Brundage Mountain
Master Development Plan

November 2022

PREFACE

Brundage Mountain Resort (Brundage) is a family-centric resort focused on providing quality outdoor recreational experiences to visitors of the Payette National Forest (PNF). The team at Brundage has gone through extensive planning for winter and year-round on-mountain and base area improvements to help support the current recreation at Brundage. This Mountain Resort Master Development Plan (MDP) is the guiding document for future development at Brundage. Illustration 1 on the following page is a visual representation of the process on which this document is based.

First, Brundage and its partners determined the overall resort vision and guiding goals based on market needs, resort niche and long-term outlook. These vision and goal statements help inform the entire process; that is, to help answer questions such as, “What’s important to our guests?”, “What makes our resort special?”, and “Where should we invest our time, money, and resources?”

With a vision and goals established, Brundage completed an inventory of existing conditions at the resort to identify existing strengths, weaknesses, opportunities, and constraints. This critical information goes into the resort planning phase. Details were collected such as the number of lifts and their conditions, the square footage of guest service spaces and how many parking spaces are available. Physical resources were inventoried to help identify ideal locations to develop or areas to avoid due to environmental sensitivity.

The next phase of the MDP process was to analyze existing capacities of various facility components to determine imbalances within the operation. Collectively, this analysis led to the identification of improvements that will bring existing facilities into better balance, help the resort prioritize projects and help the resort to operate more efficiently. Accomplishing these goals results in a well-balanced resort, which provides an adequate array of services and experiences to satisfy guest expectations for a quality recreation experience. The results of this process are documented in this MDP.

This MDP includes discussion of the planned development on private land in the base area as it provides vital context for the holistic planning process on both public and private lands. In 2006 a land exchange was completed between the Forest Service and Brundage Mountain. As a result of the land exchange, 388 acres of land encompassing the base area of Brundage Mountain was transferred to private ownership, under the jurisdiction of Adams County. Over the next several years, extensive work was completed that resulted in an approved Planned Unit Development (PUD) for the 388 acres. A Phasing Plan was developed in accordance with the guidelines contained in the Brundage Mountain Village Planned Unit Development (PUD, May 2009) and the Brundage MountainVillage Development Agreement (PUD DA; November 9, 2009).

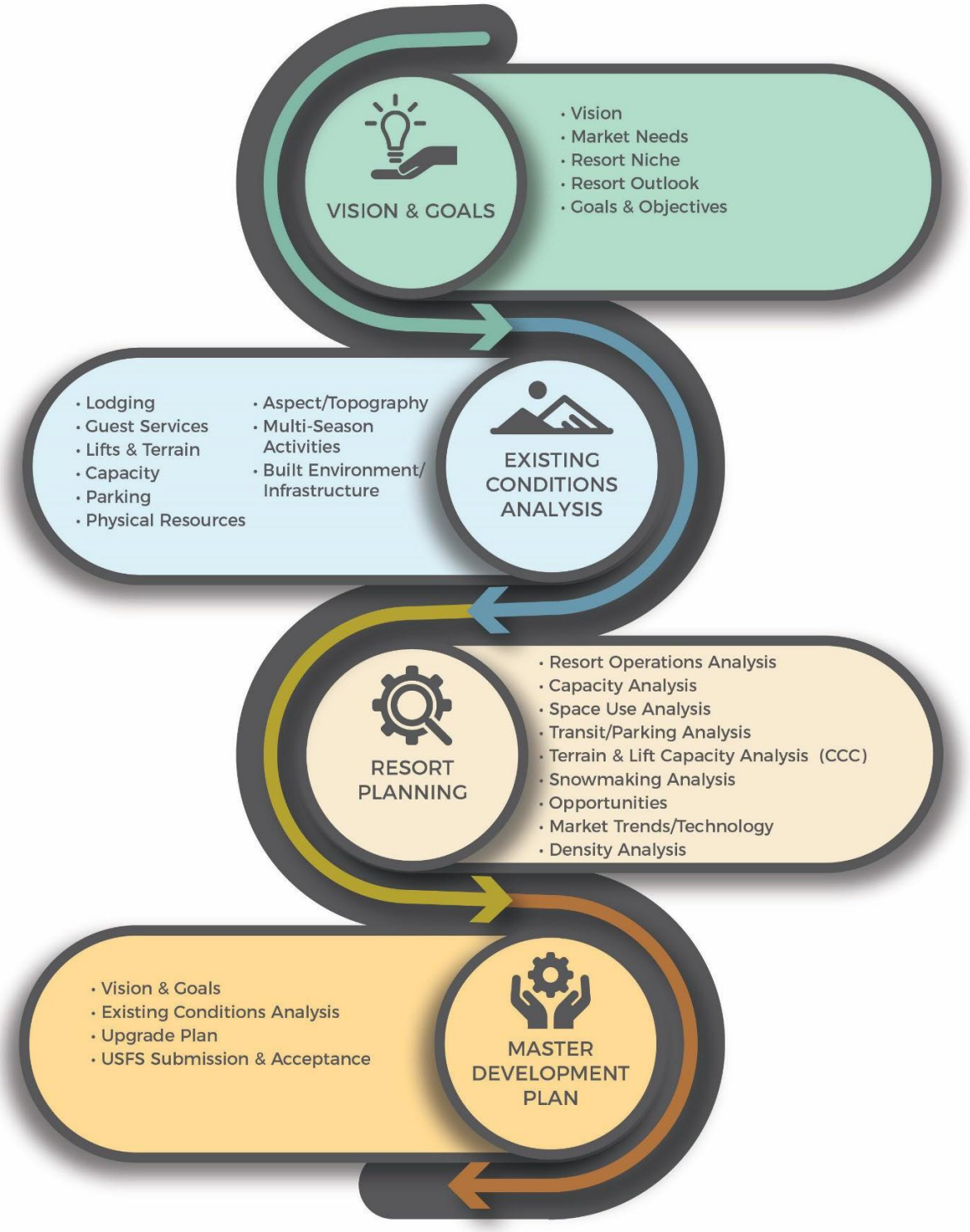
Brundage is working to seamlessly integrate projects on private and public lands. The current plan has parking, base area lodge and overnight accommodations on private lands to provide a portal to recreation on the PNF. Providing quality recreational experience on the PNF has been and will continue to be important to Brundage. Brundage has invested heavily in upgrading the Goose Lake Road and maintains the road in the winter to provide access to a diverse set of outdoor recreational users to the greater PNF beyond Brundage.

The projects on private land do not necessarily need to be accepted or approved by the Forest Service. Through the NEPA process, some projects on private land may be determined connected action, or an action that is closely related to a project on public land. In this instance, they may be included in environmental review. Previous NEPA was completed on projects located in the land exchange area which was public land but is now private land.

The MDP is divided into four chapters and includes four appendices:

- Chapter 1—Introduction: provides an overview of the plan, summary of Brundage history and character, statement of the plan vision and goals, and an overall summary of the Master Development Plan.
- Chapter 2—Existing Conditions: describes existing resort facilities, and evaluates the current balance of resort operations, facilities, and infrastructure. This includes lifts, comfortable carrying capacity (CCC), terrain, guest services, food service seating capacity, and parking.
- Chapter 3—Previously Approved, Not Yet Implemented Projects: inventories projects previously approved through a NEPA analysis, but yet to be constructed.
- Chapter 4—Upgrade Plan: describes the proposed upgrades and improvements to resort facilities, infrastructure, and operations.
- Appendices: Appendix A provides terrain and space use specifications for existing conditions and the upgrade plan. Appendix B is the approved Vegetation Management Plan projects. Appendix C provides a summary of general mountain planning design criteria that are incorporated into this MDP. Appendix D is Forest Service direction, including Recreation Opportunity Spectrum, Management Area direction, and more.

Illustration 1. The MDP Process



CONTENTS

PREFACE ..... A

CONTENTS i

LIST OF TABLES iii

LIST OF CHARTS iii

LIST OF FIGURES iv

CHAPTER 1. INTRODUCTION 1

A. Purpose of a Mountain Resort Master Development Plan 1

B. Resort Background 2

C. Plan Vision and Goals 4

D. Summary of the Upgrade Plan 6

CHAPTER 2. EXISTING CONDITIONS 8

A. Summary of the Existing Guest Experience 8

B. Existing Lift Network 9

C. Existing Terrain Network 12

D. Existing Capacity Analysis 16

E. Existing Guest Service Facilities, Food Service Seating & Space Use Analysis 20

F. Existing Parking Capacity and Resort Access 25

G. Existing Resort Operations 26

H. Resort Capacity Balance and Limiting Factors 28

I. Summer and Multi-Season Operations 29

CHAPTER 3. PREVIOUSLY APPROVED, NOT YETIMPLEMENTED PROJECTS 31

A. Lifts 31

B. Terrain 32

C. Guest Service Facilities 32

D. Multi-Season Recreation 34

E. Operational Infrastructure 34

F. Vegetation Management Projects 35

G. Summary of Project Approvals 35

CHAPTER 4. UPGRADE PLAN 38

A. Summary of the Upgrade Plan 38

B. Upgraded Lift Network 39

C. Upgraded Terrain Network 43

D. Upgraded Capacity Analysis 49

E. Upgraded Guest Service Facilities, Food Service Seating & Space Use Analysis 53

F. Upgraded Parking Capacity and Resort Access 57

G. Upgraded Resort Operations 58

H. Resort Capacity Balance and Limiting Factors 61

I. Upgraded Summer and Multi-Season Operations 62

J. Priority Projects 69

APPENDIX A. ADDITIONAL FIGURES 71

APPENDIX B. VEGETATION MANAGEMENT PLAN PROJECTS 88

APPENDIX C. MOUNTAIN PLANNING DESING CRITERIA 89

A. Destination Resorts 89

B. Base Area Design 90

C. Mountain Design 91

D. Capacity Analysis and Design 93
E. Balance of Facilities 94
F. Multi-Season Recreation Activities 94
G. Inventory of Physical Resources 95

APPENDIX D. FOREST SERVICE DIRECTION 100
A. 2011 Ski Area Recreational Opportunities Enhancement Act 101
B. 2003 PNF Land and Resource Management Plan 102
C. French Creek IRA 106
D. Recreation Opportunity Spectrum 108
E. Scenery Resources 109

FIGURES 112

LIST OF TABLES

TABLE 1. ANNUAL WINTER AND SUMMER VISITATION 3
TABLE 2. LIFT SPECIFICATIONS—EXISTING CONDITIONS 11
TABLE 3. TERRAIN DISTRIBUTION BY ABILITY LEVEL—EXISTING CONDITIONS 15
TABLE 4. COMFORTABLE CARRYING CAPACITY – EXISTING CONDITIONS 16
TABLE 5. DENSITY ANALYSIS—EXISTING CONDITIONS 18
TABLE 6. SPACE USE RECOMMENDATIONS—RESORT TOTAL—EXISTING CONDITIONS 23
TABLE 7. RESTAURANT SEATS—EXISTING CONDITIONS 24
TABLE 8. RECOMMENDED PARKING—EXISTING CONDITIONS 25
TABLE 9. PREVIOUSLY APPROVED, NOT YET IMPLEMENTED 36
TABLE 10. LIFT SPECIFICATIONS—UPGRADE PLAN 42
TABLE 11. TERRAIN DISTRIBUTION BY ABILITY LEVEL—UPGRADE PLAN 48
TABLE 12. DAILY LIFT CAPACITY—UPGRADE PLAN 50
TABLE 13. DENSITY ANALYSIS—UPGRADE PLAN 52
TABLE 14. SPACE USE RECOMMENDATIONS—RESORT TOTAL—UPGRADE PLAN 55
TABLE 15. RESTAURANT SEATS—UPGRADE PLAN 56
TABLE 16. RECOMMENDED PARKING—UPGRADE PLAN 57
TABLE 17. SUMMER ZONE AND SCORE RANGE 69
TABLE A-1. TERRAIN SPECIFICATIONS—EXISTING CONDITIONS 71
TABLE A-2. TERRAIN SPECIFICATIONS—UPGRADE PLAN 74
TABLE A-3. SPACE USE RECOMMENDATIONS—BASE AREA—EXISTING CONDITIONS 79
TABLE A-4. SPACE USE RECOMMENDATIONS—BEAR DEN—EXISTING CONDITIONS 80
TABLE A-5. SPACE USE RECOMMENDATIONS—BASE AREA—UPGRADE PLAN 81
TABLE A-6. SPACE USE RECOMMENDATIONS—LOWER BASE—UPGRADE PLAN 82
TABLE A-7. SPACE USE RECOMMENDATIONS—TEMPTATION LODGE—UPGRADE PLAN 83
TABLE A-8. SPACE USE RECOMMENDATIONS—ON-MOUNTAIN—UPGRADE PLAN 84
TABLE A-9. SUMMER ZONES—UPGRADE PLAN 85
TABLE C-1. TERRAIN GRADIENTS 91
TABLE C-2. SKIER ABILITY BREAKDOWN 91
TABLE C-3. SKIER DENSITY PER ACRE 92

LIST OF CHARTS

CHART 1. TERRAIN DISTRIBUTION BY ABILITY LEVEL—EXISTING CONDITIONS 15
CHART 2. RESORT CAPACITY— EXISTING CONDITIONS 28
CHART 3. TERRAIN DISTRIBUTION BY ABILITY LEVEL—UPGRADE PLAN 48
CHART 4. RESORT CAPACITY—UPGRADE PLAN 61

LIST OF FIGURES

FIGURE 1. Vicinity Map
FIGURE 2. Property Boundaries
FIGURE 3. Slope Analysis
FIGURE 4. Aspect Analysis
FIGURE 5. Existing Winter Conditions
FIGURE 6. Mountain Roads and Utilities Plan
FIGURE 7. Existing Summer Conditions
FIGURE 8. Winter Upgrade Plan
FIGURE 9. Snowmaking Upgrade Plan
FIGURE 10. Mountain Roads and Utilities Upgrade Plan
FIGURE 11. Summer Zones
FIGURE 12. Summer Opportunities

CHAPTER 1. INTRODUCTION

A. PURPOSE OF A MOUNTAIN RESORT MASTER DEVELOPMENT PLAN

Many mountain resorts across the country are partially or completely located on public lands. Each mountain resort on National Forest System (NFS) lands must obtain a United States Forest Service (Forest Service) Ski Area Term special use permit (SUP) to operate on public lands. Forest Service SUPs require the preparation of an MDP that identifies the existing and desired conditions for the resort, as well as proposed improvements on NFS lands within the SUP boundary.

This MDP fulfills this requirement and provides future direction for the development and improvement of Brundage—ensuring both a balance of facilities and a wide variety of amenities affording an exceptional recreational experience in a manner which is sustainable to the business, operations, and the surrounding environment and at the same time achieving Brundage's goal of providing quality outdoor recreational experiences to its family-centric visitors and visitors to the Payette National Forest (PNF). This MDP provides a thorough assessment of existing operations and facilities at Brundage and identifies a comprehensive plan for future improvements to the resort. Specific to Brundage, this MDP identifies existing conditions and deficiencies (such as lack of out-of-base lift capacity and terrain diversity), previously approved projects, and planned upgrades that would improve the experience and address the deficiencies identified.

This MDP was created using an iterative and collaborative process among the resort management team, Forest Service personnel who administer the SUP, and SE Group planners. Forest Service acceptance of this document as a planning tool for Brundage does not imply authorization to proceed with implementation of any of the projects that are identified herein. All projects identified within this MDP will require site-specific environmental analysis and approval per the National Environmental Policy Act of 1970 (NEPA) before they can be implemented. This MDP is intended to be a dynamic document, which may be amended periodically to reflect innovations in facilities and recreation.

Existing conditions at the resort are identified in Chapter 2. Previously approved, not yet implemented projects are noted in Chapter 3 while planned upgrades at Brundage are discussed in Chapter 4.

Appendix A contains the terrain and space use specifications tables developed for the resort. Appendix B contains the approved Vegetation Management Plan projects. Appendix C contains general mountain planning design criteria that serve as the foundation for this analysis and Appendix D includes Forest Service direction pertaining to Brundage.

B. RESORT BACKGROUND

1. LOCATION

Brundage is a four-season resort in the Northern Rocky Mountains approximately 100 miles north of Boise, Idaho and eight miles northwest of McCall. Brundage's SUP is situated on 3,330 acres of the PNF in the McCall Ranger District. In addition to the PNF lands within Brundage's SUP, Brundage operates on 388 acres of private lands at the base area (refer to figures 1 and 2). The resort is accessed via US Highway 95, State Highway 55, and Goose Lake Road. Charter operations provide air service to McCall and major commercial airlines provide daily flights into Boise Airport (a 100 mile, 2.5- hour drive to the mountain). Ground service to Brundage is available from Boise Airport, as well as from points throughout the greater McCall area.

Brundage is surrounded by the PNF which spans 2.3 million acres of rugged, timbered and remote land in west-central Idaho. The Forest is bordered by two of the deepest canyons in North America—the Salmon River Canyon on the north and the Hells Canyon of the Snake River on the west. These public lands attract visitors throughout the year, making the area around Brundage a destination in the summer and winter. In addition to the skiing, snowboarding, and mountain biking available at Brundage, outdoor recreationists pursue a variety of other recreation opportunities at nearby Payette Lakes, as well as other portions of the PNF. Hells Canyon, Seven Devils Mountains, Frank Church-River of No Return Wilderness, and several world-renowned whitewater rivers are other natural attractions proximate to Brundage that bring recreationists to central Idaho.

2. HISTORY AND RESORT SUMMARY

Brundage was originally established in 1959 by three Idaho businessmen: Warren Brown, Jack Simplot and Corey Engen. Downhill skiing opened to the public in 1961, with a mile-long double chairlift, a rope-tow, two partially developed ski runs, and a small day lodge. By the early 1970s, the demand for alpine skiing had outgrown the capacity of Brundage's one chairlift. A second double chairlift was installed in 1976.

In concert with market demand and the growing expectations of the recreating public, Brundage management has steadily improved the facility over the years. During the early 1990s, two triple chairlifts and one surface lift were added to the lift network. In the summer of 1997, Brundage upgraded its out-of-base uphill capacity by installing the Blue Bird Express chairlift, a high-speed detachable quad.

To diversify the recreational experience, and to evaluate the downhill ski terrain adjacent to Brundage's lift-served terrain at the time, Brundage initiated a snowcat skiing program in 1991. In 1994, the resort secured Forest Service approval for the expansion of the snowcat skiing program to the Granite Mountain/Slab Butte area. Today, the snowcat skiing program serves over 18,000 acres of challenging, off-piste terrain. This snowcat skiing program does not operate under Brundage's Ski Area Term SUP and is instead authorized through a separate Forest Service Outfitter and Guide SUP.

Warren Brown and Jack Simplot maintained majority interests in Brundage from its inception until 1980 when Judd and Diane DeBoer purchased Brown's shares and took ownership of the resort. The DeBoer family took sole ownership of Brundage in 2006, and the resort continued to operate under their leadership until November 2020 when Brundage Mountain Holdings LLC, a newly formed company, purchased the majority interest. Since then, Brundage Mountain Holdings LLC, led by President Bob Looper, has operated the resort.

Brundage is a partner to Adams County and the PNF and works to ensure a quality recreational experience available to visitors.

Brundage is well-known for its exceptional snowfall and for its welcoming environment. The resort is known as having the "Best Snow in Idaho," with over 320 base area inches of snow annually. Winter at Brundage provides a great mix of bluebird and powder days on a regular basis throughout the season. In November 2020, Brundage was voted the second-best ski resort in North America – and the best in the United States – in a USA Today reader's choice contest.

In addition to its wintertime operations, the resort has offered summer and shoulder season recreational activities, including hiking and lift-served mountain biking. With diverse recreational offerings, Brundage has evolved into a year-round resort that is attractive to a wider spectrum of guests and remains in a strong position to increase year-round visitation. Refer to Table 1 for the annual visitation at Brundage.

Table 1. Annual Winter and Summer Visitation

Season	Winter Visits	Winter Season Length (days)	Summer Visits	Summer Season Length (days)
2020/21	175,934	135	9,051	65
2019/20*	143,050	98	6,287	65
2018/19	151,193	134	7,066	65
2017/18	137,077	117	5,385	65
2016/17	132,627	121	6,677	52
2015/16	146,600	126	7,197	52
2014/15	116,516	100	8,919	52
2013/14	125,000	108	4,837	39
2012/13	130,434	114	5,649	39
2011/12	111,143	104	5,818	39
2010/11	139,956	138	4,567	39
AVERAGE	**137,230**	**118**	**6,496**	**52**

Note: 2019/20 season closed early due to the COVID pandemic.

C. PLAN VISION AND GOALS

Brundage is known for its family-friend, low-key mountain atmosphere. As Brundage looks to the future, the vision for the mountain is anchored in its Idaho history and the resort's skiing roots. Brundage wishes to maintain a strong local vibe and continue providing family-friendly skiing experience.

The team at Brundage recently updated their vision and guiding principles for the mountain that embodies these qualities:

Vision:

- We are mountain first, mountain always.
- We are nothing if not for the mountain. The mountain is everything. Before we make any decision that affects this beloved place, we must first consider its impact. This is more than a place. It's an idea worthy of dedicating our lives to respecting its spirit and protecting its integrity as we endeavor to create a truly exceptional environment to be enjoyed for generations to come.

Guiding Principles:

- NATURE FORWARD by true devotion to the natural environment.
- FAMILY FORWARD by being inclusive, providing high value, being down to earth, and being locally owned.
- COMMUNITY FORWARD by supporting our local nonprofits, Brundage team, and local community.
- EMPLOYEE FORWARD by engaging employees to be part of the future of Brundage and providing support for their overall employee experience and work-life balance.
- PROVIDING A UNIQUE OPPORTUNITY to experience a place where nature, not man, is the true inspiration.
- CREATING TREASURED MOMENTS for guests that lead to lifelong relationships.

Brundage is in a unique situation as a mountain resort. Already one of Idaho's premier ski mountains, skiing will continue to provide a key amenity to Brundage guests. Additionally, Brundage benefits greatly from its proximity to the picturesque towns of New Meadows and McCall. Nearby Payette Lake and a multitude of other recreational opportunities throughout the PNF contribute to the broad appeal of Brundage and its four-season mountain resort characteristics.

Brundage is focused on providing quality outdoor recreational experiences for its guests. These guests are family-centric and largely from Idaho that is experiencing record growth in population. Developing programing to support positive family experience in the outdoor setting is a goal Brundage strives to achieve with future base area planning and on-mountain experiences year-round. With an expanded terrain network, Brundage plans to maintain the low density, family-centric resort it is known for as Brundage's visitation grows, as well provide a good skills progression for its beginner skiers and riders.

Brundage is well positioned to continue to play a leading role in providing winter and year-round recreation on the PNF, and the resort plans to continue to act as an integral partner with both Adams County and the PNF. Nevertheless, there are several maintenance and capacity issues that negatively impact the winter guest experience, and climate change is expected to pose new challenges to the maintenance of consistent winter operations. Thus, Brundage's vision is to enhance its resilience and sustainability by both expanding and improving guest access to skiing on the PNF and by expanding year-round offerings in the base area to include other adventure-based experiences that support guest

connection with the PNF. Brundage has identified a variety of goals that contribute to this vision. These goals are not mutually exclusive and may contain similar themes; however, Brundage feels that each individual goal is important to achieving its overall vision. The goals of the MDP are as follows:

- Keeping the familiar low-density, family-friendly atmosphere.
- Development of the guest arrival process to be easy, efficient, and conducive to accessing the resort terrain network.
- Improvement, diversification, and expansion of the lift and terrain network to bring in line with future growth and guest expectations.
- Increase in the size and quality of day skier and overnight guest service spaces.
- Development of learning progression opportunities to position Brundage as a beginner- and family-friendly resort.
- Expansion of non-skiing, year-round recreation opportunities to make Brundage a successful, four-season resort.

To meet the goals identified in this MDP, Brundage has identified a variety of specific objectives. These objectives are concrete means of achieving the goals listed previously and connect directly to the projects proposed in this MDP. These objectives are as follows:

- Increase base area guest service space, including guest lodging, and associated parking.
- Increase out-of-base chairlift capacity.
- Modernize the existing lift loading and riding experience for guests.
- Develop lift-served terrain on Brundage's eastern terrain to offer more novice terrain that is not available due to topography within Brundage's existing SUP to support skills progression.
- Develop non-traditional terrain across Brundage's current and planned SUP boundary (e.g., terrain parks, gladed terrain, etc.).
- Address noted circulation and terrain quality challenges within the existing ski trails.
- Increase quantity of beginner and novice terrain, lifts, and guest service space for families with children as well as new skiers.
- Expand the snowmaking system on current ski trails to improve snow quality throughout the winter season and provide a more consistent opening timeframe.
- Add four-season recreation activities such as mountain biking, hiking, on-site events, access to other activities in and around National Forest lands.
- Bring the maintenance, administrative, and ski patrol facility size in line with other planned expansions.

In the next 10 years, Brundage hopes to focus on building upon the resort's established skiing legacy by introducing new resort accommodations, a revitalized base village and an array of new recreation and mountain amenities. This MDP describes the existing conditions and planned improvements to Brundage's outdoor recreation infrastructure over the next decade that will achieve this vision.

D. SUMMARY OF THE UPGRADE PLAN

The Upgrade Plan, detailed in Chapter 4 and illustrated in Figure 8, focuses on upgrading and replacing existing aging facilities at the base area and expanding lift-served skiable terrain. Potential near-term upgrades include a new day lodge at the base area, a new resort entrance, and terrain expansion. The expansion will achieve the goal of upgrading the existing resort while keeping the familiar low-density, family-friendly atmosphere and offering more variety for lower-level ability skiers.

