4</b> | <b>Zone 1</b>    | <b>Total Score</b> | <b>7</b> | <b>Zone 3</b>    |
| <b>Area 2</b>      |          |                  | <b>Area 8</b>      |          |                  |
| Access             | 1        |                  | Access             | 1        |                  |
| Remoteness         | 1        |                  | Remoteness         | 2        |                  |
| Naturalness        | 1        |                  | Naturalness        | 2        |                  |
| Infrastructure     | 1        |                  | Infrastructure     | 2        |                  |
| <b>Total Score</b> | <b>4</b> | <b>Zone 1</b>    | <b>Total Score</b> | <b>7</b> | <b>Zone 3</b>    |
| <b>Area 3</b>      |          |                  | <b>Area 9</b>      |          |                  |
| Access             | 1        |                  | Access             | 1        |                  |
| Remoteness         | 2        |                  | Remoteness         | 2        |                  |
| Naturalness        | 2        |                  | Naturalness        | 1        |                  |
| Infrastructure     | 2        |                  | Infrastructure     | 2        |                  |
| <b>Total Score</b> | <b>7</b> | <b>Zone 3</b>    | <b>Total Score</b> | <b>6</b> | <b>Zone 2</b>    |
| <b>Area 4</b>      |          |                  | <b>Area 10</b>     |          |                  |
| Access             | 1        |                  | Access             | 2        |                  |
| Remoteness         | 1        |                  | Remoteness         | 2        |                  |
| Naturalness        | 2        |                  | Naturalness        | 3        |                  |
| Infrastructure     | 1        |                  | Infrastructure     | 2        |                  |
| <b>Total Score</b> | <b>5</b> | <b>Zone 2</b>    | <b>Total Score</b> | <b>9</b> | <b>Zone 3</b>    |
| <b>Area 5</b>      |          |                  | <b>Area 11</b>     |          |                  |
| Access             | 1        |                  | Access             | 1        |                  |
| Remoteness         | 1        |                  | Remoteness         | 1        |                  |
| Naturalness        | 2        |                  | Naturalness        | 1        |                  |
| Infrastructure     | 1        |                  | Infrastructure     | 1        |                  |
| <b>Total Score</b> | <b>5</b> | <b>Zone 2</b>    | <b>Total Score</b> | <b>4</b> | <b>Zone 1</b>    |
| <b>Area 6</b>      |          |                  |                    |          |                  |
| Access             | 1        |                  |                    |          |                  |
| Remoteness         | 1        |                  |                    |          |                  |
| Naturalness        | 2        |                  |                    |          |                  |
| Infrastructure     | 1        |                  |                    |          |                  |
| <b>Total Score</b> | <b>5</b> | <b>Zone 2</b>    |                    |          |                  |



## 2. Summer and Multi-Season Activities and Facilities

The available statewide guest survey results and statistics provide insight into the development philosophy and the target market ASC strives to reach. During the summer, the mean age of guests is slightly higher (approximately 42 years of age), and ASC recognizes that it must cater to a slightly different demographic than in the winter. Summer activities provided by ASC are planned to include activities for the 45- to 54-year-old range, while also providing opportunities for the children of this demographic who will likely accompany their parents to Aspen Mountain.

Summer visitation on Aspen Mountain via the Silver Queen Gondola has always existed, but only in the past twenty to thirty years have ASC, TOSV, and the City of Aspen collaborated to offer a wide range of summertime recreation. As those opportunities developed, and as access to higher mountain elevations via the gondola became easier, so did the realization for continued opportunities and growth as a summer destination that would complement the already successful winter resort economy.

Details on planned upgrades are presented below, but specific project locations and associated maps will be developed during site-specific analysis as part of the NEPA process.