Lifts

- Eastside Lift installation
- Sargent's Lift installation
- Sargent's Backside Lift (Lift G) installation
- Way Back Lift installation
- Hidden Valley Lift installation
- Temptation Knob Lift installation (private land)
- Access Lift – South installation (private land)
- Three Base Area Conveyor installation (private land)
- Centennial Lift upgrade

Terrain

- Eastside terrain pod development
- Sargent's and Sargent's Backside (Lift G) terrain pod development
- Way Back pod development
- Hidden Valley pod development
- Temptation and Access-South pod development (private land)
- Various connector and circulation runs
- Beginner terrain improvements
- Expansion of gladed terrain

Guest Services and Other Facilities

- Bear's Den expansion
- Four on-mountain facilities – top of Lakeview Lift, top of Bluebird Lift (Summit Hut), in Eastside pod, and top of planned Sargent's Lift
- Temporary warming hut in South Sargent's managed Recreation Area
- Three new/improved day lodges – adjacent Bluebird Express Lift, on Temptation Knob, adjacent bottom terminal Easy Street Lift (private land)
- Upgraded Kids Center complex and new Ski Patrol building (private land)
- New and improved base area parking (private land)
- Relocation of existing maintenance facility (private land)

Other

- Approximately 115 acres of additional snowmaking
- Approximately 1 mile of mountain roads in Hidden Valley pod and ridgeline between Bluebird Lift and Sargent's
- North End water tank installations
- Snowmobile trail re-route
- Various infrastructure and utility upgrades to provide power/utilities to planned projects

Multi-Season Recreation

- Expansion of multi-use trail network and increase of multi-season programming, including snowshoe, Nordic, and hiking and biking trails
- Development of un-guided cat and self-propelled skiing and lift served summer and winter hiking operations for Lower Lakeview, South Sargent's and North Sargent's managed Recreation Areas until the new lift installations are inplace

CHAPTER 2.
EXISTING CONDITIONS

This chapter contains discussion and analysis of existing facilities at Brundage. Completion of a thorough resort inventory is the first step in the master planning process and involves the collection of data pertaining to the resort's existing facilities. This inventory includes lifts, trails, the snowmaking system, base area structures, guest services, other resort functions and activities, parking, operations, and mountainroads This inventory of facilities creates a baseline of the resort, which is then used to compare to comparable resort (as discussed in appendix C). A comparison of Brundage's existing conditions can help clarify the ways in which the resort has the opportunity to reach its strategic vision and goals.

The overall balance of the existing resort is evaluated by calculating the capacities of various facility components and then comparing these capacities to the resort's current CCC. This examination of capacities helps to identify Brundage's strengths, weaknesses, opportunities, and constraints as a resort. The next step is the identification of improvements that would bring the existing facilities into better balance with other resort capacities. This, in turn, will assist the resort in meeting guest expectations.

Accomplishing these objectives will result in a well-balanced resort that provides an adequate array of services and experiences capable of satisfying guests' expectations for a quality recreation experience.The examination of existing facilities in this chapter correlates with figures 5 – 7.

A. SUMMARY OF THE EXISTING GUEST EXPERIENCE

The guest experience at Brundage covers a spectrum of year-round recreational activities, from alpine skiing in the winter to hiking and lift-served mountain biking in the summer.

The winter guest experience at Brundage is characterized by what is commonly referred to as the best snow in Idaho; the mountain receives more than 320 base area inches of snowfall annually. Other wintertime recreational offerings include guided snowcat tours on approximately 18,000 acres of backcountry terrain, guided snowmobile excursions and snowmobile rentals that are authorized under a separate Outfitter and Guide SUP.

During the summertime, Brundage is currently open Wednesday through Sunday each week with a goal of operating seven days a week, with outdoor recreational offerings appropriate for the whole family. Consistent with the growing market for summertime recreation at mountain resorts, Brundage's system of lift-served downhill and cross-country mountain biking is expanding. Guests also have access to a variety of scenic hiking trails of all ability levels, scenic chairlift rides, disc golf and lawn games.

In addition to summer and winter outdoor recreation opportunities, Brundage provides a variety of amenities, services and events. Winter food and beverage is available at four locations: Smoky's Bar and Grill, Main Street Market and Espresso, Upper Lot and Bear's Den. Summer food and beverage is offered at Smoky's Bar and Grill. Various wintertime events take place every year: Light Up the Night, Visit from Santa, Beer and Gear, Diva Day, Crazy Daze and Pond Skimming, as well as the State Championship Gelande Quaff. Lastly, Brundage hosts weddings in the summer, with both indoor and outdoor venues available. Wedding guests may take a scenic chairlift ride to the summit for the ceremony, with the following reception taking place on the base area lawn or inside of base area facilities.

B. EXISTING LIFT NETWORK

Brundage currently operates five aerial lifts: one detachable quad and four fixed-grip triples as well as one surface lift for a CCC of 3,170 people-per-hour (pph). In general, the lift network is well-maintained and functions effectively for the associated terrain. During average operating days, lift wait times remain generally comfortable with less than five-minute lines in most cases. On current peak day conditions and sometimes during weekday mornings, lift lines are modestly crowded with wait times of approximately 10 to 15 minutes or more. Most guests choose to ride the Bluebird Lift over the older Centennial Lift (discussed below), resulting in lift lines at the Bluebird Lift.

Bluebird Lift is the primary base-to-summit lift for guests staging from the Main Lodge and Main parking lot. Constructed in 1997 with an hourly capacity of 1,800 pph, this detachable quad is the most utilized lift on the mountain and is in good working condition. Bluebird is the primary lift of the resort – it provides access to much of the terrain at the resort and is skied extensively by most skiers at the resort on any given day.

Centennial Lift is the other base-to-summit lift at Brundage. Centennial is a long fixed-grip triple constructed in 1990 with an hourly capacity of 1,300 pph. Guests typically use it staging from the Centennial parking lot or on days when Bluebird has long lift lines. Due to its length, ride times on Centennial Lift are more than twice that of Bluebird Lift; as a result, Centennial is underutilized relative to Bluebird, which services similar terrain. Centennial is the oldest lift at the resort, has a long ride time, a low hourly capacity, and should be upgraded. In addition, because both the Centennial and Bluebird lifts travel from the base of Brundage to the summit, guests often experience changes in snow condition and quality as they descend during the early and late part of the ski season. Because snowfall for the upper portion of Brundage is more reliable and sustainable, snow quality is often better there and declines as skiers descend to the base area.

Lakeview Lift is the southern- and eastern-most lift at Brundage. Constructed in 2007, it is the newest lift at Brundage and has an hourly capacity of 1,800 pph. Lakeview anchors a small pod of mostly intermediate terrain on the southern boundary of the resort. Skiers and riders must ride Bluebird or Centennial lifts to access the Lakeview pod. Currently, the transition from the slope into the Lakeview Lift bottom terminal maze and loading zone is short. Skiers and riders must quickly slow down as they transition from the steeper slope to the maze. On busy days, this can result in a degraded skiing experience that results in lift lines extending onto the steeper slope. Potential grading to reconfigure the maze area or improve the transition from slope to loading zone would improve the loading experience at the Lakeview Lift.

Bear Chair services beginner and intermediate terrain, with the bottom terminal located adjacent to the bottom terminal of the Centennial Lift. Bear Chair is a fixed-grip triple with an 1,800 pph hourly capacity. In addition to servicing beginner and intermediate terrain, Bear Chair provides a connection back to the Main Lodge from the Centennial Lift and Centennial parking lot.

Easy Street Lift and Easy Rider conveyor are located northeast of the Main parking lot. The fixed-grip triple lift and conveyor service the beginner and teaching terrain at Brundage. Both are in good operating condition. These lifts currently provide a learning progression for first-time skiers and riders; however, based on the current placement of the lift and conveyor, there are circulation issues with beginner terrain due to limited terrain and bottlenecks in these pods.This often results in busy sections of beginner

terrain, which is not an ideal beginner experience. In addition, because there is only one lift and one conveyor for first time/beginner skiers and rides, Easy Street and Easy Rider are often busy on peak days.

Except for the Lakeview Lift, the bottom terminals for all existing lifts are on private land owned by Brundage, received as part of the 2006 Brundage Land Exchange. Easy Street Lift, and the Upper and Lower Conveyors are located exclusively on private land, while Bear Chair, Bluebird Express, and Centennial lifts pass between private and FS land.

Overall, Brundage's lift network services its terrain relatively efficiently but there are identified issues with lift ride times and experience, out-of-base capacity, and the availability of beginner lifts. The resolution of these issues is aligned with Brundage's goals and objectives of increasing out-of-base capacity, modernizing the existing lift loading and riding experience for guests, and increasing the quantity of beginner terrain, lifts, and guest service space for families with children as well as new skiers.

Table 2. Lift Specifications—Existing Conditions

Lift Name, Lift Type	Top Elevation (ft.)	Bottom Elevation (ft.)	Vertical Rise (ft.)	Slope Length (ft.)	Avg. Grade (%)	Actual Capacity (pph)	Rope Speed (fpm)	Carrier Spacing (ft.)	Lift Maker/ Year Installed
Bluebird Express / DC4	7,605	6,055	1,550	5,693	29%	1,800	1,000	133	Garaventa CTEC (1997)
Easy Street / C3	6,057	5,963	94	697	14%	1,200	400	60	Garaventa CTEC (1994)
Bear Chair / C3	6,505	5,882	622	2,559	25%	1,800	500	50	Doppelmayr CTEC (2007)
Centennial / C3	7,520	5,879	1,641	6,161	28%	1,300	500	69	CTEC (1990)
Lakeview Lift / C3	7,381	6,564	816	3,371	25%	1,800	500	50	Doppelmayr CTEC (2007)
Easy Rider / Conveyor	6,040	6,032	8	112	7%	600	120	12	Sun Kid (2017)

Source: SE Group
Notes:
C3 = fixed-grip triple chairlift / *DC4* = detachable four-passenger chairlift

C. EXISTING TERRAIN NETWORK

Evaluation of the existing terrain network requires equal consideration of many factors, chief among them terrain variety and the distribution of terrain by ability level. Assessment of either of these factors on their own will not provide a complete picture of the current state of terrain at the resort.

Brundage's existing terrain network encompasses approximately 265 acres of traditional, cleared ski trails, ski-ways and gladed ski trails. The ski trail network accommodates the entire range of skier ability levels from beginner to expert. Under current peak day conditions, ski runs remain generally congestion-free as noted in Brundage's goals and objectives with exceptions on *Easy Street* and the *Alpine* funnel. For details of the existing conditions terrain specifications, refer to Appendix A.

1. TERRAIN VARIETY

This analysis accounts for three separate types of terrain at Brundage, totaling approximately 1,920 skiable acres:

- Lift-accessed, developed runs for beginner, intermediate, and expert skiers and riders—totaling about 265 acres.
- Glades, both developed (thinned or maintained) and undeveloped, and natural terrain within the ski area boundary that are routinely skied—adding another 980 acres.
- Skiable, but undeveloped terrain that is less routinely skied within Brundage's SUP— adding another 675 acres. Note that this acreage includes the approximately 420 acres of unpatrolled terrain in the Sargent's Mountain area.

Brundage's terrain network consists of a developed ski trail network of named, defined, lift-served, and maintained (groomed, or groomable) ski trails. These trails represent the baseline of the terrain at the resort and are listed in the Terrain Specification Table of Appendix A. These trails are where most guests ski and are usually the only places to ski during the early season, periods of poor or undesirable snow conditions, avalanche closures, and certain weather conditions.

There is also an undeveloped portion of Brundage's terrain network that provides a natural and unstructured style of terrain that is typically used by advanced to expert ability level skiers. This terrain is located off Sargent's Peak and southeast of the Lakeview Pod.

Brundage is known for the glades and open bowl skiing that comprise its undeveloped terrain. This terrain variety is considered a key part of its overall guest experience, as it provides diverse ski routes for guests to discover at their own pace. The current gladed terrain is difficult to access and generally only usable by advanced and expert skiers. Current tree cover within a variety of these glades is very dense, which can make the terrain difficult to ski. Therefore, while there is a high quantity of undeveloped terrain adjacent to the developed terrain, it is only accessible by a minority of Brundage's guests. This fact, combined with the overabundance of intermediate terrain discussed below, results in a deficiency of terrain variety for guests.

Importance of Terrain Variety

Terrain variety is considered the key factor in evaluating the quality of the actual skiing and riding guest experience (as opposed to total acreage, vertical, grooming, or any other factor).

Terrain variety is consistently ranked as one of the most important criteria in skiers' choice of a ski destination, typically behind only snow quality, and ahead of such other considerations as lifts, value, accessibility, resort service, and others. This is a relatively recent industry trend, representing an evolution in skier/rider tastes and expectations. The implication of the importance of terrain variety is that 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, gladed trees, open parks, in-bounds "backcountry-style" (i.e., hike-to) terrain, and terrain parks and pipes. At resorts across the nation, there is a growing trend favoring these more natural, unstructured types of terrain, since the availability of this style of terrain has become one of the more important factors in terms of a resort's ability to retain guests, both for longer durations of visitation and for repeat business.

To provide the highest quality guest experience, resorts should offer groomed runs of all ability levels and some level of each of the undeveloped terrain types. Undeveloped terrain is primarily used by advanced and expert level skiers/riders during desirable conditions (e.g., periods of fresh snow, spring corn, etc.). Even though some of these types of terrain only provide skiing/riding opportunities when conditions warrant, they represent the most intriguing terrain, and typically are the areas that skiers/riders strive to access. Terrain variety is increasingly becoming a crucial factor in guests' decisions on where to visit.

2. TERRAIN DISTRIBUTION BY ABILITY LEVEL

This terrain distribution analysis considers 265 acres within the developed terrain network at Brundage. As shown in Table 3 and Chart 1, the terrain breakdown for Brundage's market segment is 5% for beginner, 15% for novice, 25% for low intermediate, 35% intermediate, 15% advanced and 5% for expert. Because Brundage is the main resort in the region, the resort seeks to serve skiers of all levels equally, rather than specializing towards a particular ability level niche, as resorts with many nearby competitors may seek to do. For example, 25% of the terrain at Brundage should be low intermediate terrain because, on average, it is expected that 25% of the skiers at Brundage would be low intermediate level.

Brundage's existing terrain distribution is unable to match the market demands for Brundage: the current terrain distribution at Brundage shows shortages of beginner, novice, advanced and expert terrain compared to the skier and rider market, and there is a surplus of intermediate terrain. The shortage of expert terrain is partially remedied by the undeveloped terrain on Sargent's and off the Lakeview Pod, which is not included in the standard terrain analysis. However, advanced skiers, who may be comfortable on intermediate and advanced *traditional* terrain only, may be underserved because they may not use those areas. In addition, novice skiers are underserved by Brundage's current terrain network andhave limited on-mountain circulation options. Hence, this analysis demonstrates the need for additional beginner, novice, and advanced terrain. The beginner and novice terrain constitutes a critical teaching environment for first time skiers and riders and the advanced terrain provides a learning progression for upper intermediate skiers. Additional undeveloped terrain, while not captured in this analysis, would also help address upper intermediate/advanced skier expectations.

Brundage has also identified certain locations within existing trails that result in skier circulation issues, contain steep pitches, or are difficult to access. This includes the bottom of runs *Hotshot* and *Kickback* where they flow into the Lakeview Lift, travelways between the Centennial Lift to the Base Area, the area in between the top terminal of Bluebird Express Lift, off of *Temptation,* and from *Temptation* to *45th Parallel*.

As a result of the terrain variety, distribution, and circulation analyses, Brundage identified the following objectives for their developed/undeveloped terrain network: develop lift-served terrain on Brundage's eastern terrain to offer more novice and intermediate terrain that is not available due to topography within Brundage's existing SUP; develop non-traditional terrain across Brundage's current and planned SUP boundary (e.g., terrain parks, gladed terrain, etc.); increase quantity of beginner terrain, lifts, and guest service space for families with children as well as new skiers; and address noted circulation and terrain quality challenges within the existing ski trails.

Ability Level

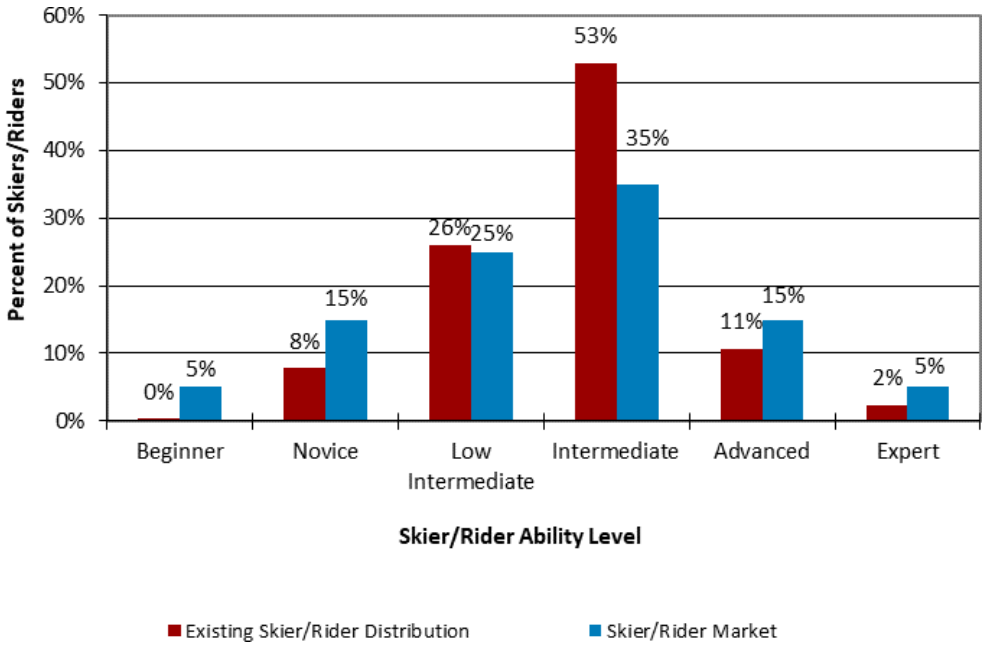
It should be noted there is a significant difference between the ski run ability level ranking approach used in this document and that used by all U.S. ski areas on their trail map and on-mountain trail signs. The established approach used at all resorts in the country is to make the ranking be relative to that resort – i.e., the easiest runs at that resort are signed as green circles and the most difficult are signed as black diamonds, the intermediate runs being blue squares. SE Group uses a different approach in this document (and in all other Master Plan documents produced by SE Group). This approach is aimed at comparing the terrain available at a given resort to the overall skier market, to determine if there are opportunities to appeal to a broader range of skiers. SE Group also uses six categories of ability level, as opposed to the standard three used by mountain resorts. Using various criteria, including maximum sustained gradient, run width, sightlines, and others, SE Group makes an internal determination of which ability level each run falls into. From that data, calculations are then done to determine terrain capacity and ability level distribution by capacity. These calculations are accomplished by multiplying terrain acreage by an assigned density. These numbers are then compared to the skier market, to determine surpluses and deficiencies of terrain by ability level, as compared to the overall skier market.

Table 3. Terrain Distribution by Ability Level—Existing Conditions

Skier/Rider Ability Level	Trail Area (acres)	Skier/Rider Capacity (guests)	Skier/Rider Distribution (%)	Skier/Rider Market (%)
Beginner	0.3	9	0%	5%
Novice	11.6	209	8%	15%
Low Intermediate	49.5	694	26%	25%
Intermediate	141.8	1,418	53%	35%
Advanced	41.0	287	11%	15%
Expert	20.9	63	2%	5%
TOTAL	**265.1**	**2,680**	**100%**	**100%**

Source: SE Group

Chart 1. Terrain Distribution by Ability Level—Existing Conditions



D. EXISTING CAPACITY ANALYSIS

1. COMFORTABLE CARRYING CAPACITY

A detailed calculation of Brundage's existing Comfortable Carrying Capacity (CCC) was completed for this MDP, as shown in Table 4. In the existing condition, Brundage's CCC is calculated at 3,170 guests.

What is Comfortable Carrying Capacity

In ski area planning, a "comfortable carrying capacity" (CCC) is established, which represents a daily guest population to which all ski resort functions are balanced. CCC is a planning parameter that is used to establish the recommended size of the primary facilities of a ski resort: ski lifts, ski terrain, guest services, restaurant seats, building space, utilities, parking, etc.

Accordingly, the design capacity does not normally indicate a maximum level of visitation or a "cap" on visitation, but rather the number of visitors that can be "comfortably" accommodated on a daily basis. It is understood that peak day visitation will always exceed the resort's CCC. Peak days, or days when the visitation level exceeds the CCC, typically occur approximately 10 days per year, with the highest peak day visitation at most resorts being at around 25% higher than the design capacity.

The accurate estimation of the CCC of a mountain is a complex issue and is the single-most important planning criterion for the resort. Related skier service facilities, including base lodge seating, mountain restaurant requirements, restrooms, parking, and other guest services are planned around the proper identification of the mountain's true capacity.

CCC is derived from the resort's supply of uphill lift capacity and demand for vertical feet of skiing, and factors in the total amount of time spent waiting in the lift line, on the lift itself, and in the descent.

Table 4. Comfortable Carrying Capacity—Existing Conditions

Lift Name, Lift Type	Slope Length (ft.)	Vertical Rise (ft.)	Actual Capacity (pph)	Operating Hours (hrs.)	Up-Mountain Access Role (%)	Misloading/ Lift Stoppages (%)	Adjusted Hourly (pph)	VTF/ Day (000)	Vertical Demand (ft./day)	CCC (guests)
Bluebird Express/DC4	5,693	1,550	1,800	7.00	0	5	1,710	18,549	20,780	890
Easy Street/C3	697	94	1,200	7.00	0	15	1,020	671	3,247	210
Bear Chair/C3	2,559	622	1,800	7.00	0	10	1,620	7,057	8,534	830
Centennial/C3	6,161	1,641	1,300	6.50	30	10	780	8,319	14,366	580
Lakeview Lift/C3	3,371	816	1,800	5.50	0	10	1,620	7,275	12,257	590
Easy Rider/Conveyor	112	8	600	7.00	0	5	570	32	434	70
TOTAL	**18,593**		**8,500**				**7,320**	**41,903**		**3,170**

Source: SE Group
Notes:
C3 = fixed-grip triple chairlift / *DC4* = detachable four-passenger chairlift

2. DENSITY ANALYSIS

The Density Analysis below compares the uphill and downhill capacities at Brundage. At any one time, skiers and riders are dispersed throughout the resort, using guest facilities and milling areas, waiting in lift mazes, riding lifts, or descending on ski terrain. For the trail density analysis, 25% of each lift's CCC is presumed to be "inactive" (i.e., using guest service facilities or milling areas and otherwise not actively skiing or riding lifts).

Trail density is calculated for each lift pod by dividing the number of guests on the trails by the amount of trail area that is available within each lift pod. The trail density analysis compares the calculated trail density for each lift pod to the desired trail density for that pod (i.e., the product of the ideal trail density for each ability level and the lift's trail distribution by ability level).

Table 5 shows that the average trail density at Brundage is 7 skiers per acre, which is lower than the calculated target density of 12 skiers per acre. It is not uncommon for ski areas to have lower trail densities than the target density, as generally lower trail densities reflect a higher quality recreation experience and less instances of overcrowding on trails. Because the target density is 12 skiers per acre, which is significantly higher than the calculated target trail density, this situation indicates underutilization of the existing terrain. Underutilization of terrain means that there could comfortably be more skiers/riders on the terrain at any one time than there are at current visitation levels.This situation indicates that the amount of effort required to properly maintain the quantity of terrain could be disproportionately high when compared to the overall number of skiers/riders on the mountain. Although the target density is lower, the first goal of this MDP is keeping the familiar low-density, family-friendly atmosphere.

Therefore, it is beneficial for a ski area to be below the target of 12 skiers per acre, but densities that are too low may indicate that there is a surplus of trail acreage. The existing conditions depict an overall positive recreational experience.

Balancing Uphill and Downhill Capacities

An important aspect of resort design is the balancing of uphill lift capacity with downhill trail capacity. Trail densities are derived by comparing the uphill, at-one-time capacity of each individual lift pod (CCC) with the trail acreage associated with that lift pod. The trail density analysis considers only the acreage associated with the developed trail network. A high trail density can restrict skiing space, degrade snow conditions, and detract from the recreational experience. A low trail density can indicate under-utilization of the existing terrain and inefficient operations.

Table 5. Density Analysis—Existing Conditions

Lift Name, Lift Type	CCC	Guest Dispersement				Density Analysis				Density Index (%)
		Support Facility/ Milling (guests)	Lift Lines (guests)	On Lift (guests)	On Terrain (guests)	Terrain Area (acres)	Terrain Density (guests/acre)	Target Trail Density (guests/acre)	Diff. (+/-)	
Bluebird Express/DC4	890	223	143	162	362	135.0	3	9	-6	33%
Easy Street/C3	210	63	51	30	66	3.7	18	18	0	100%
Bear Chair/C3	830	208	81	138	403	34.6	12	14	-2	86%
Centennial/C3	580	145	65	160	210	65.9	3	10	-7	30%
Lakeview Lift/C3	590	148	135	182	125	25.6	5	10	-5	50%
Easy Rider/Conveyor	70	25	29	9	7	0.3	23	30	-7	77%
	3,170	**812**	**504**	**681**	**1,173**	**265.1**	**7**	**12**	**-5**	**61%**

a) Lift Network Efficiency

Within the context of ski area design, the term “Lift Network Efficiency” refers to the amount of effort and cost required to operate and maintain the lift network, as compared to the number of guests served by the lift network. The energy and costs related to the lifts include, but are not limited to, the following: power use, operational labor, maintenance costs and labor, increased indirect administrative costs, and various direct and indirect costs associated with higher staff levels to perform these tasks. From this standpoint, the most efficient scenario is to have the fewest number of lifts possible that can comfortably and effectively serve the capacity and circulation requirements of the resort.

One way to analyze Lift Network Efficiency is to calculate the average CCC per lift at a given resort. While this calculation does not relate to the overall capacity of the resort, it can indicate if (1) the resort is not getting maximum utilization out of its lifts, or (2) if there are more lifts than necessary for the capacity levels of the resort. When calculating this average, conveyors used for teaching, as well as lifts that are used for access only, are not included. Optimally, and in general, the average CCC per lift would likely be close to 1,000 guests. Industry-wide, the average CCC per lift is approximately 650. The average CCC per lift at Brundage is 620, which reflects a very slightly below-average lift network efficiency.

b) Terrain Network Efficiency

A parallel of the terrain density analysis is an analysis that provides an indication of the efficiency of the terrain network as compared to the lift network serving it. In this usage, the term “Terrain Network Efficiency” refers to the amount of effort required to properly maintain the terrain (e.g., costs related to snowmaking, grooming, energy, ski patrol, summer trail maintenance, administration, etc.).

From this standpoint, the most efficient scenario is to have a quantity of terrain that closely meets the target density requirements. This can be easily achieved by reviewing the density analysis in Table 5. A terrain density index of 100% would imply that the resort had exactly the right amount of terrain to match target densities. Brundage has an index of 61%, meaning that densities are 61% of target densities. It is important to note that only the developed terrain network is used in these calculations, because it is largely the developed terrain that incurs core operational and maintenance costs

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Lift and Terrain Network Efficiency

Overall resort efficiency is becoming an increasingly important factor in the industry. This relates not only to energy efficiency and operational efficiency, but also to efficiency of the design and layout of the resort. The idea behind ski area 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 trail densities, circulation routes, and service to the full spectrum of skier ability levels and types.

E. EXISTING GUEST SERVICES FACILITIES, FOOD SERVICE SEATING & SPACE USE ANALYSIS

1. GUEST SERVICES

Guest service facilities constitute an essential component of the recreation experience at ski areas. These areas provide visitors with shelter from the elements, bathrooms, food and beverages; the capacity of these facilities is important in understanding whether the needs of visitors are being met.

Brundage's existing guest services are primarily offered in the four-story Main Lodge. The Kid's Center, adjacent to the Main Lodge, also houses ski school operations, ski patrol and some administrative offices. Bear's Den, located at the top of the Bear Chair offers warm food service, indoor seating and restrooms. Together these facilities provide guests with the services they need. Brundage's guest services facilities currently provide these services in a central locale. This can be convenient for guests but can also cause significant congestion during high demand periods. Most of the facilities within the Main Lodge are undersized and result in frequent backups, lines forming, and an overall crowded feeling within the building.

On-mountain facilities are currently limited to Bear's Den, which is a small log cabin that offers food and drink services. On-mountain facilities are an important offering for guests because they provide a more remote feeling and are typically easier to transition to and from the slopes while still being within theresort boundary. Given the increase in use in the Bear's Den in recent years, the building is frequently crowded. Lines typically form during lunch times and throughout the day on peak days. Brundage has identified the need for additional on-mountain guest service space to address guest expectations as measured by guest feedback during yearly surveys.

Brundage also previously operated a yurt adjacent to the top terminal of Bluebird Express. While this temporary structure has not been put up in recent winters, the amenities routed to the location (including power lines) remain in place.

Space Use Planning

To provide a balanced resort experience sufficient guest service space should be provided to accommodate the existing resort CCC. The distribution of the CCC is used to determine guest service capacities and space requirements at base area 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.

In addition to distributing the CCC amongst the base area and on-mountain facilities, guest service capacity needs, and the resulting spatial recommendations are determined through a process of reviewing and analyzing the current operations to determine specific guest service requirements that are unique to the resort.

Service functions include:

Restaurant Seating: All areas designated for food service seating, including restaurants, cafeterias, and brown bag areas. Major circulation aisles through seating areas are designated as circulation/waste, not seating space.

Kitchen/Scramble: Includes all food preparation, food service, and food storage.

Bar/Lounge: All serving and seating areas designated as restricted use for the serving and consumption of alcoholic beverages. If used for food service, seats are included in seat counts.

Restrooms: All space associated with restroom facilities (separate women, men, and employees).

Guest Services: Services including resort information desks, kiosks, and lost and found.

Adult Ski School: Includes ski school booking area and any indoor staging areas. Storage directly associated with ski school is included in this total.

Kid's Ski School: Includes all daycare/nursery facilities, including booking areas and lunchrooms associated with ski school functions. Storage and employee lockers directly associated with ski school are included.

Rentals/Repair: All rental shops, repair services, and associated storage areas.

Retail Sales: All retail shops and associated storage areas.

Ticket Sales: All ticketing and season pass sales areas and associated office space.

Public Lockers: All public locker rooms. Any public lockers located along the walls of circulation space are included, as well as the 2 feet directly in front of the locker doors.

Ski Patrol/First Aid: All first aid facilities, including clinic space. Storage and employee lockers directly associated with ski patrol are included in this total.

Administration/Employee Lockers & Lounge/Storage: All administration/ employee/storage space not included in any of the above functions.

2. SPACE USE ANALYSIS

Brundage has identified a shortage of guest service space as one of the core problems in the resort's operations. Staff reports note that there are frequent lines for rentals/repair, rest rooms, and retail sales. In addition, the bar/lounge, restaurant seating, and kitchen/scramble areas are frequently at maximum occupancy. Furthermore, hallways and other circulation spaces are frequently found to be congested as well. Guest Experience (GX) surveys (weekly guest experience surveys and year end compilation of results) confirm that there is a shortage of space at Brundage, with comments noting a "crowded" feeling at the resort, particularly on peak days.

In order to better serve guests, Brundage has identified increasing base area and on mountain guest service space as a priority. To gain a detailed understanding of how much additional space is needed, the resort turned to an analysis of the industry.

In the past several decades, industry analysts like the SE Group have used a combination of quantitative modeling and guest satisfaction surveys to determine the amount of service space necessary at various resorts. These analyses have found that, typically, the guest service space necessary to maximize guest satisfaction falls within a range that correlates linearly with a resort's CCC, regardless of resort size or market segment.

Table 6 compares the current space use allocations of the guest service functions at Brundage to the desired space used based on the aforementioned linear correlation at the resort's existing CCC of 3,170 skiers. As shown in the table below, Brundage is short roughly 20,000 square feet of space. Square footage contained in this table is calculated to illustrate how Brundage compares to the recommended range and should not be considered absolute requirements. Comparing existing totals to the recommended ranges, Brundage could increase rental/repairs, bar/lounge, restaurant seats and kitchen/scramble to bring specific service function space use in line with target market norms.

Rental/repair, retail sales, bar/lounge, restaurant seating, kitchen/scramble, restrooms, ski patrol, and circulation/waste space are all substantially undersized for the current CCC. While this analysis does not specifically discuss space use in other seasons, Brundage has noted an increase in use of its facilities during non-winter seasons and a corresponding lack of space to host events, provide facilities for hikers, etc.

The recommended range below is based on the resort's existing CCC and does not incorporate planned terrain and lift network expansions. A further discussion of the desired conditions under the upgrade plan can be found in Chapter 4, Section E.

Table 6. Space Use Recommendations—Resort Total—Existing Conditions

Service Function	Existing Total	Recommended Range	
		Low	High
Ticket Sales/Guest Services	1,000	710	870
Public Lockers	1,920	2,140	2,620
Rentals/Repair	1,700	5,070	5,710
Retail Sales	500	1,500	1,830
Bar/lounge	1,350	2,250	2,750
Adult Ski School	2,741	1,140	1,390
Kid's Ski School	2,670	2,280	2,790
Restaurant Seating	7,850	10,480	12,810
Kitchen/Scramble	3,100	5,990	7,320
Rest rooms	850	3,000	3,660
Ski Patrol	515	1,200	1,460
Administration	2,400	1,500	1,830
Employee Lockers/Lounge	500	600	730
Storage	1,500	1,700	2,520
Circulation/Waste	2,200	5,110	7,550
TOTAL SQUARE FEET	**30,796**	**44,670**	**55,840**

Source: SE Group

3. FOOD SERVICE SEATING

Food service seating at Brundage is located in the Main Lodge and on-mountain at Bear's Den. Due to the limited on-mountain options, most guests must descend to the Main Lodge for guest services. Nearly all the restaurant seats are located at the Main Lodge. Thus, the Main Lodge experiences heavy lunchtime congestion on many days. Additional on-mountain restaurant seats would help alleviate the lunchtime congestion issues.

As shown in Table 7, there are a total of 657 indoor and outdoor seats at Brundage. Brundage requires 832 seats to seat all of their guests over the course of the day, which is calculated by dividing the anticipated lunchtime demand of 3,329 (CCC + 5% non-skiing guests) by the average seat turnover of four. This assumes that each seat hosts four people over the course of a day. The food seating analysis shows a deficit of 49 seats primarily in the base area.

Table 7. Restaurant Seats—Existing Conditions

	Base Area	On-Mountain	Total
Existing Indoor and Outdoor Seats	657	126	783
Total Required Seats	768	64	832

Note:
Total required seats are calculated by estimating the Lunchtime Capacity of the area, which is the CCC plus an additional 5% of non-ski guests. This is assumed to be 3,074 guests in the Base Area; 255 guests on-mountain; 3,329 guests for the total resort. This Lunchtime Capacity is divided by 4 to account for the average seat turnover over the course of the day (i.e., each physical seat provides, on average, seating for 4 people over the course of a day). As a result, there are 768 seats required in the base area (3,074/4), 64 seats required on-mountain (255/4), and 832 seats required total (the sum of the two areas).

F. EXISTING PARKING CAPACITY AND RESORT ACCESS

Parking at Brundage is provided in two main lots located on private land in the base area: the Upper Lot and the Lower (Centennial) Lot. Additional overflow parking is also available at the Goose Lake Lot, also on private land. The Upper Lot is located adjacent to the Main Lodge and has 500 parking spaces. The Lower Lot is adjacent to the bottom terminal of the Centennial Lift and has 900 parking spaces. The Goose Lake Lot is off the Brundage Mountain Road and has 175 parking spaces. The three parking lots collectively accommodate approximately 1,575 cars. Applying an average occupancy rate of 2.3 passengers per personal vehicle, Brundage's parking lots currently have a capacity of approximately 3,315 guests. Brundage currently has enough parking for most busy weekend day. On peak days, as with almost all ski areas, parking is at a premium.

This shortage of parking on peak days results in cars parking on the side of roadways or in areas that impede traffic circulation. Current conditions prevent Brundage from providing an efficient space for overflow cars to park. In addition, the current parking situation can be difficult for families with children, which are common at Brundage. When the Upper Lot fills up, cars park down at the Lower (Centennial) Lot. This requires anapproximately ¼ mile walk uphill to the base lodge or a ¼ mile walk directly onto the Bear or Centennial lifts. Neither option is ideal for families with young children. As a result, Brundage has identified an increase to base area guest service space and associated parking as an objective for the resort to address. Brundage runs an in-resort shuttle on weekends and holidays to help accommodate guest flow from parking lots to the ski experience.

Brundage also provides shuttles (the Bluebird Express) from McCall for free on weekends and holidays. Three morning shuttles depart from the McCall and three afternoon shuttles return back to McCall.

Table 8. Parking—Existing Conditions

	Total
CCC + other guests	3,329
Number of guests arriving by car (95%)	3,162
Number of guests arriving by bus (5%)	166
Required car parking spaces (average 2.3 guests per car)	1,375
Required bus parking spaces (35 guests per bus; 1 bus = 4.5 cars)	21
Required employee car parking spaces	133
Total required spaces	1,529
Existing parking spaces	1,575
Surplus/Deficit	46

G. EXISTING RESORT OPERATIONS

1. SNOWMAKING

Brundage has a small-scale snowmaking operation to “patch” high use areas which are subject to heavy snow degradation in the base area. The water source is a well, which has a capacity of approximately 60 gpm. Water for snowmaking is stored in a 100,000-gallon reservoir. The existing snowmaking system provides approximately 2-3 acres of trail coverage on *Easy Street*, as well as the area immediately adjacent to the Bluebird Lift. The lack of a larger snowmaking system can prevent Brundage from having a consistent opening date, being able to provide additional snow in areas of high use or areas that are impacted by wind and solar effects, and being able to provide consistent snow quality across the resort. The guest experience is frequently negatively impacted by inconsistent or icy snow conditions, large variations in snow quality across the season, and closures of trails due to low snow. As a result, Brundage has an objective to expand the snowmaking system on current ski trails to achieve the goal of improvement of snow quality across the resort.

2. MAINTENANCE FACILITIES

The maintenance facility is located on the south end of the Lower Lot on private land. The two-story facility is approximately 6,400 square feet with 4 large bays and 2 smaller bays. In general, the facility is adequately sized for current vehicle maintenance operations. Fuel storage and pumps are located adjacent to the maintenance facility.

3. WATER

Brundage has five water rights appurtenant. These water rights authorize commercial and domestic use of water from North and South Brundage Springs via three locations and from groundwater via two locations.

The North and South Brundage Springs water rights authorize 9 gallons per minute (gpm) for two locations and 18 gpm for one. There is a total maximum flow rate from these springs of 18 gpm but no annual volume limit on the amount of water diverted from these water rights. Water from the springs is stored in four 1,000-gallon tanks adjacent to the south spring and used in the base area.

Brundage has two groundwater water rights. One has a diversion of 13 gpm with an annual limit of 2.6 acre-feet for commercial use and 0.6 acre-feet for domestic use for a total of 3.2 acre-feet or a million gallons. The second groundwater water right has a diversion of 90 gpm with a volume limit imposed based on 1998 documents.

Brundage also has a 100,000-gallon, buried, concrete storage tank in the Bear Chair area (between *Badger* and *Red Fox*) with a pipeline to the main lodge.

4. MOUNTAIN ROADS

The existing mountain roads network ensures access to all of Brundage’s on-mountain infrastructure. These roads provide access for the required maintenance of this infrastructure. Currently, there are approximately 14 miles of mountain roads within Brundage’s SUP. A portion of these roads and surrounding network of mountain roads are part of the National Forest Road System. Existing mountain roads are shown in Figure 6. As part of its commitment to supporting access to the PNF for all users, Brundage maintains Goose LakeRoad in the winter from its junction with SR 55 north beyond the resort parking lot to provide access to the PNF. The County provides summer maintenance to Goose Lake Road.

5. INFRASTRUCTURE AND UTILITIES

Brundage relies on a septic tank/drain field sewage treatment system. The drain field is beneath *Easy Street*. The system is adequate for Brundage's existing guest attendance levels, and was designed to be augmented as future guest capacities dictate.

H. RESORT CAPACITY BALANCE AND LIMITING FACTORS

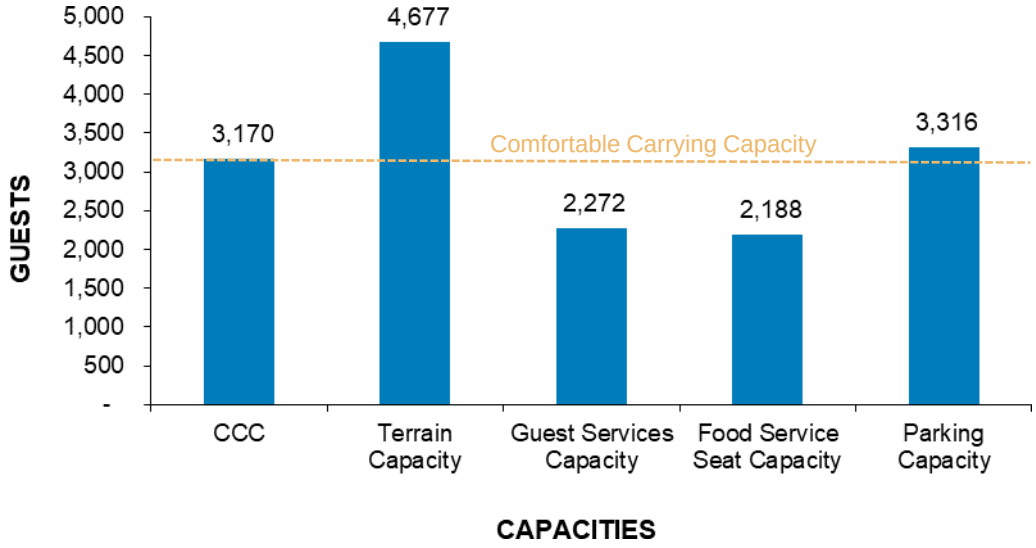
Brundage's winter visitation pattern is common of a day-use resort. The majority of Brundage's visitation occurs on weekends and holidays and exceeds CCC on peak days. Under current peak day conditions, lift lines are modestly crowded with wait times of 10-15 minutes with higher waits during the morning. The terrain network is moderately well distributed with some deficiencies in terrain variety as well as in beginner, novice, advanced, and expert terrain. Ski runs remain generally low density with exceptions on *Easy Street* and the *Alpine* funnel. Guest service space is currently inadequate, with a variety of guest services undersized for current visitation. Parking is sufficient, with a small surplus on days at CCC, but can be difficult for families and intermittent parking shortages occur.

In the chart below, the resort's existing capacities are graphically depicted. All resort capacities are compared to the resort's existing CCC, as this is the numerical estimate of guests that can be comfortably accommodated within the lift and terrain network and is the benchmark for a resort's capacity.

This chart illustrates the need for additional guest services and food service seating. How these needs might be achieved are discussed in Chapter 4. Given a CCC of 3,170 skiers per day, there is a surplus of terrain quantity (as calculated by the total acreage of developed terrain available at Brundage). However, there are substantial deficiencies in guest services capacity and food service seat capacity. Specifically, guest services capacity is only adequate for 2,272 guests and food service seat capacity is only adequate for 2,188 guests. This means there is a deficit of space for almost 1,000 guests on a day when Brundage is at CCC.

Guest services improvements should focus on on-mountain facilities and spreading guests out during the lunchtime congestion, as well as give guest alternative experiences to the one existing on-mountain guest service option. The lack of appropriately sized guest services and food service seating diminishes the guest experience on peak days.

Chart 2. Resort Capacity—Existing Conditions



I. SUMMER AND MULTI-SEASON OPERATIONS

1. EXISTING MULTI-SEASON ACTIVITIES AND THE GUEST EXPERIENCE

The 2011 Ski Area Recreational Opportunity Enhancement Act (SAROEA) amended the National Forest Ski Area Permit Act of 1986. The 2011 SAROEA enables snow sports (other than Nordic and alpine skiing) to be permitted on NFS lands subject to ski area permits issued by the Secretary of Agriculture. In addition, it clarified the authority of the Secretary of Agriculture to permit appropriate additional seasonal or year-round recreational activities and facilities on National Forest System land subject to ski area permits. Refer to Appendix D for additional detail on 2011 SAROEA.

Following the trend occurring at ski areas across the country, Brundage has begun to develop additional recreation opportunities beyond skiing in the winter season, such as mountain biking, hiking and other events. The expansion of these multi-season activities allows Brundage to provide recreation opportunities throughout the year to visitors of the PNF. Furthermore, multi-season recreation (e.g., mountain biking, hiking, scenic lift rides) are typically enjoyed by a more diverse demographic than skiing guests due to the generally lower cost of entry.

As a result, Brundage has identified multi-season activities as an important component of their overall resort plan. Brundage notes their current objective is to construct additional four-season recreation activities, which will contribute to their goal of operating as a successful, four-season resort.

Brundage is open for summer operations from late May to early September. The resort offers the following recreational opportunities to summertime guests.

a) Mountain biking

Mountain biking has continually grown in popularity across the breadth of the outdoor recreation sector in recent years and has become a vital component to four-season operations at ski areas within the North American market. Brundage presently offers a downhill mountain bike park with vertical drop of approximately 1,800 feet, as well as cross-country trails spread out around the front- and back-sides of the mountain. In total, there are 13 mountain bike trails at Brundage, all of which can be accessed with a lift ticket for the Bluebird Express. There are approximately 26 miles of mountain bike trails and 6 miles of multi-use / hiking trails. The current system lacks separation of user groups between cross country, downhill and hikers, and does not meet modern trail design criteria.

Electronic bikes (e-bikes) or pedal-assist bikes have also grown in popularity in recent years in the mountain bike community. Brundage is authorized to allow e-bikes on Brundage built and maintained trails within the SUP boundary. Through the NEPA process, e-bike classification would be determined.

b) Hiking

Brundage offers a hiking trail system for guests of all ability levels. Hiking-only trails at Brundage include the South Lodge Lane Trail, which offers 3.1 miles of hiking from the summit; the Lookout Trail and Hidden Valley Overlook Trail, both of which are located along the summit and provide expansive views of the surrounding area; the Base Area Nature Trail, which has minimal vertical gain and is best for beginner hikers and children. In addition, multi-use (hike and bike) trails at Brundage include the *Greenhorn, Hammerhead, Roller Coaster, Thorn Creek, Black Bear, Growler*, and *Lakeview Vista* trails. The current system lacks diversity and hiking opportunities to experience more remote areas of the PNF within the Brundage SUP.

c) Scenic Lift Rides

Brundage's existing scenic lift ride program operates on the Bluebird Express whenever it is operational throughout the summer. Brundage's general schedule for operating the scenic lift ride program is as follows: Wednesday through Sunday starting mid-June through early September. A single scenic ride ticket is good for one ride up and down the Bluebird Express and offers summertime guests easy access to the upper reaches of the resort to picnic, sightsee, hike and photograph the spectacular vistas within and surrounding the resort.

d) Disc Golf

Disc golf is a sport with rules similar to golf. Players throw a disk at a target made of metal chains with a basket below to catch the disks. Brundage offers a 9-hole disc golf course called the "Easy Street 9," which is located in the base area, mostly surrounding the Easy Street Chair. The course is 2,539 feet, plays to a par of 28, and is free of cost to Brundage guests who supply their own discs. The course is only 9 holes. An expanded course and different terrain would provide a better experience.

CHAPTER 3.
PREVIOUSLY APPROVED, NOT YET IMPLEMENTED PROJECTS

The projects detailed in this section have been previously approved through the NEPA process but have not yet been implemented. Prior to project implementation the Forest Service will review project consistency with Forest Plan standards and guidelines and determine if additional analysis is warranted due to new or changed conditions. The applicable analysis and approval for most of the projects listed below were provided by the 1999 Brundage Mountain Resort Revised Master Development Plan (RMDP) Phase 1 Environmental Assessment (EA), and the associated 1999 Brundage Mountain Resort Revised Master Development Plan Phase 1 Decision Notice and Finding of No Significant Impact (DN/FONSI), which was signed in 2003.

Appendix C of the 2003 DN/FONSI details required mitigation measures and best management practices for each approved project and Appendix D is an implementation guide. Brundage would adhere to the stipulations of the DN/FONSI as well as any additional analysis determined by the Forest Service prior to construction.

Since the 1999 RMDP EA and DN/FONSI, several other NEPA processes have been completed for Brundage, some of which approved projects listed below. The following decision documents were issued for those other NEPA processes:

- Brundage Vegetation Management Project DN/FONSI, signed September 26, 2008;
- Brundage Mountain Resort Toilet and Communication Project Decision Memo, signed October 6, 2011; and
- Brundage Wildland Urban Interface / Bear Basin Restoration Project.

Refer to Table 9 for a summary of what was approved in each document as well as what has been constructed to date. While resource analysis was completed and these projects are considered previously approved and are being brought forward in this analysis, it is understood that certain resource conditions (e.g., watershed and wildlife) may have changed since the 1999 DN/FONSI was published. Therefore, additional site-specific analysis will likely be required prior to implementation of these projects.

A. LIFTS

As part of the 1999 DN/FONSI, five new lifts (four fixed-grip and one detachable) and one surface lift were approved. Note that two of these lifts (Lakeview [formerly South Peak] and Bear Chair) were approved in this document but have since been constructed and are discussed in Chapter 2.

- Sargent's Express Lift was approved as a detachable quad with an hourly capacity of 2,400 pph.
- Way Back Lift was approved as a fixed-grip double with an hourly capacity of 1,200 pph.
- Hidden Valley was approved as a fixed-grip double with an hourly capacity of 1,200 pph. The lift was designed with a mid-station.

The surface lift was approved to the northwest of the Upper Parking Lot and would serve the previously approved tubing facility.

B. TERRAIN

Approximately 224 acres of developed ski terrain (i.e., trails with designated edges) and approximately 124 acres of gladed terrain (i.e., thinning within tree islands) were approved as part of the 1999 DN/FONSI. Of this, approximately 87 acres of traditional terrain and 98 acres of gladed terrain have been constructed. The following terrain pods are considered previously approved, not yet implemented:

- Within the Sargent's Mountain terrain pod, approximately 110 acres of developed ski terrain and 14 acres of gladed terrain were approved. 20% of this terrain is intermediate; 10% is advanced-intermediate; and 70% is expert. Approximately 25 acres were logged and cleared in 2009 for developed trails (portions of trails SG1, SG2, SG3 and SG4). The remaining trails have not been constructed.
- Within the Way Back terrain pod, approximately 10 acres of developed ski terrain were approved. 40% of this terrain is lower-intermediate; and 60% is intermediate. Approximately 6 acres were logged and cleared in 2009 for developed trails (trail WB-01). The remaining trails have not been constructed.
- Within the Hidden Valley terrain pod, approximately 34 acres of developed ski terrain and 25 acres of gladed terrain were approved. 25% of this terrain is novice; 25% is lower-intermediate; 10% is intermediate; and 40% is expert. None of this terrain has been constructed.

C. GUEST SERVICE FACILITIES

1. SARGENT'S PATROL STATION

The 1999 DN/FONSI approved an on-mountain ski patrol station at the summit of Sargent's Mountain. Approximately 500 square feet in size, this approved patrol station would be supplied with avalanche control equipment, search/rescue equipment, toboggans, trail maintenance equipment, lift evacuation equipment, and medical equipment for the treatment of injuries.

2. SARGENT'S WARMING HUT

This snack bar/warming hut, approved in the 1999 DN/FONSI, would serve the bottom terminals of the previously approved Sargent's Express and Way Back chairlifts. The facility would provide a limited food service function, would offer portable, heated toilets, and would contribute approximately 30 seats to Brundage's food service seating capacity. Construction of the building would require tree removal and grading for an approximately 800 square foot footprint.

3. MOUNTAIN TOP RESTAURANT

The 1999 DN/FONSI approved the 6,500 square foot Mountain-Top Restaurant (and a 3,000 square foot deck) at the present location of Ski Patrol Headquarters, near the top terminal of the Bluebird Express. In addition to offering food service, bar/lounge facilities, restrooms and lockers, and a warming area, the Mountain-Top Restaurant would be equipped with a small retail shop, a visitor information desk, and a radio/telecommunications center. This facility, as designed, would create approximately 200 cafeteria-style seats and 75 additional seats reserved for sit-down table service. Approximately 200 outdoor seats

would be available as well. With construction of this facility, guests would not have to return to the base area to access visitor services, which would alleviate congestion in the base area especially during the busy lunch period. The wastewater and potable water lines were approved within the *Main Street* run. With construction of additional cells in the drainage field, the existing septic system can accommodate the additional waste load. This project is discussed in additional detail in Chapter 4.