### a. Climbing/Bouldering Walls and Climbing Features

Climbing walls are planned to be located near trail edges in the Aspen Mountain summit area. Possible locations are the edges of the One-and-Two-Leaf trails. Concepts could include walls of up to 25' that would be served with auto belays and shorter bouldering walls that would not require fall protection. These features will provide a challenging experience for those new to the sport of climbing and can be designed for a wide variety of users that would suit the full age range of a family. Artificial climbing walls in a high alpine setting provide opportunities for users to develop skills and a level of comfort necessary to participate in climbing and bouldering in more natural settings elsewhere on NFS lands.

Climbing "features" are categorized as climbing apparatus or structures that have netting or other fall protection elements incorporated into the climbing features themselves, thereby not requiring a belay systems and attendants or other fall protection.

### b. Challenge Course

A challenge course is planned for the forested area between the One-and-Two-Leaf and Copper trails. The intent of this course is to provide physical recreation and engagement in a natural setting, offering a challenging personal development and team-building activity. The course elements would be constructed within, and supported by, trees and other natural materials wherever possible. An artful yet natural design concept will create a sense of place and a greater appreciation for the wonderful setting the forest provides. Challenge courses on NFS lands have proven effective in helping users explore the fundamentals of trust, craftsmanship, and coaching, intertwined with group interaction, problem solving, and leadership. A renewed knowledge and respect for the surrounding natural environment is another expected outcome of the challenge course.

### c. Mountain Bike Trails

A system of downhill mountain bike trails is planned for Aspen Mountain. There is currently only one expert level downhill single track trail that is primarily used for special events such as the mountain Enduro and/or the Power of Four mountain bikes races. Up to four separate "flow" type trails are planned with access via and from the top of the Silver Queen gondola. Given the steep topography and large vertical relief on Aspen Mountain, these trails will be very long (8 to 12 miles) in order to achieve the desired 7 to 10% average grade. Given this length, trails will be for intermediate and advanced riders only.

#### d. Hiking Trails

Additional hiking/multi-use trails are planned throughout the private and NFS lands that make up Aspen Mountain to complement the existing trail system. New trails would provide additional high elevation loops that would start and finish from the Sundeck area. Concepts include a short interpretive trail to the east of the Sundeck, a short trail or walking path immediately to the south and west of the Sundeck, returning to that facility just north of it, a 4- to 6-mile loop into the Pandora pod that would provide views to the east up the Roaring Fork drainage towards Independence Pass, as well as potential reroutes of existing trails to more desirable alignments.

#### e. Special Event and Music Sites

A wedding deck currently exists on the Sundeck's north side, as does a music platform in a meadow approximately 700 feet south of the Silver Queen gondola's top terminal. Both of the locations are on private lands.

ASC plans to upgrade the existing 144-square foot (approximate) music platform in the meadow to a larger one, approximately 375 square feet in size. The larger platform will also have a canopy roof to provide weather protection for musicians. The meadow is planned to be terraced to provide formal seating and also have a canopy roof for weather protection.

Portable food and beverage services are planned for certain events, which will be provided by a food and beverage trailer. A permanent vault toilet is also planned in this area.

Reconstruction of the Ski Patrol Headquarters and remodeling of the gondola building may afford the opportunity to access and use the roof of the gondola building for a sightseeing platform and event venue subject to engineering and code requirements.

#### f. Rustic Overnight Accommodations

One or more small rustic cabins and/or huts are planned for the areas near the existing Ruthie's Restaurant. These on-mountain huts will be modeled after the popular 10th Mountain, Braun, Friends, and Summit huts system on NFS lands and alpine hut systems in Europe. These huts are intended to offer hikers, skiers, and mountain guests, who may be seeking a less remote location and more controlled experience or who may not have the proper equipment or sufficient stamina to use the backcountry huts systems, a similar on-mountain, in-bounds, overnight experience. The huts are planned to be modestly scaled structures capable of sleeping eight to twenty people each with bedding and various supplies provided. The huts will be serviced by the adjacent on-mountain restaurants and facilities.