4. SKIER SERVICES AND RESORT SERVICES BUILDINGS

A guest services building, approximately 20,000 square feet in size, was approved by the 1999 DN/FONSI for the space immediately southwest of the existing Day Lodge. The approved building is now on private land. This facility would house ticket sales, ski school, a rental and repair shop, a retail shop, a Cat Ski sales office, administrative space, a visitor information desk, public restrooms and lockers, and an equipment check station. The Guest Services Building would be powered by existing distribution lines within the base area.

A resort services team building—containing ski patrol, first aid and employee lockers—was also approved adjacent to the Lower Parking lot and Easy Street Lift and is also now on private land.

5. CENTENNIAL SALOON / EQUESTRIAN CENTER AND OVERNIGHT STABLES

The 1999 DN/FONSI approved the Centennial Saloon, which would serve as Brundage's new equestrian center during the summer. Overnight stables were approved to be constructed in the Lower Parking Lot, with a day corral located near the facility. The equestrian center would provide access to an existing network of NFS roads south (*and outside*) of the SUP area. A separate Forest Service outfitter/guide permit would be necessary for this operation. These existing NFS roads are approximately 15.5 miles in length. Two connector trails (48 inches wide, totaling approximately 3,900 feet in length) were approved to be constructed to create loops in this road system. Waste generated by the proposed 20 to 25 horses at the equestrian center would be collected and disposed of at an off-Forest location.

6. MULTI-PURPOSE EVENT SITE

A multi-purpose event site for hosting freestyle, big air, and gelande style competitions was approved by the 1999 DN/FONSI to be located on the lower portion of the *Face*, within viewing distance of base area facilities. This site was selected for its appropriate slope gradients and solar aspect, as well as its proximity to base area facilities to accommodate spectators and the media. Earth disturbance associated with construction of jump, transition and landing would not exceed one acre (approximately 75' x 400').

7. RESTROOMS

The 2008 Brundage Mountain Resort Toilet and Communication Project Decision Memo approved three vault toilets at the top of Bear Lift, Lakeview Lift and Bluebird Express to replace portable toilets as well as the installation of approximately 1,400 feet of underground communication cable within the upper third of the Bluebird Express lift corridor. These restrooms were constructed, and the underground communication cable has not.

D. MULTI-SEASON RECREATION

1. MOUNTAIN BIKING AND HIKING TRAILS

Approximately 19 miles of multi-use trails, single track trails and summer trail bridges for mountain biking and hiking have been previously approved. Approximately 6 miles have been previously approved, not yet constructed (refer to figures 11 and 12). The 6 trail segments are located off of Grouse, from Grouse to the service road, from Hidden Valley to Rock Garden, from Wildcat to the service road, from the service road to Black Bear/Growler junction, and a Black Bear connection.

Lift-served access to these trails wouldbe provided via Bluebird Express in the summer months (June through September). Maximum grades on the new trails would not exceed 20%, with maximum sustained pitches of approximately 10%. Single track trails would be constructed to have a width of 36 to 48 inches, with selective limbing of overstory vegetation to assure a safe canopy clearance for cyclists. Waterbars were also approved to be incorporated into final trail design on all slopes posing erosion concerns.

2. SNOWSHOE TRAILS

The 1999 DN/FONSI approved approximately 1.5 miles of snowshoe trails to broaden the spectrum of services available to the recreating public and to accommodate non-skiing guests. The lift-served snowshoeing program would be located in the vicinity of the top terminals of the Bluebird Express and Centennial lifts. Snowshoe trails would be flagged-in over-the-snow; no tree removal or grading would be necessary. This previously approved over-the-snow trail would intersect FSR 456 at two points near the summit of Brundage. Because snowmobile use is relatively low in this location (10-15 machines is considered normal on a busy day), signage to be installed indicating that multiple users could be encountered would be sufficient to limit the danger of interaction with snow machines. Rental equipment would be available in the base area's expanded rental shop, and snowshoers would have access to the Mountain-Top Restaurant for amenities.

3. FUN PARK AREA

The Fun Park, an on-skis play area for Brundage's younger clientele, was approved in the 1999 DN/FONSI. It would be located in the trees between Way Back and Hidden Valley lifts. The Fun Park would be constructed as a narrow adventure ski path, including gentle rolls, turns, and twists, with no section of the trail exceeding a novice ability level. A variety of small play structures, animal silhouettes, etc. were also approved and would add intrigue to this portion of the resort for children.

Recently, Brundage has focused its snowplay Fun Park features in the Bear Chair area. Additional snowplay features, aspreviously approved, are planned to be added to the Bear Chair area.

E. OPERATIONAL INFRASTRUCTURE

1. EXPANDED PARKING FACILITIES

The 1999 DN/FONSI approved the expansion of Brundage's parking facilities. This included the expansion of Brundage's existing lots as well as the creation of a new parking lot (Parking Lot A). Note that all existing and previously approved parking lots are no longer located on FS land as a result of the subsequently approved land exchange.

F. VEGETATION MANAGEMENT PROJECTS

Brundage is acutely aware of the need for a vegetation management plan. The current whitebark pine and subalpine fir mortality in and around Brundage is visible and is affecting ski area operations. The 2008 Brundage Vegetation Management Project Environmental Assessment analyzed the effects of implementing the Vegetation Management Plan (VMP) for Brundage. The VMP identified stand treatment that should be undertaken to assure the long-term health and visual objectives within the ski area. A DN/FONSI was signed in September 2008 approving 1.5 million board feet of timber from approximately 326 acres (260 acres with vegetation management plan prescriptions and 66 acres with WUI prescriptions), road construction and reconstruction and 296 acres of whitebark pine treatment. The project approved stand treatments to ensure forest health and visual objectives within the ski area (simultaneously achieving the PNF's vegetation management plan for this area, as well as ski area prescriptions). Refer to Appendix B for the DN/FONSI select alternative figure showing treatment areas.

As part of the DN/FONSI it was noted that when Brundage implements projects, including glading prescriptions in some stands, it makes sense to enter those stands only once, implementing both vegetation management and ski area prescriptions. The vegetation management prescriptions and the glading prescriptions complement each other. The upper elevation stands of whitebark pine within the ski area are currently impacted by insects and disease, particularly white pine blister rust. Therefore, this project was designed to preserve uninfected whitebark pine trees and attempt to regenerate trees in areas of mortality. The Brundage Wildland Urban Interface / Bear Basin Restoration Project approved treatmentof forest stands around Brundage's private lands, to ensure the effectiveness of suppression activities in the event of wildfire.

As of 2022, most of the projects approved in the 2008 Brundage VMP have been implemented. Brundage is in the process of updating its VMP. Such an update would continue to address the concerns of dead, dying and blighted trees, and continue to ensure forest health for many decades to come and would be in coordination with the Forest Service.

G. SUMMARY OF PROJECT APPROVALS

The following table summarizes the previously approved, not yet implemented projects that are being carried forward in this MDP, their approval date and document, what specifically has or has not been implemented, and whether the project is on NFS or private land.

Table 9. Previously Approved Projects, Not Yet Implemented

Project	Date Approved/Approval Document	Authorized, Not Yet Implemented	Land Ownership
Lifts			
Sargent's Express Lift Way Back Lift Hidden Valley Lift	1999 DN/FONSI	All three lifts	NFS Land
Terrain			
224 acres of traditional terrain	1999 DN/FONSI	137 acres authorized, not yet implemented	NFS Land
124 acres of gladed terrain	1999 DN/FONSI	26 acres authorized, not yet implemented	NFS Land
Guest Service Facilities			
Sargent's Patrol Station Sargent's Warming Hut Mountain Top Restaurant Snowtubing Facility and Warming Hut Multi-Purpose Event Site	1999 DN/FONSI	All facilities	NFS Land
Skier Service Building Resort Service Building Centennial Saloon/Equestrian Center and Overnight Stables	1999 DN/FONSI	All facilities	Private Land*
Bear Lift, Lakeview Lift, and Bluebird Express Lift Restrooms	2011 Brundage Mountain Resort Toilet and Communication Project Decision Memo	All Restrooms	NFS Land
Multi-Season/Alternative Recreation			
Mountain Biking, Hiking, and Snowshoeing Trails	1999 DN/FONSI	6 miles authorized, not yet implemented	NFS Land
Fun Park Area	1999 DN/FONSI	Entire Project	NFS Land
Operational Infrastructure			
Expanded Parking Facilities	1999 DN/FONSI	TBD	Private Land*
Power and Communications Lines	1999 DN/FONSI	TBD	Partially on NFS Land

Other Projects			
Vegetation Management Plan	2008 Brundage Vegetation Management Project DN/FONSI	Completed	NFS Land
Wildland Urban Interface/Bear Basin Restoration	Brundage Wildland Urban Interface / Bear Basin Restoration Project	In Progress	NFS Land

Note: * indicate projects approved on Forest Service lands but were subsequently changed to private lands.

CHAPTER 4.
UPGRADE PLAN

A. SUMMARY OF THE UPGRADE PLAN

The Upgrade Plan has been specifically assembled to improve the quality of the recreational experience and increase recreational opportunities at Brundage. Brundage plans to build upon their established skiing legacy by planning towards a truly small-scale boutique resort with relatively small number of residential units, a revitalized base village and an array of new recreation and mountain amenities. These improvements were developed to support Brundage's vision to expand and improve guest access to skiing in the PNF and expand year-round offerings in the base area to include other adventure-based experiences that support guest connection with the PNF, while maintaining Brundage's family friendly skiing and riding experience and conserving the nostalgic ski culture vibe.

This Upgrade Plan addresses the overall guest experience from arrival to departure in the base area and on the mountain. Proposed improvements focus on out-of-base lift capacity and opening 200 acres of new lift-served developed terrain for beginner, intermediate, and advanced skiers. These projects address Brundage's goal to improve, diversify, and expand the lift and terrain network to bring it in line with current guest expectations. The planned resort terrain and lift expansion includes various improvements like expansion on the Eastside, seven new lift installations, three new conveyors, an upgraded lift, miscellaneous trail widening and grading.

Brundage would also potentially develop a terrain park in the Temptation Pod or other suitable location, a Fun Park area to cater to children and the children's ski school, and other similar activities in the base area to expand on the activity options for guests. Beyond meeting Brundage's goal to improve the lift and terrain network, these projects would also meet the goal of developing learning progression opportunities to position Brundage as a beginner- and family-friendly resort. To address Brundage's goal of improving snow quality and resiliency in the face of a changing climate and unpredictable annual snowfall, Brundage plans to expand its snowmaking system by approximately 115 acres.

A variety of on-mountain guest service upgrades are also planned, including a new resort entrance and parking area, ski-in/ski-out accommodations, and several on-mountain guest service facilities (such as a warming hut or yurt). These facilities would dramatically improve Brundage's ability to cater to its guests' needs without requiring them to descend to the base area. Additionally, a day lodge replacing the old ski school facility and a new ski patrol building where the Kids Center Complex currently exists is planned to further improve the on-mountain amenities. Two additional base lodges would be constructed on private land as well. Together, these projects would address a variety of Brundage's goals, including: development of the guest arrival process to be easy, efficient, and conducive to accessing the resort terrain network; and increase in the size and quality of day skier and overnight guest service spaces.

Some of the on-mountain upgrades would require an expansion of the existing Brundage SUP. The current boundary follows USFS Road 451 (Hartley Meadows Road). The boundary in the Upgrade Plan extends the bottom of the slope which is the Forest Service and State of Idaho boundary. The SUP expansion would be required for development of the Eastside and Sargent's Backside pods. The Eastside would provide Brundage with more novice and low intermediate terrain that is currently

topographically limited and built out within the existing SUP boundary. This terrain is important for skiers looking to progress their skills and stay engaged in the sport. This terrain would also allow Brundage to keep it low density, family-friendly feel as visitation and the surrounding Idaho population and economy grows.

Brundage is also planning to expand its alternative winter activities as well as its summer and multi-season operations. This would include creation of snowshoe trails, Nordic trails, potential hiking and biking trails, and additional opportunities consistent with the summer zones mapped in Chapter 4, Section I. These would address the goal of expanding non-skiing, year-round recreation opportunities to make Brundage a successful, four-season resort.

Brundage notes that construction of some of the project components—namely portions of the Eastside and Lift G lifts and terrain pods—would be located in the French Creek Inventoried Roadless Area (IRA). As such, road construction and reconstruction would not be permissible unless one or more of the criteria listed under the 2008 Idaho Final Roadless Rule are met. Refer to Appendix D for these specific criteria. Brundage plans to construct projects in accordance with the French Creek IRA regulations. As noted in Appendix D, the area of the French Creek IRA that would contain infrastructure and trails is defined as Management Class Backcountry/Restoration.

Backcountry/Restoration areas are typically managed for other resource benefits like recreation and the proposed projects could be consistent with that direction. Project-specific NEPA analysis will further identify concerns and resource impacts to the French Creek IRA. Refer to Appendix D for additional detail on IRA guidance and restrictions.

B. UPGRADED LIFT NETWORK

All planned lift upgrades are located, at least partially, within Brundage's SUP or on National Forest System lands with the exception of Access Lift South, Access Lift North, Easy Street and the conveyors.

1. EXISTING LIFT REPLACEMENTS

a) Centennial Lift

Centennial Lift is planned to be upgraded from a fixed-grip triple to a detachable quad. The primary reason for the upgrade is to increase utilization of the lift. A detachable quad would reduce ride times by nearly half, making the lift more appealing to guests. The lift is also nearing the end of its useful life. When upgraded, the Centennial Lift could include a mid-loading station or be broken into two components, to allow for a more reliable opening of the ski area. Snowfall for the upper portions of Brundage are more reliable and sustainable. A mid-loading station, or upper Centennial Lift, would allow Brundage to open the main Bluebird Lift and give skiers substantial access to the upper half of the mountain.

2. PLANNED LIFTS

a) Eastside Lift

The Eastside Lift would extend from the top of Brundage Mountain down into the Deadhorse Creek drainage. Eastside Lift is a proposed fixed-grip triple chairlift with top drive tension which will serve the backside of Brundage Mountain and open 450 acres of east facing lift-served terrain, including tree and glade skiing off-piste terrain. The top terminal of the lift would be located approximately 1,500 feet north of the top terminal of Bluebird Lift. Skiers would access the terrain directly off the Bluebird or Centennial lifts. Access to the top terminal would occur on existing mountain roads. The bottom terminal is approximately ¼ mile west of the NFS/State of Idaho property line and is located within the French Creek IRA. As noted

previously and in Appendix C, construction would occur via foot, ATV or helicopter. Annual maintenance would likely occur over the snow after ski area operations commence.

The bottom terminal area would have a warming hut with seating, limited food service and restrooms. More information on guest service facilities is included in the Upgraded Guest Service Facilities, Food Service Seating & Space Use Analysis discussion in Chapter 4.

Prior to implementation of the Eastside lift and terrain, NEPA review would be completed and would include outreach to key stakeholders such as the Idaho Roadless Commission as part of the process.

b) Lift G

Similar to the Eastside Lift, Lift G is planned as be a fixed-grip triple to provide access to the backside of Brundage Mountain. The Lift would provide additional intermediate terrain off of planned Sargent's Lift. The bottom terminal of Lift G is in the French Creek Roadless Area. Like the Eastside Lift, the lift would likely be a top drive tension. As noted previously and in Appendix C, access to the bottom terminal for construction would occur by foot, ATV or helicopter. Maintenance would likely occur over the snow after ski area operations commence.

c) Sargent's Lift

Sargent's Lift would be the core lift in the new Sargent's Mountain area. The Sargent's Lift was previously approved in the 1999 DN/FONSI. The area is currently enjoyed by backcountry skiers. Throughout the 1990s, Brundage conducted extensive snow quality and quantity monitoring on Sargent's Mountain's southwest flank and determined snow and skiing conditions were suitable for lift access. Sargent's Lift is planned as detachable quad and would service intermediate and expert terrain on Sargent's Mountain while simultaneously offering access to naturally open bowls, as well as new trails.

d) Way Back Lift

The Way Back Lift was designed primarily as a transfer lift to ensure adequate skier circulation between the existing ski area and terrain on Sargent's Mountain. The Way Back Lift is designed to carry skiers from the base of Sargent's Mountain to the ridge that separates it from the existing area. This fixed-grip triple would also support intermediate level, round-trip skiing. The lift could be accessed from the North Boundary Trail. Way Back would be equipped with a bottom drive terminal. The Way Back Lift was approved in the 1999 DN/FONSI.

e) Hidden Valley Lift

To further enhance access to Sargent's Mountain and the Eastside expansion, Hidden Valley Lift would transport skiers from Brundage's base area to the ridge that separates the Sargent's terrain from the Hidden Valley area. Equipped with a mid-station load/unload, this fixed-grip triple would also increase utilization of the area's novice and intermediate terrain, while simultaneously supporting round-trip skiing. The Hidden Valley Lift would also enhance Brundage's out-of-base lift capacity. The Hidden Valley Lift was approved in the 1999 DN/FONSI.

f) Access-North and Conveyors

The Access-North conveyor and two beginner conveyors would provide better access to existing beginner terrain and circulation through the base village. The existing Easy Rider conveyor is planned to be used as the upper conveyor. The addition of Hidden Valley would create a natural learning progression forbeginners to transition from a conveyor to the Hidden Valley Lift.

g) Temptation and Access-South

The Temptation and Access-South fixed-grip triples are located entirely on private land. Access to the lifts would be from a new lower parking lot with direct access off Goose Lake Road or ski-in/ski-out accommodations.

3. SUMMARY OF LIFT UPGRADE EXPERIENCE

Together, the lift upgrades would greatly improve the lift loading and riding experience as well as access to Brundage's existing and planned terrain. The upgrades of the Centennial Lift and construction of the Hidden Valley Lift would increase out-of-base capacity and help address current base area lift wait times. Development of the Temptation Lift would also increase out-of-base capacity and would provide access to a separate beginner and intermediate terrain pod adjacent to the day lodge.

Access Lift –North is plannedto provide access to a private development, while also improving access to beginner and intermediate terrain on the northwestern edge of the resort. Construction of the Eastside Lift, Lift G, Way Back Lift, andSargent's Lift would provide efficient access to the variety of new terrain planned in this MDP (discussed in the following section). The new conveyors would increase the number of lifts available for first-time skiers and would address circulation issues present on beginner terrain.

These upgrades contribute to thefollowing MDP goals: development of the guest arrival process to be easy, efficient, and conducive to access the resort terrain network; improvement, diversification, and expansion of the lift and terrain network to bring it in line with current guest expectations; and development of learning progression opportunities to position Brundage as a beginner- and family-friendly resort.

4. LIFT UPGRADE LANDOWNERSHIP SPECIFICATIONS

Following the 2006 Brundage Land Exchange, Brundage now privately owns much of the land around the base area. For this reason, the bottom terminal of the previously approved Hidden Valley Lift is on private land, though the majority of the lift spans, and its top terminal as planned are still on NFS lands. As discussed above, the Temptation, Access-North and Access-South lifts are planned to be installed entirely on private land, as well as the conveyors. All other planned lifts will be located on NFS lands.

COMPLETE UPGRADED LIFT NETWORK SPECIFICATIONS

The specifications of the complete upgraded lift network are depicted in Table 10.

Table 10. Lift Specifications—Upgrade Plan

Lift Name, Lift Type	Top Elevation (ft.)	Bottom Elevation (ft.)	Vertical Rise (ft.)	Slope Length (ft.)	Avg. Grade (%)	Actual Capacity (pph)	Rope Speed (fpm)	Carrier Spacing (ft.)	Lift Maker/ Year Installed
Bluebird Express / DC4	7,605	6,055	1,550	5,693	29%	1,800	1,000	133	Garaventa CTEC (1997)
Easy Street / C3	6,057	5,963	94	697	14%	1,200	400	60	Garaventa CTEC (1994)
Bear Chair / C3	6,505	5,882	622	2,559	25%	1,800	500	50	Doppelmayr CTEC (2007)
Centennial / DC4	7,520	5,879	1,641	6,161	28%	1,800	1,000	133	Upgrade
Lakeview Lift / C3	7,381	6,564	816	3,371	25%	1,800	500	50	Doppelmayr CTEC (2007)
Lift G / C3	7,797	6,892	905	4,468	21%	1,500	500	60	Planned Lift
Sargent's / DC4	7,787	6,561	1,226	4,908	26%	2,000	1,000	120	Planned Lift
Way Back / C3	6,925	6,573	352	1,844	20%	1,800	500	50	Planned Lift
Hidden Valley / DC4	7,087	6,053	1,034	5,611	19%	2,000	1,000	120	Planned Lift
Eastside / C3	7,669	6,583	1,086	5,998	19%	1,800	500	50	Planned Lift
Access-North / Conveyor	6,095	6,037	58	258	23%	600	120	12	Planned Lift
Conveyor-Upper	6,037	6,025	11	124	9%	600	120	12	Planned Lift
Conveyor-Lower	5,980	5,964	16	151	11%	600	120	12	Planned Lift
Temptation / C3	6,415	5,742	673	3,214	22%	1,800	500	50	Planned Lift
Access-South / C3	6,415	6,300	115	526	23%	1, 500	500	60	Planned Lift

Source: SE Group
Notes:
C3 = fixed-grip triple chairlift / *DC4* = detachable four-passenger chairlift

C. UPGRADED TERRAIN NETWORK

The planned lift network described above would improve access to Brundage's existing terrain as well as providing access to the terrain within the planned SUP boundary expansion. The amount of planned ski terrain is designed to balance with the lift network capacity, to create a balanced, operationally efficient resort. These upgrades would increase Brundage's ability to match the demand for lift-served skiing by visitors through increasing the diversity and expanse of terrain at Brundage. Within increasing demand, Brundage plans to expand terrain options for both novice, low intermediate, and intermediate terrain on the Eastside and advanced and expert terrain on Sargent's.

Brundage hopes to maintain their familiar low-density, family-friendly atmosphere all skiers enjoy through these terrain expansions instead of limited capacity or degrading the experience. The upgraded terrain network also provides a better match between terrain at Brundage and the skier demand for the various ability levels – from beginner to expert.

Overall, approximately 285 acres of traditional terrain are proposed. Approximately 241 acres of this terrain would be located on NFS lands, and 44 acres would be located on private lands. Of the terrain located on NFS lands, approximately 194 acres would be located within Brundage's existing SUP while 47 acres would be located within the planned SUP expansion.

Portions of the upgraded terrain network have been previously approved, as discussed in Chapter 3. These include Sargent's Mountain terrain pod (~110 acres of developed ski terrain and 14 acres of gladed terrain), Way Back terrain pod (~10 acres of developed ski terrain), Hidden Valley terrain pod (~34 acres of developed ski terrain and 25 acres of gladed terrain) and portions of the Bluebird/Centennial/Bear terrain pod (~17 acres of developed ski terrain and 22 acres of gladed terrain).

Note that since the approval of this terrain, some trails have been constructed and additional field fitting/terrain planning has occurred and resulted in different trail configurations. This changes the overall acreage of planned trails within each pod and explains the differences in planned terrain acreages discussed below versus the previous approval.

1. PLANNED TERRAIN UPGRADES

a) Eastside Pod

Eastside Lift and associated terrain is a planned expansion on the backside of Brundage opening approximately 56 acres of developed east-facing, lift-served named runs located entirely on NFS lands. These runs would be a mix of novice and intermediate terrain, allowing the majority of the skiers and riders at Brundage to access a larger portion of the resort. More novice, low intermediate and intermediate terrain would take pressure off the Easy Street and Easy Rider pod, Brundage's busy and often congested learning area. A circulation route back to the base area is designed from the top of Eastside through Hidden Valley.

The planned terrain would be located within an approximately 567-acre SUP expansion. The Eastside would provide Brundage with more novice and low intermediate terrain that is currently topographically limited within the existing SUP boundary. This terrain is important for skiers looking to progress their skills and stay engaged in the sport. This terrain would also allow Brundage to keep it low density, family-friendly feel as visitation and the surrounding Idaho population and economy grows.

Skiers would access the terrain directly off the Bluebird Express. The pod is planned to have four main runs. The northern most run (ES_01) in the Eastside pod is planned to be groomed on the lower half

and would act as the boundary for the lift-served area. The upper portion of that run would have a rope line in place for boundary control. Eastside pod trails are planned to have limited or no grading. A proposed connector trail from the top of Bluebird Lift would be an access road/power corridor/skier access back to Bluebird area.

An existing snowmobile trail called Lookout Trail provides access to the south of the planned Eastside pod. This trail is actively used for snowmobiling during ski area operating hours. The trail presents existing user conflict within Brundage's SUP area between skiers and riders in the Lakeview pod and snowmobiles as they reach the summit. This is not the desired condition as skiers and riders get off Lakeview Lift and snowmobilers reach the summit in the same vicinity.

It is Brundage's intent to have snowmobile access to the bottom of the Eastside pod. The Eastside Hut would give snowmobiles a destination – a place to eat, use the restroom and enjoy the National Forest. Brundage would allow snowmobile riders access to the Lookout by riding the lift up to the summit and back down for a viewing option from the top of the mountain. The Eastside pod would not intersect the Dead Horse Creek groomed snowmobile trail and planned trail ES_04 would not intersect the existing Lookout Trail; however, the existing snowmobile trail and planned ski trails could result in user conflicts.

b) Lift G Pod

Similar to the Eastside Lift, Lift G would also have four runs offering novice and intermediate skiers expanded access to the more moderate terrain available on the eastern portion of Sargent's Mountain. A portion of this terrain would be located in the 567-acre expanded SUP boundary. Total acreage of developed terrain in this pod would total approximately 40 acres and would be entirely on NFS lands. The terrain in this pod would be primarily traditional, developed ski runs. Skiers would be able to transition from the beginner-oriented base area to explore the more difficult terrain available higher up on the mountain.

c) Sargent's Pod

The Sargent's Pod – previously approved in the 1999 RMDP EA – is planned to provide access to new intermediate and advanced skiing. In addition to the seven developed trails that are proposed, Sargent's pod would support tree and glade skiing for those who desire expert level, off-piste terrain. An approximately 4,500- foot skier catchment trail would be included on the north side of Sargent Mountain to guide skiers on the higher elevation, off-piste terrain back to the proposed new trails. The catchment would be constructed over-the-snow. Because much of the terrain on Sargent's Mountain is naturally open, especially on the upper half of the mountain, minimal clearing would be required for the proposed trails. Approximately 82 acres of traditional terrain is planned in this pod and all trails would be located on NFS lands.

d) Way Back Pod

The Way Back Lift – also previously approved in the 1999 RMDP EA – is planned to serve as a transfer lift, providing skier conveyance between Sargent's Mountain and the resort's existing, lift-served terrain, it would be used primarily by guests passing from the proposed terrain on Sargent's Mountain back to the proposed Hidden Valley area. However, three trails, which are geared towards intermediate skiers, would be constructed to support a limited amount of round-trip skiing associated with the Way Back Lift. The Way Back pod would contain approximately 11 acres of developed terrain and would be located on NFS lands. This area is generally well covered with a mixed stand of timber and would require vegetation clearing in orderto develop the proposed ski trails.

e) Hidden Valley Pod

The main purpose of the Hidden Valley pod – previously approved in the 1999 RMDP EA – is to provide access to the Sargent's Mountain expansion area by transporting skiers from Brundage's base area to the ridge that separates Sargent's terrain and Hidden Valley's terrain. Along with this, the pod would facilitate progression from the beginner's terrain to more intermediate terrain, as it would support round-trip skiing from the base to the top of the ridgeline. Approximately 12 acres of developed terrain are planned in this area. All trails would be located on NFS lands. Overall, the Hidden Valley pod would enhance Brundage's out-of-base lift capacity and dispersal of guests on the mountain. A novice route is also planned from the top of the Eastside Lift, north along the ridge to connect into planned run SG_07, SG_08 or *North Boundary*.

f) Temptation and Access-South Pod

The Temptation and Access-South pods are located in the southern proposed expansion, offering a more remote and secluded experience due to their distance from the main portion of the mountain. The terrain includes a variety of intermediate and advanced options. The trails within these pods would offer skiers a mixture of developed and undeveloped skiing, with both traditional groomed runs as well as a more natural skiing experience, with gladed and undeveloped terrain present. Approximately 53 acres of terrain would be constructed in the Temptation pod. Of this terrain, approximately 18 acres would be located on NFS lands and 35 acres would be located on private lands.

g) Small Connectors/Improvements and Beginner Terrain

As this Upgrade Plan is implemented, Brundage plans to undertake strategic grading, trail widening, and trail lengthening projects on select trails. These projects are designed to, among other things, improve skier/rider circulation; eliminate steep, abrupt pitches; and improve access to trails. This work would include removal of some trees, addition of culverts and minor grading. These connector trails would total approximately 22 acres of terrain and would be entirely on NFS lands. These locations include:

- The bottom of runs *Hotshot* and *Kickback* where they flow into the Lakeview Lift
- A new mountain traverse off Centennial Lift to the Base Area
- A connector trail from the Centennial Lift to the planned Eastside terrain
- New connector trails from: the top terminal of Bluebird Express Lift; off of *Temptation*; and from *Temptation* to *45th Parallel*

In addition to these connector trails, there would be additional beginner terrain created and improved adjacent to the Easy Street Lift. These additions/improvements would total approximately 9 acres and would be located on private land.

h) Gladed Terrain

It is anticipated that some tree thinning would occur in some selected stands of trees in between and on the sides of the planned developed terrain for forest health, vegetation management and fuels reduction. Currently, the subalpine fir tree that is prevalent in the Brundage area, is seeing significant mortality. As a result, many of the tree islands at Brundage could be thinned to improve vegetation growth. Brundage has worked with the Forest Service to develop the Brundage Vegetation Management Plan (approved through a DN/FONSI in 2008 VMP EA). They would continue to work with their Forest Service counterparts to assemble a thinning plan that is responsive to both the resort's operational and recreational needs, as well as to any forest health objectives that may beimportant. The thinning plan would address elements such as, but not limited to: preservation of selected species, size selection, tree

mortality (i.e., targeting dead/dying trees), percent removal, and habitat characteristics. These targeted areas of thinning would be identified by taking a wholistic view of the forest health at Brundage and circumstances to achieve the desired surface. This trail work, including grading, would occur in areas shown asplanned trails in Figure 8.

i) Fun Park Enhancements

Bear Chair area would continue to develop on kid-centric, family-oriented features and themes in this zone. Brundage wishes to focus these types of activities and features in the Bear Chair pod, rather than in the Way Back and Hidden Valley areas as previously approved.

2. PLANNED RECREATION AREAS

A large portion of Brundage's SUP is currently not accessible by lift. Brundage plans to begin managing these areas as "recreation areas", or patrolled, side-country terrain accessible by hiking, skinning, snowshoeing or potentially snowcat. Brundage plans to operate two of these areas.

a) Sargent's Recreation Area

Sargent's Mountain is currently a popular backcountry area for skiers and riders. Brundage plans to provide guests managed access to this area prior to lift installation. The Sargent's Recreation Area would start adjacent to Brundage's existing terrain edge (i.e., to the north of *North Boundary Trail* and *Goat Trail*). As Brundage develops the Sargent's and Way Back lifts and terrain, Brundage would modify the boundary of the Recreation Zone to encompass the area outside of the developed terrain network. The zone shown on Figure 8 would be the final phase of the recreation area.

Sargent's Mountain is some of the most remote terrain within Brundage's SUP. Brundage plans to make this area accessible to the most adventurous guests. Prior to construction of the Sargent's Lift, guests would be able to access this terrain either by hiking from the top of Bluebird Express or hiking up from the bottom. As with the lower Lakeview pod, Brundage may begin un-guided cat skiing operations to this area if demand is sufficient either by operating round trips, or by running a snowcat shuttle Brundage also plans to install a temporary warming hut within the South Sargent's terrain pod as detailed in Upgrade Guest Service Facilities section of this chapter.

b) Lower Lakeview Recreation Area

Brundage plans to open the terrain within its permit area below and to the south of the Lakeview Lift. Brundage plans to open this area to hiking access from the top of Temptation Lift and from the bottom of Lakeview Lift. In the future, the resort may also provide un-guided cat skiing operations in this area in accordance with the SUP and operating plan.

c) Nordic and Snowshoe Areas

Two Nordic ski and snowshoe areas have been identified on the lower part of Sargent's and adjacent to Temptation Knob. These areas have been identified as an opportunity to offer Brundage guests another winter experience, Nordicskiing. Exact alignments would be determined prior to NEPA.

3. TERRAIN VARIETY

As discussed in Chapter 2, terrain variety is the key factor in evaluating the quality of the actual skiing and riding (as opposed to lift quality, restaurant quality, or any other factor). The implication of the importance of terrain variety is that a resort must have a diverse, interesting, and well-designed developed trail system, but also have a wide variety of alternate style terrain, such as mogul runs, bowls, trees, open parks, in-bounds "backcountry style" hike-to terrain, and terrain parks and pipes.

The developed trail network is critical to the recreation experience at any resort. Several locations throughout Brundage have been identified as needing widening, grading, or snowmaking to more effectively use this terrain (see Section C.1.G – Small Connectors/Improvements and Beginner Terrain). In addition, a variety of trail extensions are also planned. Overall, the developed alpine trail network would increase to approximately 526 acres.

The 285-acre expansion of the developed terrain network would provide a substantial improvement in terrain variety at Brundage. The new developed terrain would provide a better diversity of pitches and trail settings (i.e., more remote-feeling trails). The new undeveloped terrain would also provide a greater quantity of glades, use more diverse terrain for glading, and provide a more remote glade skiing experience. These glades would also be more accessible for guests. These expansions and improvements, detailed below, would help Brundage achieve its goal of improvement, diversification, and expansion of the lift and terrain network to bring it in line with current guest expectations.

4. TERRAIN DISTRIBUTION BY ABILITY LEVEL

A terrain distribution analysis by skier ability level for Brundage's upgraded trail network demonstrates a better match between terrain at Brundage and the needs of its market, while accommodating the full range of skier ability levels – from beginner to expert. While the analysis shows a surplus of novice and intermediate terrain, this is largely due to the quantity of skiways that are required for circulation around the mountain. There are slight deficiencies in beginner, low intermediate, advanced, and expert terrain in proportion to the skier market.

While the planned improvements to the terrain network still have deficiencies compared to Brundage's goals, the quantity of available terrain for each ability level has increased and still represents an improvement from existing conditions. The planned beginner terrain would expand from 0.3 acre to 1.1 acres; while this would only be an increase of 0.8 acres, it would effectively triple the quantity of available beginner terrain. Furthermore, the carpet installations would improve access to and circulation through this beginner terrain, which would improve the utilization of beginner terrain. Novice terrain would substantially expand, from 11.6 acres under existing conditions to 97.1 planned acres. While the proportion of low intermediate terrain relative to the skier market would decrease, this is a numerical change based on the increase of other available terrain types. All existing low intermediate terrain would remain available to use (approximately 50 acres).

Under the Upgrade Plan, the quantity of intermediate terrain would increase from 141.8 acres to 246.4 acres. While this is higher than suggested, intermediate terrain serves as foundational terrain for a resort because it is often the most heavily used terrain: novice and/or low intermediate skiers can use the terrain to progress their abilities while advanced and expert skiers can use it to travel to their desired location.

They may also use it because intermediate terrain is generally difficult enough for higher level skiers to still enjoy using. Developed advanced terrain would decrease relative to the skier market (11 percent to 9 percent) but overall quantity of this terrain would increase from 41 acres to 59.7 acres. This is an increase of almost 50 percent relative to existing conditions and would be an improvement in the availability of this terrain for advanced skiers. Expert terrain would be close to the suggested skier market percentage and would increase from 20.9 acres to 66.3 acres. This would be a substantial improvement in availability for expert skiers. In addition, as noted previously, the availability of undeveloped terrain not accounted for in this calculation helps mitigate minor deviations from the market for advanced and expert skiers.

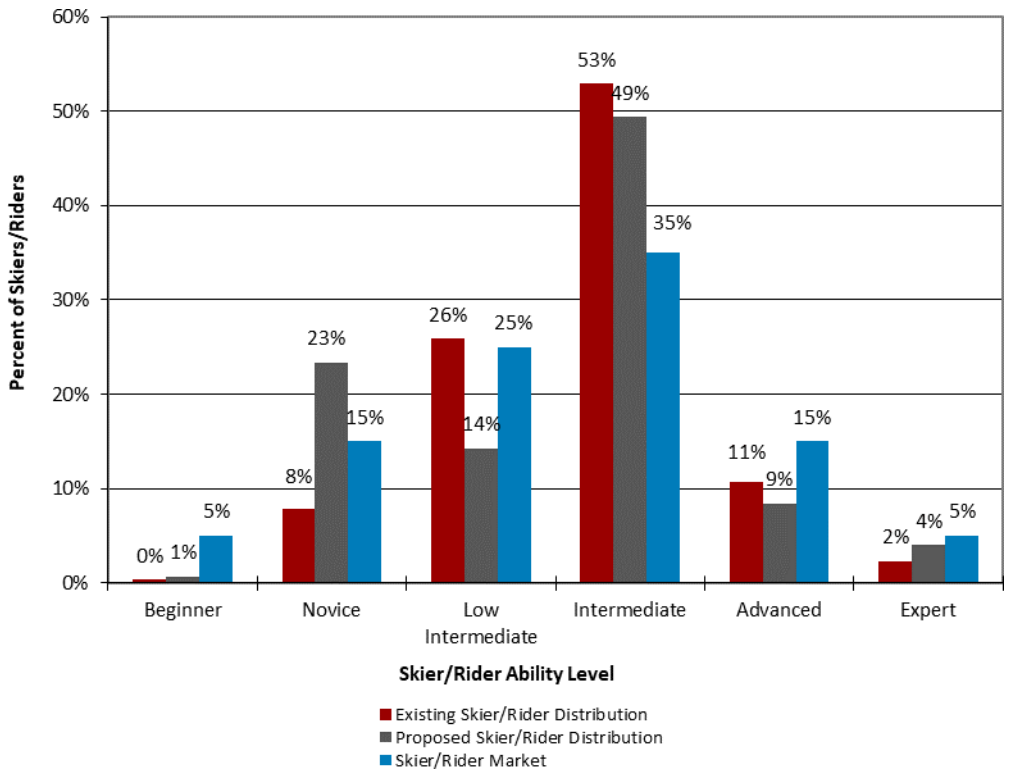
Overall, the change in terrain distribution and increase in available terrain would help Brundage meet the goal of the improvement, diversification, and expansion of the lift and terrain network to bring it in line with current guest expectations. It would also help meet the goal of the development of learning opportunities to position Brundage as a beginner and novice, family-friendly resort.

Table 11. Terrain Distribution by Ability Level—Upgrade Plan

Skier/Rider Ability Level	Trail Area (acres)	Skier/Rider Capacity (guests)	Skier/Rider Distribution (%)	Skier/Rider Market (%)
Beginner	1.1	34	1%	5%
Novice	97.1	1,165	23%	15%
Low Intermediate	50.9	712	14%	25%
Intermediate	246.4	2,464	49%	35%
Advanced	59.7	418	9%	15%
Expert	70.7	212	4%	5%
TOTAL	**526.0**	**5,006**	**100%**	**100%**

Source: SE Group

Chart 3. Terrain Distribution by Ability Level—Upgrade Plan



D. UPGRADED CAPACITY ANALYSIS

1. COMFORTABLE CARRYING CAPACITY

The calculation of Brundage's CCC under the Upgrade Plan is an important measure by which the resort's overall balance of facilities can be evaluated and planned. As discussed, CCC is a measure of the daily capacity of the resort and as such represents the planning parameter around which the rest of the resort components should be balanced. The fully built-out CCC of the resort is projected to be 6,570 guests.

Refer to Table 12 for details about the calculated CCC of 6,570 guests.

Table 12. Daily Lift Capacity—Upgrade Plan

Lift Name, Lift Type	Slope Length (ft.)	Vertical Rise (ft.)	Actual Capacity (pph)	Operating Hours (hrs.)	Up-Mountain Access Role (%)	Misloading/ Lift Stoppages (%)	Adjusted Hourly (pph)	VTF/ Day (000)	Vertical Demand (ft./day)	Daily Lift Capacity (guests)
Bluebird Express / DC4	5,693	1,550	1,800	7.00	0	5	1,710	18,549	20,780	890
Easy Street / C3	697	94	1,200	7.00	0	15	1,020	671	3,247	210
Bear Chair / C3	2,559	622	1,800	7.00	0	10	1,620	7,057	8,534	830
Centennial / DC4	6,161	1,641	1,800	6.50	30	10	1,080	11,519	17,516	660
Lakeview Lift / C3	3,371	816	1,800	5.50	0	10	1,620	7,275	12,257	590
Lift G / C3	4,468	905	1,500	5.50	0	10	1,350	6,720	13,666	490
Sargent's / DC4	4,908	1,226	2,000	6.50	0	5	1,900	15,139	21,396	710
Way Back / C3	1,844	352	1,800	7.00	40	10	900	2,217	11,392	190
Hidden Valley / DC4	5,611	1,034	2,000	7.00	50	5	900	6,513	13,460	480
Eastside / C3	5,998	1,086	1,800	6.00	20	10	1,260	8,208	10,682	770
Access-North / Conveyor	258	58	600	7.00	80	5	90	37	2,639	10
Conveyor-Upper	124	11	600	7.00	0	5	570	45	762	60
Conveyor-Lower	151	16	600	7.00	0	5	570	64	980	70
Temptation / C3	3,214	673	1,800	7.00	20	10	1,260	5,940	9,813	610
Access-South / C3	526	115	1,500	7.00	100	0	0	0	0	0
TOTAL	**45,585**		**22,600**				**15,850**	**89,954**		**6,570**

Source: SE Group
Notes:
C3 = fixed-grip triple chairlift / *DC4* = detachable four-passenger chairlift

2. DENSITY ANALYSIS

As discussed in Chapter 2, an important aspect of resort design is the balancing of uphill lift capacity with downhill trail capacity and evaluating overall resort efficiency. An in-depth discussion of the density analysis specifics, including the lift and terrain network, can be found in Chapter 2. The density analysis for the Upgrade Plan is illustrated in Table 13.

a) Lift Network Efficiency

The Lift Network Efficiency for the Brundage Upgrade Plan is 584, a slight decrease from existing conditions of 620. This is primarily attributable to the minimal increase in CCC from the new lifts used partially as access lifts to get to other parts of the mountain. For example, Hidden Valley Lift has a 50% access reduction on the lift, as shown in Table 12. This is due to the fact that skiers and riders would ride this lift to access Sargent's terrain. Although this is a minor decrease, in lift network efficiency, these lifts help Brundage achieve their goals of maintaining the familiar low-density, family-friendly atmosphere and providing improvement, diversification, and expansion of the lift and terrain network to bring in line with future growth and guest expectations. 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.

b) Terrain Network Efficiency

The overall density analysis would increase with the Upgrade Plan from 61 percent to 65 percent, therefore increasing the terrain network efficiency. Because skier access to Brundage's terrain would be improved (through decreased lift ride times and improved access to the base area), the number of skiers on any given part of terrain would be increased, thus improving the efficiency of the terrain network. As discussed previously, current densities are so low, the increase in density that would result from planned conditions is not anticipated to negatively impact the guest experience.

Table 13. Density Analysis—Upgrade Plan

Lift Name, Lift Type	CCC	Guest Dispersement				Density Analysis				Density Index (%)
		Support Facility/ Milling (guests)	Lift Lines (guests)	On Lift (guests)	On Terrain (guests)	Terrain Area (acres)	Terrain Density (guests/acre)	Target Trail Density (guests/acre)	Diff. (+/-)	
Bluebird Express / DC4	890	223	143	162	362	146.3	2	9	-7	22%
Easy Street / C3	210	84	51	30	45	4.0	11	12	-1	92%
Bear Chair / C3	830	208	81	138	403	34.6	12	13	-1	92%
Centennial / DC4	660	165	90	111	294	78.4	4	10	-6	40%
Lakeview Lift / C3	590	148	135	182	125	29.2	4	10	-6	40%
Lift G / C3	490	123	45	201	121	48.0	3	9	-6	33%
Sargent's / DC4	710	178	63	155	314	80.7	4	7	-3	57%
Way Back / C3	190	48	30	55	57	7.6	7	11	-4	64%
Hidden Valley / DC4	480	120	30	84	246	16.4	15	13	2	115%
Eastside / C3	770	193	42	252	283	48.1	6	11	-5	55%
Access-North / Conveyor	10	3	3	3	1	0.5	2	12	-10	17%
Conveyor-Upper	60	18	19	10	13	0.5	25	30	-5	83%
Conveyor-Lower	70	21	19	12	18	0.6	29	30	-1	97%
Temptation / C3	610	153	42	135	280	27.8	10	11	-1	91%
Access-South / C3	0	0	0	0	0	0.0	0	0	0	0%
	6,570	**1,685**	**793**	**1,530**	**2,562**	**526.0**	**7**	**11**	**-4**	**65%**

Source: SE Group
Notes:
C3 = fixed-grip triple chairlift / *DC4* = detachable four-passenger chairlift

E. UPGRADED GUEST SERVICES FACILITIES, FOOD SERVICE SEATING & SPACE USE ANALYSIS

1. GUEST SERVICES

The planned conditions for guest services at Brundage include upgrades and construction of base area facilities, as well as a number of on-mountain huts and lodges.

a) Base Area and Temptation Knob

Base area guest service facilities are planned to be upgraded and constructed in the Base Area, Lower Base Area and Temptation Knob. These facilities are all located on private land. A new Day Lodge is planned adjacent to the base of the Bluebird Express Lift to provide an updated guest experience. The Kids Center complex is planned for upgrade and a new Ski Patrol building is also planned in this area. A smaller Day Lodge is planned at the bottom terminal of Easy Street Lift to accommodate beginner skiers and riders.

A Day Lodge is also planned on Temptation Knob to help service the southern portion of Brundage's planned terrain. Note that a variety of these facilities (new Day Lodge, Ski Patrol building) arepreviously approved; however, since the signing of the 1999 DN/FONSI, Brundage underwent a land exchange and all base area facilities are now on private lands and do not require NEPA approval.

Brundage also plans to construct a snowmobile bypass trail adjacent to the base area. Brundage will construct the snowmobile bypass trail, but will not maintain this trail in the summer or winter. It will be maintained by the snowmobile association.

b) On-Mountain Facilities

Guest Service Facilities

Four new on-mountain facilities are planned at the top of Bluebird, in the Eastside pod, top of Lakeview and top of Sargent's. These facilities will follow Forest Service standard outlined in the BEIG as noted in Appendix D.

At the top of Bluebird Lift, the Summit Hut, is planned as the main on-mountain guest service facility. This building was approved to be approximately 6,500 square feet with a 3,000-square-foot deck. It would provide great viewing of the surrounding mountains, as well as provide a central location for guest services on-mountain. The facility would be located on/near the high point south of the Bluebird top terminal. This location could also be used for special events or as a central on-mountain facility for summer activities.

The current ski patrol outpost at the Bluebird Express would likely be relocated to accommodate the Summit Hut, either as part of the Summit Hut or as a separate building. This facilitywas originally approved in the 1999 DN/FONSI as the "Mountain Top Restaurant" and is discussed in additional detail in Chapter 3. While resource analysis was completed for this project, certain resource conditions (e.g., watershed and wildlife) may have changed since the 1999 DN/FONSI was published.

Therefore, additional site-specific analysis will likely be required prior to implementation of this facility. In addition, further site review and building design that has occurred since approval indicates that this facility would likely be smaller than approved.

The Eastside guest service facility is planned as a warming hut or picnic gazebo with seating and limited food service and restrooms. Potential locations could include the bottom of Eastside Lift or a third of the way down the Eastside pod on the cliff band within the existing SUP

The Lakeview and Sargent's huts are planned to be similar to Eastside with seating, limited food service and restrooms. The huts are planned at the top of the Lakeview and Sargent's pods to take advantage of the surrounding views and to service guests on the northern and southern portion of Brundage. The Sargent's warming hut is previously approved in the 1999 DN/FONSI.

Restrooms similar to what was installed at Bears Den, would likely accompany huts, or a septic system would be installed. In addition to the bathrooms that would accompany these huts, the 2008 Brundage Mountain Resort Toilet and Communication Project Decision Memo approved three vault toilets at the top of Bear Lift, Lakeview Lift and Bluebird Express to replace portable toilets. Additional restrooms are planned at the bottom of Lakeview Lift and top of Centennial Lift. Potable water would be transported to the sites when needed. Power would be supplied by a combination of generator and renewable energy.

Sargent's Patrol Station

A ski patrol outpost, which was also previously approved in the 1999 DN/FONSI, is planned at the top of Sargent's. This facility would be approximately 500 square feet in size and would include a variety of ski patrol equipment.

Bears Den Expansion

The Bear's Den has seen increasing guest usage and now requires an upgrade to food and beverage service. The current facility is planned to be expanded to accommodate more guests. Brundage has identified a septic field area and plans to plumb potable water to the facility from the existing water tank that islocated on the *Red Fox* run.

2. SPACE USE ANALYSIS

The following section provides recommended ranges for guest service facility space based on target market averages for space use by service function. Sufficient guest service space should be provided to accommodate the Upgrade Plan CCC of 6,570 guests per day. As noted in Chapter 2, rental/repair, retail sales, bar/lounge, restaurant seating, kitchen/scramble, rest rooms, ski patrol, and circulation/waste space are all undersized for the current CCC.

To address these deficiencies, Brundage is planning to construct a variety of base area and on mountain facilities (described above) to meet the recommended guest service space ranges for their upgrade CCC. At this time, the actual size of these facilities has not been estimated due to lack of site-specific planning; however, it is anticipated that Brundage would be within the recommended ranges for guest service facilities following construction of all planned facilities.

Table 14 shows overall resort space use sizing and programming recommendations (see Appendix A for recommendations by each individual area).

Table 14. Space Use Recommendations—Resort Total—Upgrade Plan

Service Function	Recommended Range	
	Low	High
Ticket Sales/Guest Services	1,480	1,800
Public Lockers	4,440	5,430
Rentals/Repair	10,520	11,830
Retail Sales	3,110	3,800
Bar/lounge	4,650	5,690
Adult Ski School	2,360	2,890
Kid's Ski School	4,730	5,790
Restaurant Seating	21,740	26,560
Kitchen/Scramble	12,430	15,170
Rest rooms	6,200	7,590
Ski Patrol	2,490	3,030
Administration	3,110	3,800
Employee Lockers/Lounge	1,240	1,520
Storage	3,540	5,210
Circulation/Waste	10,600	15,660
TOTAL SQUARE FEET	**92,640**	**115,770**

Source: SE Group

The proposed guest service facilities would provide a variety of additional guest service space and food service options to guests. These facilities would improve the guest experience and help Brundage meet their goal of increasing base area guest service space and associated parking (including for families with children and new skiers) as well as to bring the maintenance, administrative, and ski patrol facility size in line with other planned expansions. As these facilities would also be used to support Brundage's planned multi-season recreation, they would support the objective to construct additional four-season recreation activities such as mountain biking, hiking, and more.

3. FOOD SERVICE SEATING

Food service seating would be provided on the private land at the base area, as well as the planned on-mountain facilities.

The following table summarizes the seating requirements based on a logical distribution of the CCC to each service building/location. 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 15.

Additional outdoor seating will be available. The number of seats at full building will be determined as architecture plans are finalized prior to NEPA analysis for a given facility. As shown in Table 15, a total of 1,971 seats would be required at full buildout of the Upgrade Plan.

Table 15. Recommend Restaurant Seats—Upgrade Plan

	Base Area	Lower Base	Temptation Lodge	On-Mountain[1]	Total
Existing Indoor and Outdoor Seats	657	--	--	126	783
Total Required Seats	1,112	163	311	385	1,971

Source: SE Group

Note:

[1] – On-mountain existing totals only include Bear's Den seats. Additional on-mountain seats are planned and are not represented in the total.