Activities would take place within each zone, as follows:

##### Zone 1

- Scenic lift rides utilizing the Silver Queen gondola
- Single-track and flow mountain bike trails and hiking trails
- Bouldering walls, challenge courses and other climbing features
- Challenge course
- Special event/gathering sites
- Restaurants, mountain huts, shelters, and overnight camping activities

##### Zone 2

- Scenic lift rides utilizing the Silver Queen gondola
- Single-track and flow mountain bike trails and hiking trails
- Mountain huts, shelters, and overnight camping activities

##### Zone 3

- Single-track mountain bike and hiking trails

Skiing, snowboarding and other forms of winter recreation would occur in all three zones.



## J. IMPLEMENTATION AND PHASING SCHEDULE

The Pandora lift and trail development may be implemented in two to seven years.

Portions of the planned snowmaking upgrades may be implemented in two to seven years. Full build-out of the planned snowmaking upgrades may be implemented between five and fifteen years in the future.

Planned upgrades to the existing lifts may be implemented between three and fifteen years in the future.

Planned upgrades to various summer activities may be implemented two to ten years in the future.

Planned upgrades to the Buckhorn Cabin and/or the Ruthie's facilities may be implemented five to fifteen years in the future.



NFS LANDS WITHIN PROPOSED OPERATING BOUNDARY: MANAGEMENT AREA 7.1 - INTERMIX

PATROL DUTY STATION

GRADING TO PROVIDE ACCESS TO SUNDECK FROM PANDORA'S

NEW SKI PATROL BUILDING

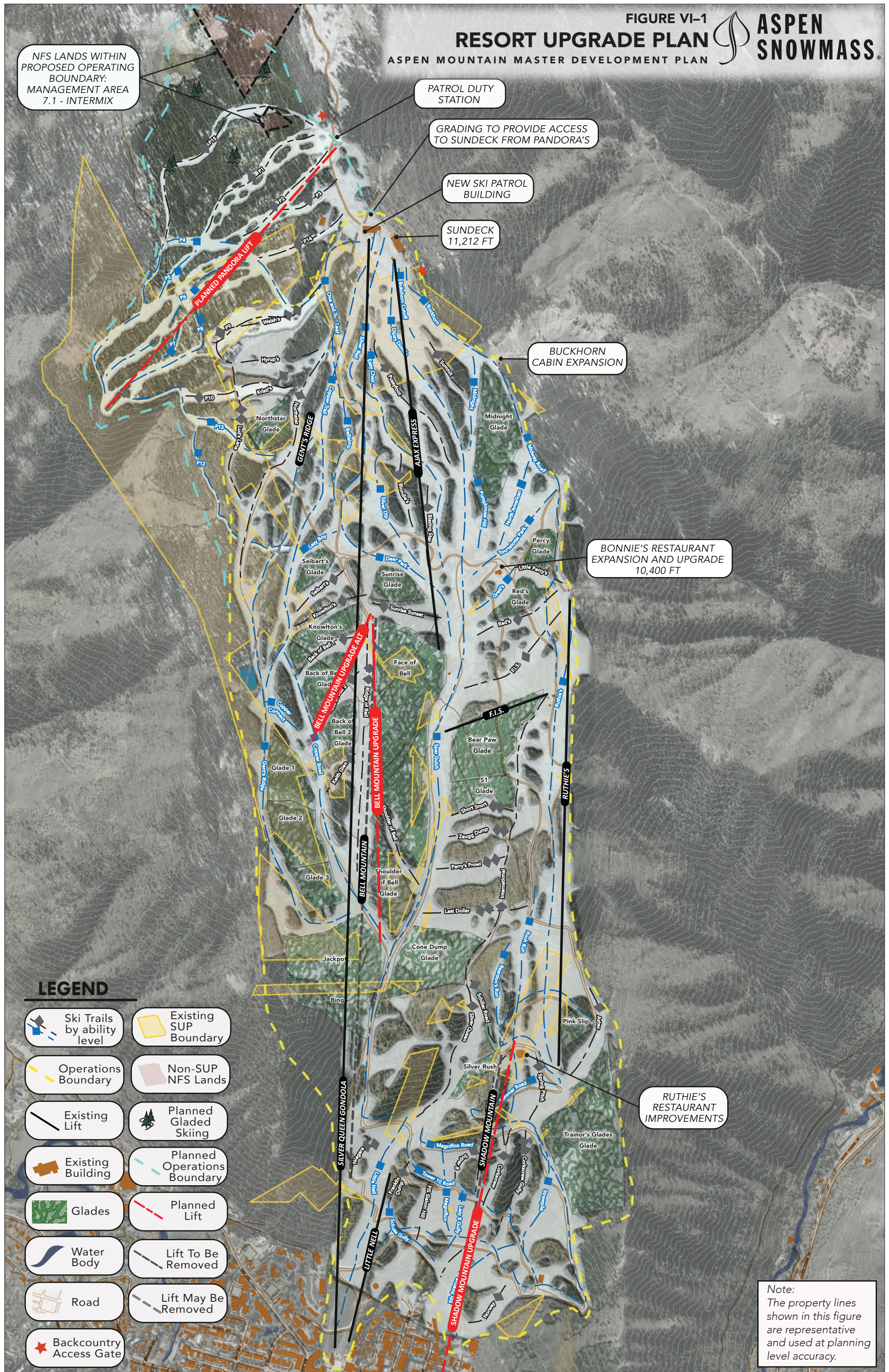
SUNDECK 11,212 FT

BUCKHORN CABIN EXPANSION

BONNIE'S RESTAURANT EXPANSION AND UPGRADE 10,400 FT

RUTHIE'S RESTAURANT IMPROVEMENTS

Note:  
 The property lines shown in this figure are representative and used at planning level accuracy.



**LEGEND**

- Ski Trails by ability level
- Operations Boundary
- Existing Lift
- Existing Building
- Glades
- Water Body
- Road
- Backcountry Access Gate
- Existing SUP Boundary
- Non-SUP NFS Lands
- Planned Gladed Skiing
- Planned Operations Boundary
- Planned Lift
- Lift To Be Removed
- Lift May Be Removed