F. UPGRADED PARKING CAPACITY AND RESORT ACCESS

The expansion of the lift and terrain network would result in an increase of CCC to 6,570 guests. Brundage plans to improve existing parking areas and construct additional parking in the base area on private lands in order to provide parking under its increased CCC. Currently Brundage has parking for approximately 1,575 vehicles.

It is assumed under full build-out of the Base Village, 1,200 guests would originate from base area lodging and 10% (657 guests) would use transit, shuttles or be dropped off. These guests would not require parking spaces and were not included in the parking analysis.

It is assumed that the remaining 4,713 guests would be driving to Brundage and require parking. Brundage plans to improve existing parking facilities at the Upper and Lower parking lots and add parking adjacent to the bottom terminal of Bear Chair, off of Brundage Mountain Road and adjacent to Temptation Lift bottom terminal. It is recommended Brundage have 2,240 parking spaces to provide access for a design day. See the table below for details on the parking analysis and recommendations.

Table 16. Recommended Parking—Upgrade Plan

	Total
CCC	6,570
Number of guests from Base Village lodging	1,200
Number of guests from transit/shuttles/drop off (10%)	657
Number of guests requiring parking	4,713
Number of guests arriving by car (95%)	4,477
Number of guests arriving by bus (5%)	236
Required car parking spaces (average 2.3 guests per car)	1,947
Required bus parking spaces (35 guests per bus; 1 bus = 4.5 cars)	30
Required employee car parking spaces	263
Total required spaces	2,240

Source: SE Group

Brundage is planning to include additional parking with the expanded base area guest service facilities discussed previously. Similar to the discussion of those facilities, the actual size of the parking expansion is not identified here due to lack of site-specific planning. Brundage expects that adequate parking will be supplied at full project buildout. Therefore, Brundage expects these projects will contribute to their goals to develop the guest arrival process to be easy, efficient, and conducive to accessing the resort terrain network as well as to increase the size and quality of day skier and overnight guest service spaces.

G. UPGRADED RESORT OPERATIONS

1. SNOWMAKING

The expansion of the existing snowmaking system is an important part of the Upgrade Plan. Currently, Brundage has limited snowmaking capacity on private land to patch high use areas and the *Easy Street* run. Brundage plans to extend this capability to a larger area that would allow for a more consistent opening date for the winter season, provide additional capability to "patch" areas during periods of low snow or to combat against wind and solar effects on the snow, and provide consistent snow surface conditions. This area is expected to cover approximately 115 acres with water supplied from existing water rights owned by Brundage Mountain Company or acquired prior to NEPA analysis. Planned snowmaking would occur on the following trails:

- Existing trails *Main Street, Alpine, 45th Parallel, Bear, Lower Bear, Griz, Centennial Lane, Sensation, Temptation, Lakeview Ridge, Easy Way, Ridge Skiway*, *Race Course* and *Cat Track*.
- Planned trails *T 02, T 05*, and *HV 01*.

The primary goal of the upgraded snowmaking system is to extend snowmaking from the top of Bluebird Express to the base area, which would provide coverage on beginner and novice terrain and ensure enough snowmaking coverage for circulation during periods of low snow. Top-to-bottom coverageof *Main Street, Alpine* and *45th Parallel* will ensure consistent snow surface on popular runs. The planned snowmaking coverage will help meet Brundage's goal to improve snow quality and resiliency of the resort during low snow years.

Assuming 115 acres of snowmaking coverage, it is estimated that the proposed snowmaking system would require approximately 123 acre-feet of water at full buildout. However, snowmaking is not considered to be 100% consumptive, as the majority of the water used for snowmaking is returned to the watershed through runoff. There are two sources of water loss: first, through some loss due to evaporation during the snowmaking process, and second, through further evaporation and sublimation loss while the snow resides in the natural snowpack.

Other factors that can influence consumptive loss percentage are soil type, temperature, aspect, and wind. Numerous studies have been conducted over the years at mountain resorts to determine the percent loss through these processes.[1] Across the Rocky Mountain region, it is generally accepted that around 80% of the water returns to streams, lakes or rivers,while around 20% is lost to evaporation and sublimation).[2]

Based on other consumptive losses analyzed in the local region, the consumptive loss factor for the Brundage is anticipated to be 28% for modeling purposes. Sources for the water will be fully analyzed through the USFS NEPA review process. Thus, theestimated consumptive water use of the new snowmaking system would be approximately 35 acre-feet.

[1] Vanham, D., Fleischhacker, E. and Rauch, W.; Impact of snowmaking on alpine water resources management under present and climate change conditions. Water Sci Technol 1 May 2009; 59 (9): 1793–1801. doi: https://doi.org/10.2166/wst.2009.211
Hirsch, R. 1988. The Hydrologic Impacts From the Diversion of Winter Flows of Cordova Creek for Snowmaking Purposes. Available at http://www.ose.state.nm.us/Pub/HydrologyReports/TDH-88-6.pdf. Last Accessed 10/5/2018 .
Rodriguez, Sylvia. "Impact of the Ski Industry on the Rio Hondo Watershed." Annals of Tourism Research 14, no. 1 (1987): 88–103. https://doi.org/10.1016/0160-7383(87)90049-1.

[2] Colorado Ski Country USA and Wright Water Engineers. 1986. A Final Report on the Colorado Ski Country USA Water Management Research Project.

Snowmaking Efficiency

The goal of an efficient snowmaking system is to balance the coverage needs and targeted opening date against the results of a detailed weather analysis that determines number of hours of optimal snowmaking conditions prior to the opening date. The best way to maximize both the efficiency and effectiveness of a snowmaking system is to have a system (including water supply/storage) that is robust enough to make the required amount of snow during the available windows of prime weather conditions. The next step is to determine how much system capacity is needed to be able to achieve these targets. System capacity is characterized as water supply, pumping capacity, and air pressure. If the capacity is not high enough to take advantage of the windows of prime weather, snowmaking occurs during less optimal and less efficient conditions. This means more water and power usage and decreasing overall efficiency of the snowmaking system.

2. MAINTENANCE FACILITIES

The maintenance facility is currently a two-story facility (approximately 6,400 square feet) with 4 large bays and 2 smaller bays. With the base area development, the maintenance facility is planned to move adjacent to the Temptation Lift bottom terminal and parking on private land. Additional space may be needed for more bays and storage to accommodate the additional terrain in the Upgrade Plan and to improve operations.

3. WATER

Brundage's existing water rights will continue to provide a majority of water to Brundage. Additional private land wells may be developed. Additional water could be obtained via an approved water right application between the Forest Service and the Idaho Department of Water Resources.

Brundage is permitting a new 10,000 square foot Large Soil Absorption System (LSAS) using a new drain field located beneath the Bluebird Express that can be used for expanded residential development prior to phasing a new wastewater treatment facility.

Potable water and fire water will be supplied through a new water tank and system centered in the North End. Test wells have been drilled and proven to provide potable water for Brundage with existing water rights. Permanent wells are located on private land and are planned to be constructed followed by a 400,000-gallon water storage tank in the Hidden Valley pod.

Potable water from the North End is planned to supply water to guest services facilities at the top of the mountain. Waterlines would be buried either up *Main Street*, *Alpine* or in mountain roads. Prior to NEPA submittal, design and alignments would be determined.

Potable water to Bear's Den is planned from the existing well at the bottom of Centennial and Bear Chair.The waterline would be buried on *Lower Bear* and *Bear* trails. The existing water tank adjacent to *Red Fox* trail currently supplies the base lodge. When the new base lodge is constructed, the water tank would be used for snowmaking and fire suppression. The 100,000-gallon water storage facility is also aging and will require an upgrade with greater capacity soon.

4. MOUNTAIN ROADS

A mountain road network ensures access to all of Brundage's on-mountain infrastructure and allows FS access for any fire needs. Under planned conditions, approximately 1 mile of mountain roads would be added to Brundage's mountain road network in the Hidden Valley pod and on the ridgeline between Bluebird Express and Sargent's. A portion of these roads and surrounding network of mountain roads are part of the National Forest Road System. Upgrade mountain roads are shown on Figure 10

5. INFRASTRUCTURE AND UTILITIES

Infrastructure and utilities are planned to be installed or upgraded. Power to the top terminal of Eastside Lift will require an upgrade of the existing single-phase line from the top of Centennial lift to the top of the Bluebird Express, to a three phase. The upgraded line will then extend over to the top of the Eastside lift within the corridor of the new access road. All power will be underground and follow existing/proposed roads.

With the development of the north portion of the private land in the Brundage Base Village, the existing mountain road and fire access would be slightly modified. Access would still occur off of Goose Lake Road and would continue on paved road through the north end and enter Forest Service lands at the same,existing location.

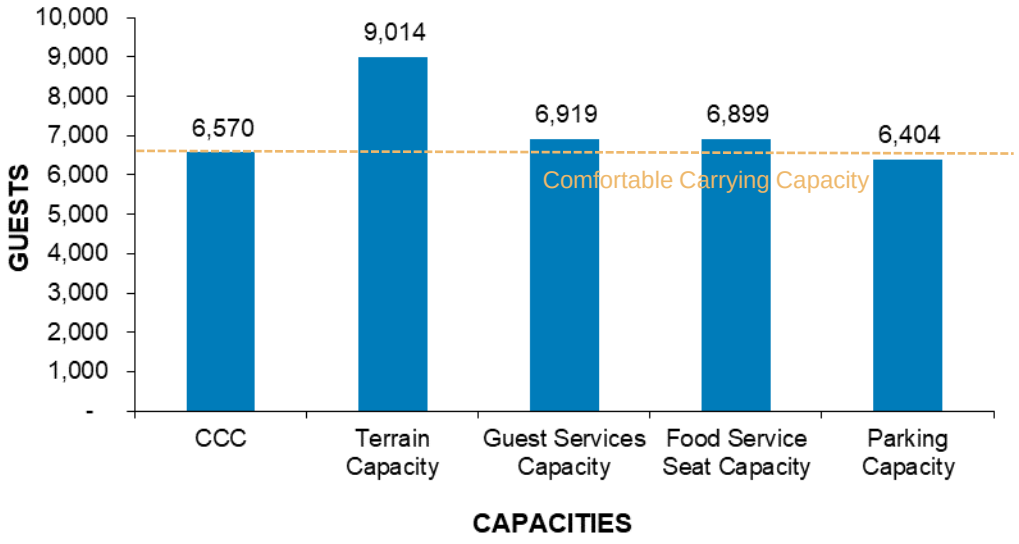
H. RESORT CAPACITY BALANCE AND LIMITING FACTORS

As Chart 4 shows, the planned upgrade conditions at Brundage would be a balanced resort, with all components balanced to the upgraded capacity. Compared to existing conditions, the overall resort will have an improved balance of guest service facilities with other capacities as a result of the additional base area space, as well as a series of on-mountain huts. These spaces include additional restaurant seats – another area of deficiency under the existing conditions.

Terrain capacity, and more importantly, circulation is in balance and improved under the planned conditions. A novice circulation route to the Eastside and the backside of Sargent's would open great portions of the resort to a larger guest population. Additional novice and low intermediate terrain in the Eastside would provide better terrain variety for skiers looking to develop their skills and stay engaged in the sport. The Eastside terrain will also expand the terrain network to keep the low-density skiing and riding experience. Parking, lodging and transit capacity is balanced to the upgraded capacity, with parking built to meet the need as projects are implemented.

Partnerships with regional and local transit could help boost ridership from nearby McCall or lodging. This could help offset the need for more parking. Overall, it is anticipated that the projects identified in this document would lead to a better-balanced resort with quality guest services and recreational opportunities. This would help Brundage achieve the goals and vision identified in Chapter 1.

Chart 4. Resort Capacity—Upgrade Plan



I. UPGRADED SUMMER AND MULTI-SEASON OPERATIONS

1. SUMMER AND MULTI-SEASON ACTIVITIES AND FACILITIES

Brundage's upgraded summer and multi-season activities commensurate with current market demand for forest-based recreation in the greater McCall region. Brundage's vision for the summer months is to provide access to quality recreational experience on the PNF. These recreation opportunities include hiking and biking, as well as disc golf, canopy tours, and outdoor events, among other activities. Details on planned upgrades are presented below, but specific project locations for some activities located on NFS lands will be developed during site-specific design prior to NEPA process. If necessary, MDP amendments and revisions will include a to description of the project and its effects to other accepted MDP projects.[1] This approach has been used on Forest Service lands across the United States since the 2011 SAROEA amended the National Forest Ski Area Permit Act of 1986. These summer and multi-season projects are anticipated to be implemented in accordance with the setting and desired experience of each zone, as described in the following section.

There are three distinct opportunity areas at Brundage: private land opportunities, overall mountain opportunities, and outer mountain opportunities, which offer a range of multi-season activities, programs and events appropriately located based on the underlaying summer zone. These areas can be seen on the Figure 12: Summer Opportunities. The outer mountain opportunities, which would be within or adjacent to the French Creek IRA, might include things like hiking and biking trails, guided hikes and interpretive nature walks, adventure races, and wilderness skills camps. These activities are expected to be compatible with the character of the French Creek IRA. Providing a wide variety of mountain experiences will be an asset for guests and help support the future base area development.

Mountain biking is a large component of the lift-served summer operations at Brundage. Additional planning has led to proposed changes in the mountain bike routes as shown in the 1999 RMDP. In general, the summer trails network at Brundage can be conceptualized into pods. The downhill and flow trail network is planned around the Bluebird Lift for easy lift access via the Bluebird Lift. The cross-country mountain biking and multi-use/hiking trail network is planned to occur outside of the downhill and flow trail network to avoid user conflict. A destination trail to Sargent's is planned to offer a day adventure hike for Brundage guests. The Eastside would have additional cross-country and multi-use/hiking trails that meet the roadless characteristics below Hartley Meadow Road.

In addition to an expanded trails network, a ropes course, zipline or canopy tour is planned from Temptation Saddle area to Bear Chair. Due to the everchanging summer activities market, site specific planning will be completed when capital is available and prior to the start of the NEPA process. This planning process follows guidance provided in FSM 2343.14 – Additional Seasonal and Year-Round Recreation at Ski Areas which establishes "zones to guide placement and design of additional seasonal or year-round recreation facilities, basing the zones on the existing natural setting and level of development to support snow sports." Summer activities tend to require more site-specific planning to account for micro terrain and field fitting compared to winter infrastructure such as lifts which have to be located in specific locations to account for topography, fall line and circulation. To this end, the Forest Service has allowed flexibility in siting summer activities within appropriate zones until a formal NEPA process commences.

[1] This MDP is intended to be a dynamic document. Typical amendments that would not warrant a complete update of the MDP could include realignments of lifts, relocation of trail systems, vegetative treatments, road improvements, changes in the location and capacity of facilities, or new projects that were not anticipated at the time this document was created.

An additional 9-hole course disc golf course has been previously approved on NFS lands. This addition would be an extension of the existing 9-hole disc golf course. Both the existing and previously approved disc golf courses are located near the bottom terminal of Bear Chair, in a Zone 2 area. Multi-use trails, single track trails, and summer trail bridges for mountain biking and hiking were also previously approved in the 1999 DN/FONSI.

The RMDP also identified camping, scenic chairlift rides and summer concerts which Brundage has operated for many years. Much of this now occurs on private land including all of the base area facilities supporting these operations. Brundage has identified opportunities which are synergistic to current operations which may include zip lines, ropes courses, disc golf course, and other events which have become more prevalent at many ski resorts across the country.

2. RECREATION ZONE DESIGNATIONS

Brundage is characterized by diverse settings, from developed and modified areas near the base, western core and summit to more remote and primitive areas toward the northern, eastern, and southern edges of the resort. These settings within Brundage's operational boundary mirror what a visitor might see and experience in other open spaces on the PNF or surrounding State of Idaho and private lands, ranging from developed recreation areas and trailheads at the lower elevations, to more forested and remote settings in the high alpine. Following guidance provided in FSM 2343.14 – Additional Seasonal and Year-Round Recreation at Ski Areas, this MDP has established "zones to guide placement and design of additional seasonal or year-round recreation facilities, basing the zones on the existing natural setting and level of development to support snow sports."

Zone designations were carried out through a two-step planning process. The first step was to identify distinct areas at Brundage through careful consideration of the area's setting and proximity to existing snow sports infrastructure. Features such as watersheds, topography, vegetation structure, level of existing disturbance, and existing infrastructure were considered in establishing seven distinct areas across the planned SUP area that are unique in theirlocation and/or features.

The second step of the zone designation process was to evaluate each distinct area based on characteristics of setting and level of development. Similar to the Forest Service ROS (refer to Appendix D), this analysis utilized the following characteristics to evaluate distinct areas:

- *Access* – the number and function of roads within the area
- *Remoteness* – how far removed an individual feels from human activity
- *Naturalness* – the extent and intensity of development and disturbance within the area
- *Infrastructure* – the amount of and proximity to the built environment

Distinct areas were evaluated by 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, as shown in the following table. Characteristics were considered within the context of Brundage as a developed ski area. The scores were then summed to provide a total score, and a corresponding summer activity zone designation, for each distinct area.

A list of compatible activities is provided for each zone; however, it is important to recognize that summer and multi-season activities are continually being developed, and activities that do not currently exist may be popular within the next several years. Therefore, a certain amount of flexibility should come with this list, since it is impossible to foresee exactly what new activities will be developed over time. Brundage 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.

Table A-9 (in Appendix A) details the zone characteristics utilized to determine the zone designations of areas within the SUP area. Refer to Figure 11 for an illustration of the planned summer zones.

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 Brundage's overall SUP area, the following summarizes the setting in Zone 1:

- Road access and roads are prevalent;
- Considerable human activity (people recreating 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 lifts and buildings, are present.

Two distinct areas at Brundage have been designated as Zone 1: The top terminal of the Bear Chair and the summit area with access from Bluebird Express and Centennial Chairs. The summit area has access to the Brundage Lookout Tower and is a popular viewing destination with higher concentrations of activity.

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 ski area. Guests will encounter a higher degree of maintenance and operations facilities and activities within Zone 1. Within Zone 1, the concepts in the Built Environment Image Guide (BEIG) will be followed to ensure appropriate design guidelines for both landscape architecture and built architecture are followed. Zone 1 is surrounded primarily by Zone 2 but also touches on Zone 3 at the summit. 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.

Planned Activities and Facilities[3]

Services and activities within Zone 1, many utilizing existing or planned infrastructure, will include food and beverage operations, lodges, special event venues, trailheads for hiking, biking and nature tours,

[3] 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. Brundage 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. Existing summer recreation and maintenance occurs throughout developed portions of the ski area; therefore, no area within the developed ski area is off limits to administrative access and maintenance.

shelter, emergency services, restroom facilities, landscaped areas, and other activities. At Brundage, Zone 1 serves as the mountain's gateway, from which guests will access surrounding activities and refuel between activities. A wide range of guest services facilities and recreational, interpretive, and educational offerings are appropriate for Zone 1.

b) Zone 2

Setting

The setting of Zone 2 is less disturbed when compared with Zone 1 and provides more naturalness due to less disturbance from the surrounding ski area. Within the context of Brundage's 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 lifts and buildings, are present.

Three distinct areas at Brundage have been designated as Zone 2: The frontside terrain area, top of the Lakeview lift, and top of the Eastside Lift.

Desired Experiences

Most summer guests entering Zone 2 areas at Brundage will do so from a Zone 1 area. 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 of Brundage, this may be their first real experience in the mountains, and providing a safe, comfortable environment for exploration is critical to the success of Zone 2 and the overall summer experience at Brundage. 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 these types of activities, Zone 2 should serve as a buffer between higher levels of development within Zone 1 and the more natural settings of Zones 3 and 4.

Planned Activities and Facilities

Passive activities within Zone 2 include educational/interpretive opportunities, sightseeing and light hiking. Zone 2 will provide enhanced sightseeing opportunities when compared to Zone 1 as these areas are typically elevated and further within the mountain landscape. Planned activity offerings will include access to zip lines and canopy tours, guided hikes and interpretative opportunities, extended hiking trails, mountain biking trails, challenge/aerial adventure courses, and other natural resource and gravity-based activities.

As mentioned above, 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 Zones 3 and 4 and more developed areas within Zone 1. Thus, areas within Zone 2 serve as transitional zones, encouraging guest exploration into more natural portions of the resort in a setting that still feels comfortable for less-

experienced outdoor recreationists. 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 Zones 3 and 4.

Other Compatible Activities and Facilities

Other compatible activities in Zone 2 that are not planned by Brundage but seen around U.S. on Forest Service lands in a Zone 2 include are via ferrata, mountain coasters and other natural resource and gravity-based activities.

c) Zone 3

Setting

The setting of Zone 3 contains areas of disturbance from ski trail and lift 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 lifts are present; however, this was not the determining factor for the designation. Within the context of Brundage's 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 sight 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 lifts and buildings, are present.

Eight distinct areas at Brundage have been designated as Zone 3: Top of Sargent's Lift, Sargent's ski pod from the ridge to the SUP boundary, three areas on the east side follow the ridge to the existing SUP boundary, the Lakeview lift pod, bottom of the Lakeview lift, and along lakeview ridge to the private land boundary.

Desired Experiences

The majority of guests will access Zone 3 from the existing and planned trails network. 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 is to offer a diverse set of experiences for guests, which will promote the PNF as recreationally, biologically, and geographically diverse landscapes. Guests may enjoy interpretive signage that will provide education on their biological, cultural, and historical surroundings and enhanced opportunities to experience some of the best views in Idaho. Trail activities—including both hiking and mountain biking—and other recreational activities should be provided in forested settings. This will provide opportunities to learn about the importance of forest health and stewardship.

Planned Compatible Activities and Facilities

Activities could include mountain biking trails including flow trails, scenic lift rides, hiking trails, multiple-use trails, canopy tours, challenge/aerial adventure course and other similar natural resource-based activities. Select activities such as interpretive tours and canopy tours may occur on a year-round basis.

Activities within Zone 3 will not require substantial modifications to natural topography to facilitate construction. Existing ski area development (ski trails and lifts) exist to varying degrees within Zone 3, and potential seasonal and year-round facilities and activities will be consistent with the level of existing development for the ski area operation.

Other Compatible Activities and Facilities

Other compatible activities in Zone 3 are via ferrata and other similar natural resource-based activities.

d) Zone 4

Setting

The setting of Zone 4 is more remote and provides a great degree of naturalness. Ski area development is limited and, where ski trails are present, larger tree islands and natural terrain prevail. Within the context of Brundage's SUP area, the following summarizes the setting in Zone 4:

- Little to no road access occurs;
- Human activity (people recreating and/or resort operations) is distant or out of sight, facilitating a high degree of remoteness;
- The area is completely natural or has limited disturbance; and
- Infrastructure, including a lift and small buildings, are present.

Six distinct areas at Brundage have been designated as Zone 4: two along the northern slopes, the lower portion of Lift G, the lower portion of the Eastside Lift, and two along the southern edge below the Lakeview pod.

Desired Experiences

In Zone 4, guests will connect with the more natural setting in a relatively undisturbed environment. Dispersed hiking and biking opportunities will allow guests to experience and interpret areas of PNF where natural processes are more evident, allowing for educational opportunities that are not available in more developed zones. The setting in Zone 4 will directly affect the guest experience and maintain a more remote setting with opportunities for solitude will meet the guests' expectations.

Planned Activities and Facilities

Activities will promote the surroundings and inform guests of similar environments throughout the PNF. Activities include slower-moving actions to match the setting and character, which provide even greater opportunities for environmental education and exposure to unique environments. These activities include hiking trails with signage and interpretation and mountain biking trails.

Activities within Zone 4 will require minimal site modification to maintain the current level of naturalness. In this zone, the low density of guests is expected to maintain the feeling of remoteness. Zone 4 within the planned SUP expansion boundary would be located within the French Creek IRA. As discussed in Chapter 4, construction of any planned multi-season recreation activities in the French Creek IRA would occur by foot, helicopter, or vehicles less than 50 inches wide such as ATVs that would fit on trails.

Because the desired experience of this zone is a relatively undisturbed environment, it is anticipated that multi-season recreation activities in this zone would be compatible with the character of the French Creek IRA.

e) Zone 5

Setting

The setting in Zone 5 is undisturbed by ski area activities. Zone 5 includes high alpine environments and large, intact vegetation habitats. Very few people recreate in these areas of the SUP boundary. No ski area roads or infrastructure are present in Zone 5. Within the context of the overall SUP area, the following summarizes the setting in Zone 5:

- No ski area roads are present;
- Human activity (people recreating and/or resort operations) is predominately out of sight, so one would feel completely remote;
- Area is undisturbed by ski area activity; and
- Ski area infrastructure is only visible at a distance.

Two distinct areas at Brundage have been designated as Zone 5: east of Lift G and south of the Eastside Lift pod.

Desired Experiences

Zone 5 represents the most remote sectors within the SUP and is only accessible by dispersed hiking. The desired experience is remote and more natural. Guests within this zone would not expect to encounter many other guests.

Compatible Activities and Facilities

The areas with the Zone 5 designation would be left as is with no developed seasonal or year-round activities or facilities. Dispersed hiking by the public occurs and will continue to occur within these areas. Zone 5 is located only within the planned SUP boundary expansion and is within the French Creek IRA. As with Zone 4, construction of any activities would adhere to IRA requirements and is likely to be compatible with desired character of the IRA.

Table 17. Summer Zone and Score Range

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

J. PRIORITY PROJECTS

Brundage anticipates that the scope of the planned upgrades is big enough that it would not be feasible to construct them all at once. Therefore, Brundage has identified priority projects that the resort would focus on first. These are the projects that are the most urgent from an operations or guest experience perspective. Following completion of these top priority projects, Brundage would focus on its second-tier projects, which would provide the secondary most benefits to operations or the guest experience. It is in this way that Brundage plans to use a phased approach to implement the projects included in this MDP. The specific timelines of each phase and the structure of the phasing plan itself is subject to change based upon social and economic conditions.

As with any resort, the resources to engage in desired upgrades may be limited. Thus, prioritization for projects is planned to be based on Brundage's vision and goals. For this reason, Brundage plans to prioritize projects that provide additional guest service space for families with children as well as new skiers, as well as projects that bring the maintenance, administrative, and ski patrol facility size in line with other planned expansions.