**FIGURE VI-2**  
**SNOWMAKING UPGRADE PLAN**  
 ASPEN MOUNTAIN MASTER DEVELOPMENT PLAN



NFS LANDS WITHIN PROPOSED OPERATING BOUNDARY: MANAGEMENT AREA 7.1 - INTERMIX

NEW SKI PATROL BUILDING

SUNDECK 11,212 FT

BUCKHORN CABIN EXPANSION

PLANNED MIDNIGHT SNOWMAKING POND

BONNIE'S RESTAURANT EXPANSION AND UPGRADE 10,400 FT

PLANNED ADDITIONAL SNOWMAKING STORAGE

EXISTING GENT'S RIDGE SNOWMAKING POND

PLANNED BOOSTER STATION

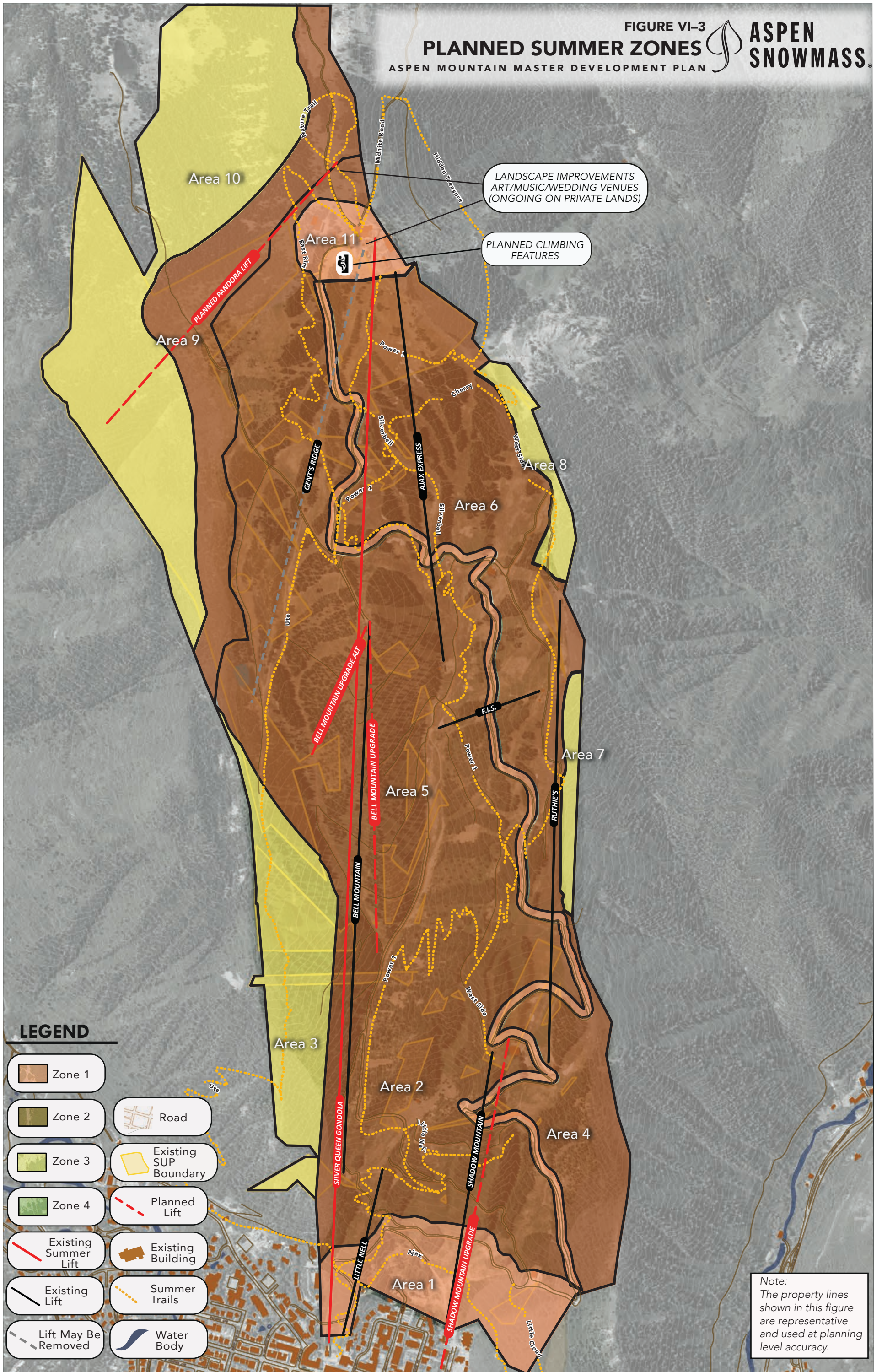
RUTHIE'S RESTAURANT IMPROVEMENTS

EXISTING BOOSTER PUMP STATION

**LEGEND**

- Existing SUP Boundary
- Non SUP NFS Lands
- Operations Boundary
- Lift May Be Removed
- Existing Lift
- Planned Lift Upgrade
- Existing Building
- Existing Snowmaking Coverage
- Glades
- Existing Snowmaking Line
- Water Body
- Planned Snowmaking Coverage
- Road
- Planned Snowmaking Line

Note:  
 The property lines shown in this figure are representative and used at planning level accuracy.



**LEGEND**

- Zone 1
- Zone 2
- Zone 3
- Zone 4
- Road
- Existing SUP Boundary
- Planned Lift
- Existing Summer Lift
- Existing Building
- Existing Lift
- Summer Trails
- Lift May Be Removed
- Water Body

Note:  
 The property lines shown in this figure are representative and used at planning level accuracy.