1. PHASE 1 PROJECTS

The only lift installation/upgrade in Phase 1 would be the upgrade of the Centennial Lift. Because this lift is a primary out-of-base lift, and currently does not meet operational or guest needs, Brundage has identified its upgrade as a priority. Phase 1 terrain projects include the small connector trails/improvements and beginner terrain.

The connector trails/improvements total approximately 22 acresof terrain and include a new mountain traverse off Centennial Lift to the Base Area, a new connector trail from the top terminal of Bluebird Express Lift, a new connector trail off of *Temptation*, a new connector trail to *45th Parallel*, modifications on the bottom of runs *Hotshot* and *Kickback*, and the planned trail *HV 01/Lower Rodeo*. The approximately 9 acres of additions/improvements for beginner terrain would also beincluded in Phase 1. These new trails would improve circulation throughout the existing terrain and provide additional beginner terrain.

Snowmaking projects that would be included in Phase 1 include snowmaking on *Cat Track/Easy Way*, *Bear/Little Bear*, and *Griz*. Brundage also considers the reroute of the snowmobile trail to be a priority and would include this in Phase 1. Brundage will construct the snowmobile bypass trail and will not maintain this trail in the summer or winter. It will be maintained by thesnowmobile association. The North End water tank installation would also be included in Phase 1.

Multi- season recreation projects that would be included in Phase 1 are the remainder of the multi-use trails, single track trails, and summer trail bridges for mountain biking and hiking that were approved in the 1999DN/FONSI. In addition, Brundage is planning to install additional multi-season programming and trails in Phase 1, which will be identified and approved through NEPA analysis. Priority guest service and parkingprojects include the Bear Den expansion, Main Base Lodge construction/improvements, Lower Lot base area parking, Upper Lot base area parking, and the previously approved vault toilets at the top of Lakeview.

2. PHASE 2 PROJECTS

Terrain and lift projects in Phase 2 include: the Eastside Lift and terrain pod; the previously approved Sargent's terrain used for the Cat skiing, Way Back terrain, and Hidden Valley terrain; and the Temptation terrain pod.

Snowmaking would be installed on *Main Street*, *Alpine*, and within the entirety of the Temptation pod. Operational projects Brundage is planning to complete in Phase 2 include moving the existing maintenance facility adjacent to the Temptation bottom terminal and the development of approximately one mile of new road within the Hidden Valley terrain pod. In Phase 2, Brundage is planning to construct the Lakeview Hut, Mountain Top Restaurant, toilets at the top of Centennial, the Summit Hut, Ridge Hut, and Temptation Base Lodge.

3. PHASE 3+ PROJECTS

The remainder of the projects would be constructed following Phase 2. It is likely that not all of the remaining projects would be constructed at once and would likely continue to occur in phases as capital becomes available. These projects will be identified through site specific NEPA proposals.

APPENDIX A.
ADDITIONAL TABLES

Table A-1. Terrain Specifications—Existing Conditions

Trail/Area Name	Top Elevation (ft.)	Bottom Elevation (ft.)	Vertical Drop (ft.)	Slope Length (ft.)	Avg. Width (ft.)	Slope Area (acres)	Avg. Grade (%)	Max. Grade (%)	Skier/Rider Ability Level
North Boundary Trail	7,551	6,700	851	6,190	22	3.1	14%	31%	Advanced
Hey Diddle Diddle	7,021	6,727	294	1,604	97	3.6	19%	31%	Advanced
Northwest Passage	7,492	6,554	938	4,121	100	9.5	24%	80%	Expert
Funnel	7,200	7,095	105	1,016	82	1.9	10%	26%	Advanced
North of North	7,522	7,305	217	596	93	1.3	39%	43%	Advanced
Rodeo	7,100	6,257	844	4,120	89	8.4	21%	37%	Intermediate
Lower Rodeo	6,294	6,049	245	1,274	72	2.1	20%	30%	Low Intermediate
North	7,584	6,160	1,424	6,150	94	13.3	24%	44%	Intermediate
Stair Step	7,351	6,632	719	2,319	64	3.4	33%	46%	Advanced
Upper Slobovia	7,063	6,576	486	1,737	88	3.5	29%	45%	Intermediate
Lower Slobovia	6,933	6,350	583	2,742	78	4.9	22%	35%	Intermediate
Main Street	7,601	6,055	1,546	6,248	174	25.0	26%	39%	Intermediate
The Face	6,512	6,102	409	1,182	142	3.8	37%	49%	Advanced
Ranger Trail	7,062	6,237	826	3,454	69	5.4	25%	58%	Expert
Sidewinder	7,590	7,138	452	1,483	155	5.3	32%	40%	Intermediate
Ridge Skiway	7,607	7,321	286	3,484	36	2.9	8%	13%	Low Intermediate
Upper/Lower Alpine	7,527	6,147	1,380	4,838	135	14.9	30%	45%	Intermediate
Easy Rider	6,040	6,032	8	114	116	0.3	5%	7%	Beginner

Trail/Area Name	Top Elevation (ft.)	Bottom Elevation (ft.)	Vertical Drop (ft.)	Slope Length (ft.)	Avg. Width (ft.)	Slope Area (acres)	Avg. Grade (%)	Max. Grade (%)	Skier/Rider Ability Level
Easy Street	6,049	5,965	84	750	160	2.8	11%	14%	Novice
Roller Coaster	6,032	5,967	65	579	34	0.5	11%	14%	Novice
Race Course	6,490	6,197	293	885	99	2.0	35%	49%	Advanced
Slot Car	6,486	6,213	273	887	34	0.7	32%	44%	Intermediate
Griz	6,480	6,055	425	2,015	154	7.1	22%	33%	Low Intermediate
Badger	6,275	6,099	176	618	194	2.7	30%	35%	Low Intermediate
Red Fox	6,288	5,963	325	1,466	91	3.1	23%	34%	Low Intermediate
Chipmunk	6,270	6,180	89	318	82	0.6	29%	35%	Low Intermediate
Jammer	6,448	5,983	465	1,982	95	4.3	24%	34%	Low Intermediate
Upper Bear	6,498	6,170	328	1,807	120	5.0	19%	33%	Low Intermediate
Lower Bear	6,164	5,940	224	1,060	108	2.6	22%	25%	Novice
Centennial Lane	6,055	5,880	175	2,554	43	2.5	7%	14%	Novice
Easy Way	6,501	6,061	440	4,643	30	3.2	10%	23%	Novice
Skidaddle	6,304	5,967	336	811	84	1.6	46%	57%	Advanced
Rappel	6,228	6,001	226	734	67	1.1	33%	43%	Advanced
Bee Line	7,316	6,925	391	1,111	71	1.8	38%	46%	Advanced
Warren's Way	6,891	6,406	485	1,703	101	4.0	30%	43%	Advanced
Skid Row	6,887	6,511	376	1,391	75	2.4	28%	42%	Advanced
Engen	7,514	6,346	1,169	3,525	137	11.1	35%	42%	Intermediate
Meadow Bowl	7,443	6,371	1,072	3,252	118	8.8	35%	47%	Advanced
Swinger	6,847	6,381	466	1,382	71	2.3	36%	44%	Advanced
Stump	6,773	6,401	372	1,236	140	4.0	32%	39%	Intermediate
45th Parallel	7,370	5,883	1,487	6,693	106	16.2	23%	44%	Intermediate

Trail/Area Name	Top Elevation (ft.)	Bottom Elevation (ft.)	Vertical Drop (ft.)	Slope Length (ft.)	Avg. Width (ft.)	Slope Area (acres)	Avg. Grade (%)	Max. Grade (%)	Skier/Rider Ability Level
Dixie	7,331	6,733	597	2,007	129	5.9	31%	57%	Expert
Lakeview Ridge	7,373	6,860	514	3,476	76	6.0	15%	33%	Low Intermediate
Cat Track	6,858	6,341	517	5,140	24	2.8	10%	15%	Low Intermediate
Temptation	6,860	6,271	589	4,688	80	8.6	13%	32%	Low Intermediate
Sensation	6,297	5,931	366	1,180	134	3.6	33%	41%	Intermediate
Celebration	6,275	5,889	386	1,214	123	3.4	34%	45%	Intermediate
Lower Temptation	6,271	5,952	319	1,160	104	2.8	29%	38%	Intermediate
Boydstun Lane	6,267	5,880	387	3,715	26	2.2	10%	19%	Low Intermediate
Lakeview Connector	7,512	7,369	143	1,148	78	2.1	13%	27%	Low Intermediate
Kickback	7,316	6,577	739	3,804	98	8.6	20%	45%	Intermediate
Springboard	7,294	6,839	455	1,883	133	5.8	25%	36%	Intermediate
Hotshot	7,275	6,563	712	2,634	93	5.6	28%	45%	Intermediate
Dropline	7,193	6,564	629	2,190	96	4.8	30%	43%	Intermediate
Total				**128,311**		**265.1**			

Table A-2. Terrain Specifications—Upgrade Plan

Trail/Area Name	Top Elevation (ft.)	Bottom Elevation (ft.)	Vertical Drop (ft.)	Slope Length (ft.)	Avg. Width (ft.)	Slope Area (acres)	Avg. Grade (%)	Max. Grade (%)	Skier/Rider Ability Level
North Boundary Trail	7,551	6,700	851	6,190	22	3.1	14%	31%	Advanced
Hey Diddle	7,021	6,727	294	1,604	97	3.6	19%	31%	Advanced
Northwest Passage	7,492	6,554	938	4,121	100	9.5	24%	80%	Expert
Funnel	7,200	7,095	105	1,016	82	1.9	10%	26%	Advanced
North of North	7,522	7,305	217	596	93	1.3	39%	43%	Advanced
Rodeo	7,100	6,257	844	4,120	89	8.4	21%	37%	Intermediate
Lower Rodeo	6,290	5,962	328	2,714	66	4.1	12%	30%	Low Intermediate
North	7,584	6,160	1,424	6,150	94	13.3	24%	44%	Intermediate
Stair Step	7,351	6,632	719	2,319	64	3.4	33%	46%	Advanced
Upper Slobovia	7,063	6,576	486	1,737	88	3.5	29%	45%	Intermediate
Lower Slobovia	6,933	6,350	583	2,742	78	4.9	22%	35%	Intermediate
Main Street	7,601	6,055	1,546	6,248	174	25.0	26%	39%	Intermediate
The Face	6,512	6,102	409	1,182	142	3.8	37%	49%	Advanced
Ranger Trail	7,062	6,237	826	3,454	69	5.4	25%	58%	Expert
Sidewinder	7,590	7,138	452	1,483	155	5.3	32%	40%	Intermediate
Ridge Skiway	7,607	7,321	286	3,484	36	2.9	8%	13%	Low Intermediate
Upper/Lower Alpine	7,527	6,147	1,380	4,838	135	14.9	30%	45%	Intermediate
Upper Conveyor 1 (Easy Rider)	6,037	6,024	13	145	71	0.2	9%	10%	Beginner
Upper Conveyor 2	6,037	6,024	13	135	90	0.3	10%	11%	Beginner
Lower Conveyor	5,979	5,964	15	159	169	0.6	10%	10%	Beginner
Easy Rider	6,040	6,032	8	114	116	0.3	5%	7%	Beginner
Easy Street	6,049	5,965	84	750	160	2.8	11%	14%	Novice

Trail/Area Name	Top Elevation (ft.)	Bottom Elevation (ft.)	Vertical Drop (ft.)	Slope Length (ft.)	Avg. Width (ft.)	Slope Area (acres)	Avg. Grade (%)	Max. Grade (%)	Skier/Rider Ability Level
Roller Coaster	6,032	5,967	65	579	34	0.5	11%	14%	Novice
Race Course	6,490	6,197	293	885	99	2.0	35%	49%	Advanced
Slot Car	6,486	6,213	273	887	34	0.7	32%	44%	Intermediate
Griz	6,480	6,055	425	2,015	154	7.1	22%	33%	Low Intermediate
Badger	6,275	6,099	176	618	194	2.7	30%	35%	Low Intermediate
Red Fox	6,288	5,963	325	1,466	91	3.1	23%	34%	Low Intermediate
Chipmunk	6,270	6,180	89	318	82	0.6	29%	35%	Low Intermediate
Jammer	6,448	5,983	465	1,982	95	4.3	24%	34%	Low Intermediate
Upper Bear	6,498	6,170	328	1,807	120	5.0	19%	33%	Low Intermediate
Lower Bear	6,164	5,940	224	1,060	108	2.6	22%	25%	Novice
Centennial Lane	6,055	5,880	175	2,554	43	2.5	7%	14%	Novice
Easy Way	6,501	6,061	440	4,643	30	3.2	10%	23%	Novice
Skidaddle	6,304	5,967	336	811	84	1.6	46%	57%	Advanced
Rappel	6,228	6,001	226	734	67	1.1	33%	43%	Advanced
Bee Line	7,316	6,925	391	1,111	71	1.8	38%	46%	Advanced
Warren's Way	6,891	6,406	485	1,703	101	4.0	30%	43%	Advanced
Skid Row	6,887	6,511	376	1,391	75	2.4	28%	42%	Advanced
Engen	7,514	6,346	1,169	3,525	137	11.1	35%	42%	Intermediate
Meadow Bowl	7,443	6,371	1,072	3,252	118	8.8	35%	47%	Advanced
Swinger	6,847	6,381	466	1,382	71	2.3	36%	44%	Advanced
Stump	6,773	6,401	372	1,236	140	4.0	32%	39%	Intermediate
45th Parallel	7,370	5,883	1,487	6,693	106	16.2	23%	44%	Intermediate
Dixie	7,331	6,733	597	2,007	129	5.9	31%	57%	Expert

Trail/Area Name	Top Elevation (ft.)	Bottom Elevation (ft.)	Vertical Drop (ft.)	Slope Length (ft.)	Avg. Width (ft.)	Slope Area (acres)	Avg. Grade (%)	Max. Grade (%)	Skier/Rider Ability Level
Lakeview Ridge-Upper	7,373	7,232	141	1,469	52	1.8	10%	20%	Novice
Lakeview Ridge Bypass	7,231	6,865	366	2,811	54	3.5	13%	21%	Novice
Lakeview Ridge-Lower	7,232	6,947	285	1,426	90	3.0	21%	33%	Low Intermediate
Cat Track	6,858	6,341	517	5,140	24	2.8	10%	15%	Low Intermediate
Temptation-Upper	6,860	6,780	80	394	132	1.2	21%	32%	Low Intermediate
Temptation	6,831	6,267	563	4,911	70	7.9	12%	25%	Novice
Sensation	6,297	5,931	366	1,180	134	3.6	33%	41%	Intermediate
Celebration	6,275	5,889	386	1,214	123	3.4	34%	45%	Intermediate
Lower Temptation	6,271	5,952	319	1,160	104	2.8	29%	38%	Intermediate
Boydstun Lane	6,267	5,880	387	3,715	26	2.2	10%	19%	Low Intermediate
Lakeview Connector	7,512	7,369	143	1,148	78	2.1	13%	27%	Low Intermediate
Kickback	7,316	6,577	739	3,804	98	8.6	20%	45%	Intermediate
Springboard	7,294	6,839	455	1,883	133	5.8	25%	36%	Intermediate
Hotshot	7,275	6,563	712	2,634	93	5.6	28%	45%	Intermediate
Dropline	7,193	6,564	629	2,190	96	4.8	30%	43%	Intermediate
G_01	7,797	6,896	901	5,315	97	11.8	17%	42%	Intermediate
G_02	7,636	6,950	687	3,670	116	9.8	19%	45%	Intermediate
G_03	7,782	6,892	890	5,622	113	14.5	16%	45%	Intermediate
G_04	7,611	7,350	261	1,910	50	2.2	14%	26%	Low Intermediate
SG_01	7,486	6,562	924	4,998	112	12.9	19%	61%	Expert
SG_02	7,780	6,593	1,186	5,077	173	20.1	24%	47%	Intermediate
SG_03	7,522	6,732	790	2,718	153	9.5	31%	62%	Expert
SG_04	7,703	6,727	976	3,678	171	14.5	28%	58%	Advanced

Trail/Area Name	Top Elevation (ft.)	Bottom Elevation (ft.)	Vertical Drop (ft.)	Slope Length (ft.)	Avg. Width (ft.)	Slope Area (acres)	Avg. Grade (%)	Max. Grade (%)	Skier/Rider Ability Level
SG_05	7,735	7,155	580	1,454	177	5.9	44%	77%	Expert
SG_06	7,727	6,942	784	2,615	136	8.2	32%	76%	Expert
SG_07	7,705	6,860	845	3,214	120	8.9	27%	63%	Expert
WB_01	6,923	6,734	189	650	134	2.0	30%	39%	Intermediate
WB_02	6,917	6,640	276	1,248	141	4.0	23%	41%	Intermediate
WB_03	6,888	6,599	289	1,527	110	3.8	19%	44%	Intermediate
HV_01	7,087	6,625	461	3,239	69	5.2	14%	32%	Low Intermediate
ES_01	7,666	6,642	1,025	7,528	73	12.6	14%	33%	Low Intermediate
ES_02	7,662	6,586	1,075	6,316	98	14.2	17%	42%	Intermediate
ES_03	7,667	7,530	136	1,375	57	1.8	10%	20%	Intermediate
ES_04	7,640	7,579	61	800	38	0.7	8%	10%	Intermediate
BB_01	7,606	6,593	1,013	6,373	84	12.3	16%	43%	Intermediate
BB_02	7,600	7,400	200	2,176	35	1.8	9%	12%	Novice
CT_01	7,515	6,584	932	7,031	86	13.8	13%	52%	Advanced
ACC_01	6,094	6,036	58	288	80	0.5	21%	29%	Novice
T_01	6,414	5,739	675	3,254	141	10.5	21%	36%	Intermediate
T_02	6,421	6,140	281	1,649	206	7.8	17%	32%	Low Intermediate
T_03	6,373	5,959	413	1,388	113	3.6	31%	55%	Advanced
T_04	6,363	5,983	380	1,372	76	2.4	29%	36%	Intermediate
T_05	6,046	5,926	120	662	111	1.7	19%	27%	Low Intermediate
T_06	6,069	5,864	205	1,369	81	2.5	15%	26%	Low Intermediate
SG_08	7,091	6,952	139	1,823	43	1.8	8%	11%	Beginner
HV_02	6,802	6,466	336	3,154	50	3.6	11%	30%	Low Intermediate

Trail/Area Name	Top Elevation (ft.)	Bottom Elevation (ft.)	Vertical Drop (ft.)	Slope Length (ft.)	Avg. Width (ft.)	Slope Area (acres)	Avg. Grade (%)	Max. Grade (%)	Skier/Rider Ability Level
Lakeview Return	6,630	6,569	61	1,404	31	1.0	4%	13%	Intermediate
G_05	7,078	6,892	186	1,019	117	2.7	19%	42%	Intermediate
CT_02	6,310	5,990	320	920	126	2.7	37%	48%	Advanced
CT_03	6,842	6,353	490	2,904	72	4.8	17%	36%	Intermediate
Total				**244,140**		**526.0**			

Table A-3. Space Use Recommendations—Base Area—Existing Conditions

Service Function	Existing Total	Recommended Range	
		Low	High
Ticket Sales/Guest Services	1,000	710	870
Public Lockers	1,920	2,140	2,620
Rentals/Repair	1,700	5,070	5,710
Retail Sales	500	1,500	1,830
Bar/lounge	1,350	2,250	2,750
Adult Ski School	2,741	1,140	1,390
Kid's Ski School	2,670	2,280	2,790
Restaurant Seating	6,850	9,680	11,830
Kitchen/Scramble	2,800	5,530	6,760
Rest rooms	700	2,770	3,380
Ski Patrol	515	1,110	1,350
Administration	2,400	1,500	1,830
Employee Lockers/Lounge	500	600	730
Storage	1,500	1,630	2,410
Circulation/Mechanical/Walls	2,000	4,900	7,230
TOTAL SQUARE FEET	**29,146**	**42,810**	**53,480**

Table A-4. Space Use Recommendations—Bear Den—Existing Conditions

Service Function	Existing Total	Recommended Range	
		Low	High
Ticket Sales/Guest Services	--	--	--
Public Lockers	--	--	--
Rentals/Repair	--	--	--
Retail Sales	--	--	--
Bar/lounge	--	--	--
Adult Ski School	--	--	--
Kid's Ski School	--	--	--
Restaurant Seating	1,000	800	980
Kitchen/Scramble	300	460	560
Rest rooms	150	230	280
Ski Patrol	--	90	110
Administration	--	--	--
Employee Lockers/Lounge	--	--	--
Storage	--	70	110
Circulation/Mechanical/Walls	200	210	320
TOTAL SQUARE FEET	**1,650**	**1,860**	**2,360**

Table A-5. Space Use Recommendations—Base Area—Upgrade Plan

Service Function	Recommended Range	
	Low	High
Ticket Sales/Guest Services	740	900
Public Lockers	2,220	2,710
Rentals/Repair	5,260	5,910
Retail Sales	1,550	1,900
Bar/lounge	2,330	2,850
Adult Ski School	590	720
Kid's Ski School	1,180	1,450
Restaurant Seating	12,260	14,980
Kitchen/Scramble	7,010	8,560
Rest rooms	3,500	4,280
Ski Patrol	1,400	1,710
Administration	1,550	1,900
Employee Lockers/Lounge	620	760
Storage	1,810	2,670
Circulation/Mechanical/Walls	5,430	8,020
TOTAL SQUARE FEET	**47,450**	**59,320**

Table A-6. Space Use Recommendations—Lower Base—Upgrade Plan

Service Function	Recommended Range	
	Low	High
Ticket Sales/Guest Services	370	450
Public Lockers	1,110	1,360
Rentals/Repair	2,630	2,960
Retail Sales	780	950
Bar/lounge	1,160	1,420
Adult Ski School	1,180	1,450
Kid's Ski School	2,370	2,890
Restaurant Seating	1,800	2,200
Kitchen/Scramble	1,030	1,250
Rest rooms	510	630
Ski Patrol	210	250
Administration	780	950
Employee Lockers/Lounge	310	380
Storage	640	940
Circulation/Mechanical/Walls	1,920	2,830
TOTAL SQUARE FEET	**16,800**	**20,910**

Table A-7. Space Use Recommendations—Temptation Lodge—Upgrade Plan

Service Function	Recommended Range	
	Low	High
Ticket Sales/Guest Services	370	450
Public Lockers	1,110	1,360
Rentals/Repair	2,630	2,960
Retail Sales	780	950
Bar/lounge	1,160	1,420
Adult Ski School	590	720
Kid's Ski School	1,180	1,450
Restaurant Seating	3,430	4,190
Kitchen/Scramble	1,960	2,390
Rest rooms	980	1,200
Ski Patrol	390	480
Administration	780	950
Employee Lockers/Lounge	310	380
Storage	710	1,040
Circulation/Mechanical/Walls	2,120	3,120
TOTAL SQUARE FEET	**18,500**	**23,060**

Table A-8. Space Use Recommendations—On-Mountain—Upgrade Plan

Service Function	Recommended Range	
	Low	High
Ticket Sales/Guest Services	--	--
Public Lockers	--	--
Rentals/Repair	--	--
Retail Sales	--	--
Bar/lounge	--	--
Adult Ski School	--	--
Kid's Ski School	--	--
Restaurant Seating	4,250	5,190
Kitchen/Scramble	2,430	2,970
Rest rooms	1,210	1,480
Ski Patrol	490	590
Administration	0	0
Employee Lockers/Lounge	0	0
Storage	380	560
Circulation/Mechanical/Walls	1,130	1,690
TOTAL SQUARE FEET	**9,890**	**12,480**

Table A-9. Summer Zones—Upgrade Plan

Area Boundaries	Score	Appropriate Zone
Area 1		
Access	1	**Zone 2**
Remoteness	1	
Naturalness	2	
Infrastructure	1	
Total Score	**5**	
Area 2		
Access	1	**Zone 1**
Remoteness	1	
Naturalness	1	
Infrastructure	1	
Total Score	**4**	
Area 3		
Access	1	**Zone 1**
Remoteness	1	
Naturalness	1	
Infrastructure	1	
Total Score	**4**	
Area 4		
Access	1	**Zone 2**
Remoteness	2	
Naturalness	1	
Infrastructure	1	

Area Boundaries	Score	Appropriate Zone
Area 5		
Access	2	**Zone 3**
Remoteness	2	
Naturalness	2	
Infrastructure	2	
Total Score	**8**	
Area 6		
Access	2	**Zone 4**
Remoteness	3	
Naturalness	3	
Infrastructure	3	
Total Score	**11**	
Area 7		
Access	2	**Zone 4**
Remoteness	3	
Naturalness	3	
Infrastructure	3	
Total Score	**11**	
Area 8		
Access	2	**Zone 3**
Remoteness	2	
Naturalness	2	
Infrastructure	2	

Area Boundaries	Score	Appropriate Zone
Total Score	1	
Area 9		
Access	2	**Zone 3**
Remoteness	2	
Naturalness	2	
Infrastructure	2	
Total Score	**8**	
Area 10		
Access	2	**Zone 3**
Remoteness	1	
Naturalness	2	
Infrastructure	2	
Total Score	**7**	
Area 11		
Access	3	**Zone 5**
Remoteness	3	
Naturalness	3	
Infrastructure	3	
Total Score	**12**	

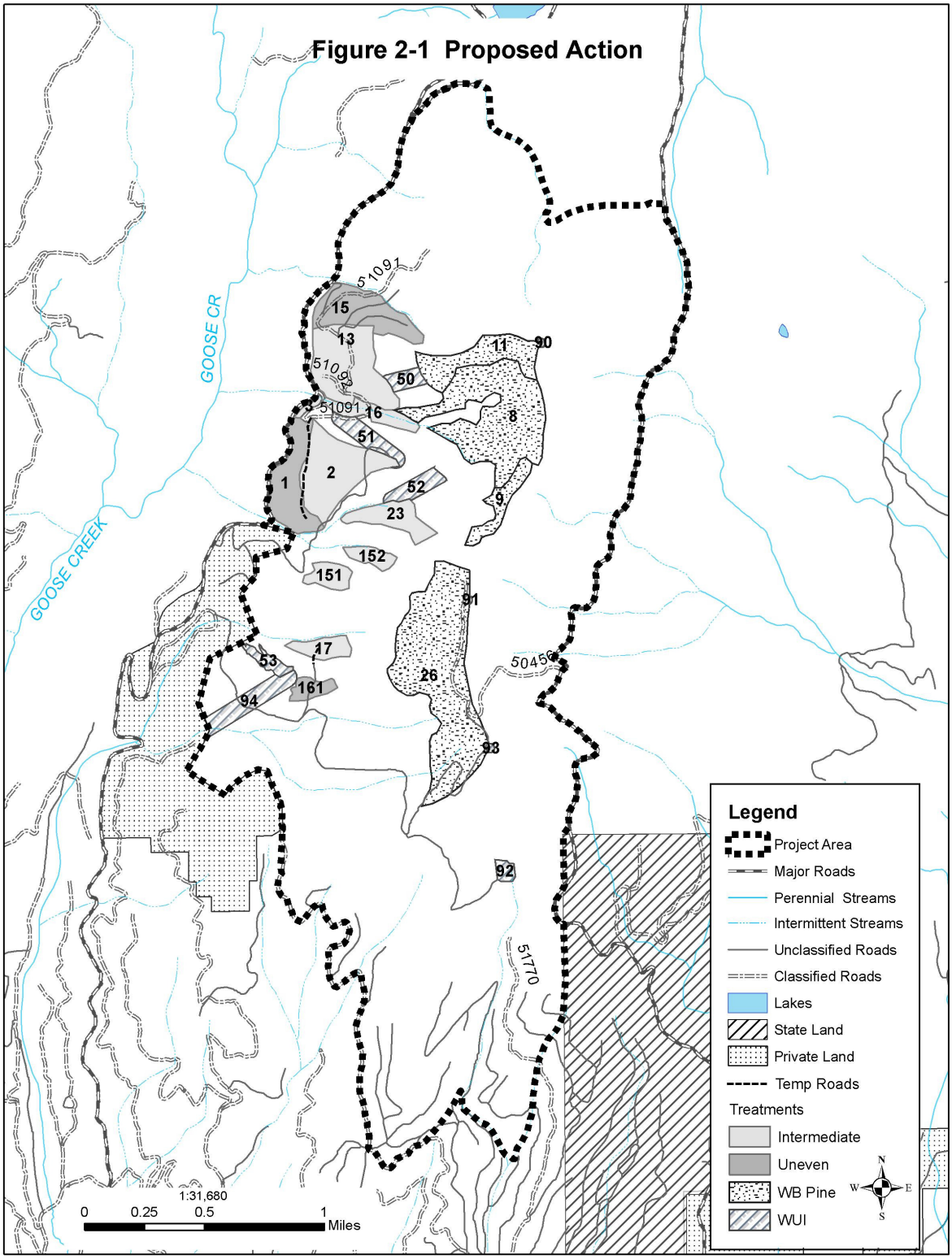
Area Boundaries	Score	Appropriate Zone
Total Score	**8**	
Area 13		
Access	3	**Zone 4**
Remoteness	3	
Naturalness	3	
Infrastructure	2	
Total Score	**11**	
Area 14		
Access	2	**Zone 3**
Remoteness	3	
Naturalness	2	
Infrastructure	2	
Total Score	**9**	
Area 15		
Access	3	**Zone 4**
Remoteness	3	
Naturalness	3	
Infrastructure	2	
Total Score	**11**	

Area Boundaries	Score	Appropriate Zone
Area 12		
Access	2	**Zone 3**
Remoteness	3	
Naturalness	2	
Infrastructure	2	
Total Score	**9**	
Area 16		
Access	3	**Zone 5**
Remoteness	3	
Naturalness	3	
Infrastructure	3	
Total Score	**12**	
Area 17		
Access	2	**Zone 4**
Remoteness	3	
Naturalness	3	
Infrastructure	3	
Total Score	**11**	
Area 18		
Access	2	**Zone 4**
Remoteness	3	
Naturalness	3	
Infrastructure	3	
Total Score	**11**	

Area Boundaries	Score	Appropriate Zone
Area 19		
Access	2	**Zone 3**
Remoteness	1	
Naturalness	2	
Infrastructure	2	
Total Score	**7**	
Area 20		
Access	2	**Zone 3**
Remoteness	2	
Naturalness	2	
Infrastructure	1	
Total Score	**7**	
Area 21		
Access	1	**Zone 2**
Remoteness	2	
Naturalness	1	
Infrastructure	1	
Total Score	**5**	

APPENDIX B.
VEGETATION MANAGEMENT PLAN PROJECTS

Selected Alternative



APPENDIX C.
MOUNTAIN PLANNING DESIGN CRITERIA

General mountain planning design criteria are important concepts in resort master planning. This appendix provides an overview of the basic design criteria on which Chapter 2 (Existing Conditions) and Chapter 4 (Upgrade Plan) are based. Note that the concepts discussed in this appendix are general design criteria and concepts that are used for resort master planning; terminology and planning concepts specific to Brundage are discussed in Chapters 2 through 4.

A variety of design criteria, each of which help to create a quality ski experience, influence the upgrading and expansion of ski areas. At mountain resorts, guests have a variety of expectations. They may wish to participate in recreation associated with mountains, to enjoy dining and shopping opportunities, and to enjoy a mix of other vacation experiences in a mountain setting. Thus, a destination resort must offer a multitude of services, amenities, and experiences that are designed to allow a guest to rejuvenate their spirit. Design parameters that guide the development of everything from the pedestrian-oriented social environment, to the alpine experience, all contribute to the success of a destination resort.

Along with design guidelines, awareness of consumer preferences is crucial to the overall performance of a resort for both recreational amenities and real estate products. Accordingly, detailed market research and user group surveys are effective tools to help guide the development of a successful mountain venue.

Resort innovation must be pursued to: (1) attract and retain target customers; (2) satisfy unmet needs; and (3) improve a resort's overall market effectiveness and efficiency.

The following discussion describes the types of destination mountain resorts, and the principal base lands and mountain design criteria that lead to the development of a successful resort.

A. DESTINATION RESORTS

Brundage is a destination resort. While day-use guests play a large role, Brundage also appeals to vacationers. One common characteristic of destination resorts is that they cater to a significant vacation market and thus should offer the types of services and amenities vacationers expect. At the same time, some components of the destination resort are designed specifically with the day-use guest in mind (e.g., day-use parking). Additionally, the employment, housing, and community services for both full-time and second-home residents created by destination resorts encourage the development of a vital and balanced community. This inter-relationship is helpful to the long-term success of the destination resort.

1. REGIONAL DESTINATION RESORTS

Regional destination resorts like Brundage largely cater to a "drive" market. At regional destinations resorts, lodging typically is a component of operations, but due to the average length of stay and guests' vacation budgets, lodging and related services and amenities are usually less extensive than what might be expected at a larger national and/or international destination resort. As most regional destination resorts have evolved within or adjacent to an existing local community, resort services are often supplied by proprietors within that local community. Such is the case at Brundage and its relationship to the community of McCall. Even though a portion of the services offered at Brundage cater directly to guests of the resort or summer vacationers to the surrounding area, proprietors within McCall also supply

services to “locals,” which helps to maintain the balanced lifestyle that permanent residents and second-homeowners tend to enjoy. McCall is the epicenter of Valley County and supplies most of the local services for the area.

2. NATIONAL AND INTERNATIONAL DESTINATION RESORTS

National and international destination resorts appeal and cater to a significant “fly-in” market, due to a combination of the unique character and level of services offered by either or both the mountain facilities and base village. It can be expected that the Brundage national/international guest expectations will be higher than for many of their regional destination guests. These guests expect abundant opportunities to participate in a variety of vacation experiences. This guest mindset stems from the expectation that their destination vacation will likely represent the apex of their skiing or summer season, and hence the appetite for varied experiences will be great. In addition to a weeklong visit, guests may also hope to participate in the resort and community on a more regular or permanent basis (through ownership of real estate and full-time and part-time residency).

B. BASE AREA DESIGN

The relationship between planning at a resort’s base area and its on-mountain lift and terrain network is critical. This relationship affects the overall function and perception of a resort.

Design of the base lands at a mountain resort involves establishing appropriate sizes and locations for the various elements that make up the development program. The complexion and relationship between these elements vary considerably depending on the type of resort and its intended character. The fundamental objectives of base area planning are the same, however.

A resort should seek to integrate the mountain with the base area to ensure an attractive, cohesive, and functional recreational and social experience. This is essential to creating the feeling of a mountain community and can only be achieved byaddressing base area components such as (but not limited to): multiple mountain portals, guest service locations, skier/rider circulation, pedestrians, parking/access requirements, and mass-transit drop-offs.

Planners rely on resort layout as one tool to establish resort character. The way in which resort elements are organized, both inside the resort core and within the landscape setting, along with architectural style, helps to create the desired character.

Skier service facilities are located at base area and on-mountain buildings. Base area staging locations, or portals, are “gateway” facilities that have three main functions:

- Receiving arriving guests (from a parked car, a bus, or from adjacent accommodations);
- Distributing the skiers onto the mountain’s lift and trail systems; and
- Providing the necessary guest services (e.g., tickets and rentals).

C. MOUNTAIN DESIGN

1. TRAIL DESIGN

a) Slope Gradients and Terrain Breakdown

Terrain ability level designations are based on slope gradients and terrain features associated with the varying ability terrain unique to each mountain. Ability level designations for this analysis are based on the maximum sustained gradient calculated for each trail. Short sections of a trail can be more or less steep without affecting the overall run designation. For example, novice skiers are typically not intimidated by short, steeper pitches of slope, but a sustained steeper pitch may cause the trail to be classified with a higher difficulty rating. The following general gradients are used by SE Group to classify the skier difficulty level of the mountain terrain.

Table C-1. Terrain Gradients

Skier Ability	Slope Gradient
Beginner	8 to 12%
Novice	to 25%
Low Intermediate	to 35%
Intermediate	to 45%
Advanced Intermediate	to 55%
Expert	over 55%

Source: SE Group Mountain Planning Guidelines

The distribution of terrain by skier ability level and slope gradient is compared with the market demand for each ability level. It is desirable for the available ski terrain to be capable of accommodating the full range of ability levels reasonably consistent with market demand. The market breakdown for the general skier market is shown in Table 3, illustrating that intermediate ability level skiers comprise the bulk of market demand.

Table C-2. Skier Ability Breakdown

Skier Ability	Percent of Skier Market
Beginner	5%
Novice	15%
Low Intermediate	25%
Intermediate	35%
Advanced Intermediate	15%
Expert	5%

Source: SE Group Mountain Planning Guidelines

b) Trail Density

The calculation of capacity of a ski area is based in part on the target number of skiers that can be accommodated, on average, on a typical acre of ski terrain at any one given time. The criteria for the range of trail densities for North American ski areas that SE Group utilizes are provided in Table 4.

Table C-3. Skier Density per Acre

Skier Ability	Percent of Skier Market
Beginner	25 to 40 skiers/acre
Novice	12 to 30 skiers/acre
Low Intermediate	8 to 25 skiers/acre
Intermediate	6 to 20 skiers/acre
Advanced	4 to 15 skiers/acre
Expert	2 to 10 skiers/acre
Alpine Bowls	0.5 skier/acre

Source: SE Group

These density figures account for the skiers that are actually populating the ski trails and do not account for other guests who are either waiting in lift lines, riding the lifts, using the milling areas or other support facilities. SE Group's observations and calculations indicate that on an average day approximately 40% of the total number of skiers at the resort are on the trails at any given time. Additionally, areas on the mountain, such as merge zones, convergence areas, lift milling areas, major circulation routes, and egress routes, experience higher densities periodically during the ski day.

SE Group has observed that recent trends in trail density design criteria tend to provide for a less crowded skiing experience. As witnessed at many Rocky Mountain resorts, there is a segment of the market that prefers more natural, unstructured, semi-backcountry types of terrain commonly referred to as off-piste.[4]

Demand is increasing for alpine open bowls, glades, and other similar types of terrain. Skier density per acre numbers are not necessarily applicable to these types of terrain, particularly as there often is not a defined edge to these areas like on a traditional ski run. However, skiers are attracted to these areas for the un-crowded feel, and the experience and challenge that it affords. Planning and design should provide these types of areas if possible. Examples range from glading between existing runs, to providing guided out-of-bounds tours.

c) Trail System

A resort's trail system should be designed to provide a wide variety of terrain to meet the needs of the entire spectrum of ability levels as well as the resort's particular market. Each trail should provide an interesting and challenging experience within the ability level for which the trail is designed. Optimum trail widths vary depending upon topographic conditions and the caliber of the skier/rider being served. The trail network should provide the full range of ability levels consistent with each level's respective market demands.

[4] "Piste" is a term commonly borrowed from French vernacular which refers to a groomed, maintained, defined ski trail. "Off-Piste" therefore refers to the ungroomed, less defined natural style of skiing commonly found in high Alpine areas and bowls.

In order for a resort to retain guests, both for longer durations of visitation and for repeat business, one of the more important factors has proven to be variation in terrain. This means providing developed runs for all ability levels: some groomed on a regular basis and some not—bowl, trees, and terrain parks and pipes.

In summary, a broad range of terrain satisfies skiers/riders from beginner through expert ability levels within the natural topographic characteristics of the ski area.

2. LIFT DESIGN

The goal for lift design is to serve the available ski terrain in an efficient manner, while being sensitive to environmental considerations. A myriad of factors are considered including wind conditions, visual impacts, wetlands, round-trip skiing, access needs, interconnect ability between other lifts and trails, and the need for circulation space at the lower and upper terminal sites.

The vertical rise, speed and length of ski lifts for a particular mountain are important measures of overall attractiveness and marketability of a ski area.

3. ON-MOUNTAIN GUEST SERVICES

On-mountain guest service facilities are generally used to provide food service (cafeteria-style or table service), restrooms, and limited retail, as well as ski patrol and first aid services, in closer proximity to upper-mountain terrain. This eliminates the need for skiers and riders to descend to the base area for similar amenities. It has also become common for resorts to offer ski/board demo locations on-mountain, so skiers and riders can conveniently test different equipment throughout the day.

D. CAPACITY ANALYSIS AND DESIGN

In ski area planning, a “design capacity” is established, which represents daily guest population to which all ski resort functions are balanced. The design capacity is a planning parameter that is used to establish the acceptable size of the primary facilities of a ski resort: ski lifts, ski terrain, guest services, restaurant seats, building space, utilities, parking, etc.

Design capacity is commonly expressed as “comfortable carrying capacity,” “skier carrying capacity,” “skiers at one time,” and other ski industry-specific terms. These terms refer to a level of utilization that provides a pleasant recreational experience and does not overburden the resort infrastructure.

Accordingly, the design capacity does not normally indicate a maximum level of visitation, but rather the number of visitors that can be “comfortably” accommodated on a daily basis. Design capacity is typically equated to a resort’s fifth or tenth busiest day, and peak-day visitation at most resorts is at least 10% to 25% higher than the design capacity.

This MDP uses the term Comfortable Carrying Capacity (CCC) when referring to Brundage’s design capacity. The accurate estimation of the CCC of a mountain is a complex issue and is the single-most important planning criterion for the resort. Related skier service facilities, including base lodge seating, mountain restaurant requirements, restrooms, parking, and other guest services are planned around the proper identification of the mountain’s true capacity.

The calculation of CCC involves comparing the amount of vertical transport capacity supplied by the lift system against the demand for vertical transport by skiing guests on a daily basis. Total vertical transport-feet per day (VTF/Day) for all lifts is divided by Vertical Demand to derive CCC.

E. BALANCE OF FACILITIES

The mountain master planning process emphasizes the importance of balancing recreational facility development. The sizes of the various skier service functions are designed to match the CCC of the mountain. Future development of a ski area should be coordinated to maintain a balance between accommodating skier needs, ski area capacity (lifts and trails), and the supporting equipment and facilities (e.g., grooming machines, day lodge services and facilities, utility infrastructure, access, and parking).

F. MULTI-SEASON RECREATION ACTIVITIES

Throughout the ski industry, resorts are reimagining the capabilities and duration of their operation. To combat the inconsistent six-month winter operating window, which is likely to grow narrower as a result of climate change, traditionally winter-oriented resorts are pursuing a more sustainable fiscal and economic outlook via the development of multi-season recreation activities. Multi-season recreational activities tend to attract a more diverse range of new guests than traditional winter activities. This master planning process assesses the best programs and implementation approaches for developing multi-season activities and facilities to showcase the prospective success given the unique characteristics that define Brundage and its markets.

While the increasing popularity of Brundage and nearby Tamarack Resort have increased winter visitation, most destination visitors in Valley and Adams County, where Brundage operates, come in the summer. Brundage wishes to expand summer operations to offer more activities and amenities.

To identify reasonable and realistic opportunities a strategic examination is conducted, which involves a case-by-case approach of several important criteria to determine the multi-season recreation elements that have the greatest likelihood for success. Criteria defining this strategic analysis, explored within this MDP, consist of the suitability of available land for recreation facilities, consistency with regional, state and national administration's policies and plans, financial considerations, and visitation potential. Undertaking such a comprehensive exercise leads to a multi-season recreation program comprised of recreation facilities and/or activities that are suitable for implementation and will align with operational goals and performance expectations.

The activities described within this MDP are designed to utilize existing ski area infrastructure (e.g., chairlifts and guest services facilities) to the extent possible in order to enhance existing snow sports activities through integration with multi-season activities. In doing so, the projects included in this MDP will improve utilization of ski area infrastructure and ensure the long-term, year-round viability of Brundage and the local economy. Though Brundage looks to expand its summer activities offerings, snow sports are, and will continue to be, the primary use of NFS lands at Brundage and are an economic driver for the greater region.

1. SUMMER "ACTIVITY ZONES"

At a site-specific level, this MDP takes the planned setting and anticipated use of the area to establish value-oriented and strategic prescriptions. The summer activity zones are based on the planned setting and level of development due to the planned expansion of Brundage on NFS lands.

Summer "Activity Zones" consider several characteristics similar to the Recreation Opportunity Spectrum (ROS), discussed in Chapter 4, including:

- *Access* – the number and function of roads within the area
- *Remoteness* – how far removed an individual feels from human activity
- *Naturalness* – the extent and intensity of development and disturbance within the area
- *Infrastructure* – the amount of and proximity to the built environment

Each of these characteristics is to be considered within the context of Brundage as a developed ski area. Future summer activities can be compatible and can occur within the existing French Creek IRA. Refer to section H.2 – 2003 PNF Land and Resource Management Plan for definition of the roadless area.

Planned summer activities are addressed in the Chapter 4 – Upgrade Plan.

G. INVENTORY OF PHYSICAL RESOURCES

This section provides an overview of the unique resource conditions of Brundage's SUP area that were taken into consideration when assembling this MDP.

1. TOPOGRAPHY

Topography is the arrangement of natural and artificial physical features of an area and includes the general surface shapes and features at Brundage. Topography, along with slope gradient, is important to a ski area because it partly defines terrain variety, which is consistently ranked as the second most important criterion in skier choice of a ski destination in Ski Magazine's Reader Resort Ratings, behind snow quality.

Brundage's operational area comprises a combination of 3,330 acres of NFS lands, operated under an SUP, 5 acres of state of Idaho lands on the backside of the mountain, and 388 acres of private lands at the base area. Elevations range from approximately 5,840 feet at the base area to approximately 7,640 feet at the summit of Brundage Mountain, the resort's highest point.

The resort has a mostly flat base area located at the end of Brundage Mountain Road, and from the base area extends uphill to the east for a vertical gain of approximately 1,800 feet until the slope crests along the ridge overlooking the resort. Most of the existing developed ski terrain at the resort is located on the west face of Brundage Mountain. On this face, there are several small drainages running from the ridgeline down to the bottom of the mountain, which create small basins around which the developed ski terrain is located.

2. SLOPE GRADIENTS

Slope gradient defines the angle of the ski run, relative to a completely flat surface. As mentioned above, slope gradient helps define terrain variety. In addition, slope gradient defines the difficulty of terrain and, therefore, which types of skiers (novice, intermediate, etc.) are able to ski that terrain. Slope gradient also dictates trail and infrastructure development, as both completely flat ground and cliff faces are un-skiable and steep slopes are more difficult to build structures on.

Terrain ability level designations are based on slope gradients and terrain features associated with the varying terrain unique to each mountain. Regardless of the slope gradient for a particular trail, if it feeds into a trail that is rated higher in difficulty, its ability level must be rated accordingly. Conversely, if a trail is fed only by trails of a higher ability level than the maximum slope of the trail would dictate, it also must be rated accordingly.

General slope gradients are defined as follows:

- **0 to 8% (0 to 5 degrees)**: too flat for skiing and riding, but ideal for base area accommodations, and other support facility development.
- **8 to 25% (5 to 15 degrees)**: ideal for Beginners and Novices, and typically can support most types of development.
- **25 to 45% (15 to 25 degrees)**: ideal for Intermediates, and typically are too steep for development.
- **45 to 70% (25 to 35 degrees)**: ideal for Advanced and Expert skiers/riders and pose intermittent avalanche hazards.
- **>70% (>35 degrees)**: too steep for all but the highest level of skiing/riding. These areas are typically allocated as Expert only and are closely managed by the resort operator for avalanche control.

A slope gradient analysis was conducted for the lands at Brundage, which places all lands at Brundage within a slope gradient range of 0-8% (unsuitable for sliding), 8–25% (easier), 25–45% (more difficult), 45–70% (most difficult), or 70% and above (expert only). The majority of the terrain at Brundage has a slope gradient range of 8-25% or 25-45%, corresponding with easier and more difficult terrain. Refer to Figure 3 (Slope Analysis).

3. ASPECT

Slope aspect, or the positioning of a slope in relation to the four cardinal directions, plays an important role in snow quality and retention as it plays a role in the intensity of solar radiation the slope receives. The variety of exposures present opportunities to provide a range of slope aspects that can respond to the changes in sun angle, temperature, wind direction, and shadows.

Generally, within the Northern Hemisphere, northern slopes are the coolest and most shaded, south slopes are the warmest with the most sun exposure, and eastern/western slopes are in between. For Brundage's west-facing slopes, management uses machine grooming and limited snowmaking to patch the snow surface for areas of high use in the base area. The relative abundance of varying terrain aspects at a resort means guests can choose different terrain based on snow and weather conditions (i.e., guests can use east-facing slopes on cold mornings, which soften faster in the morning, and transition to other sections of the mountain later). In addition, east and west facing slopes within ski areas can be beneficial for softening snow and improving skiing conditions on cold winter days. The placement and location of snow features, such as halfpipes and terrain parks, must factor in the effects of sun on elements of the feature, (i.e., snow softening, and the recurring process of melting and freezing). Typical constraints in relation to the various angles of exposure are as follows:

- **North-facing**: ideal for snow retention, minimal wind scour, minimal sun exposure
- **Northeast-facing**: ideal for snow retention, minimal wind scour, minimal sun exposure
- **East-facing**: good for snow retention, some wind scour, morning sun exposure
- **Southeast-facing**: fair for snow retention, moderate wind scour, morning and early afternoon sun exposure

- **South-facing**: poor for snow retention, moderate wind scour, full sun exposure
- **Southwest-facing**: poor for snow retention, high wind scour, full sun exposure
- **West-facing**: good for snow retention, high wind scour, late morning and afternoon sun exposure
- **Northwest-facing**: good for snow retention, moderate wind scour, some afternoon sun

An aspect analysis was conducted for the lands within Brundage's SUP area, which identifies the cardinal direction that all lands at Brundage face (refer to Figure 4 Aspect Analysis). Brundage's frontside is primarily located on west-facing slopes, with some terrain (in the vicinity of the Lakeview lift) facing more toward the east and south. The terrain on Brundage's backside is primarily east-facing, but there is currently no lift-served access in this area. This MDP Upgrade Plan has projects that expand skiing into the backside terrain.

4. SOILS AND GEOLOGY

Soils and geology within and around a ski area are important factors to take into consideration because they influence the erosion potential of the area, the drainage capabilities, the vegetation that grows in the area, and other factors that inform ski area management.

Brundage is located at the western edge of the Idaho batholith. Tectonic activity associated with the formation of the batholith transformed older sedimentary rocks into gneiss and schist. Idaho batholith is characterized by very soft granites that are highly susceptible to weathering through water and sunlight. These rocks have some similarities to the batholith granites in that they weather easily, forming silty-sandy residual and colluvial soils.

In general, these rocks are somewhat more durable than the granites. The batholith in the study area is different from the central core batholith in that there are changes in rockand soils due to the influence of metamorphosed sedimentary rocks (predominantly gneiss and schist) along the border of the batholith. For this reason, the rocks in the project area are loosely termed border zone granitics. Soils derived from them also exhibit slightly higher values of shear strength than those of core-granitic origin.

The most notable characteristic of these granitic soils is their extreme susceptibility to surface erosion. Much of the rock in the existing and proposed areas of disturbance consists of metamorphosed sedimentary rocks intermingled with core granites. Soils evolving from these border zone rocks tend to have slightly higher percentages of fines and demonstrate some cohesion or apparent cohesion. Soil depths at Brundage are relatively shallow, ranging from zero-to-four feet to bedrock.

5. HYDROLOGY

Hydrology influences the availability of water in the ski area as well as the movement of snowmelt and groundwater. This can influence a ski area's ability to make snow as well as how snowmelt travels through and impacts the ski area. Within higher elevation zones, headwater wetland complexes and streams can create unique challenges to development.

The Brundage SUP area is located within the Goose Creek watershed, tributary to the Little Salmon River, and the Dead Horse Creek and Wagon Bay Creek subwatersheds of the North Fork Payette River. Dead Horse and Wagon Bay Creeks also flow down into Payette Lake, adjacent to the town of McCall, meaning that any activities at Brundage affecting water quality may also affect Payette Lake. Sediment production within the Goose Creek watershed has been accelerated through human-related activities such as road development, timber management, recreation management, fire suppression, mining, grazing, and private land development, and as a result the water quality of the Goose Creek watershed has been diminished.

6. FISH AND WILDLIFE

Fish and wildlife, being federally monitored (in the case of the Endangered Species Act), as well as generally being in the public eye, are importance considerations for ski area development. A site-specific NEPA analysis of all Forest Service sensitive, management indicator, and federally listed, threatened, and endangered species will be conducted prior to implementation of any MDP projects proposed by Brundage in the future. That analysis will be based on the latest information provided by the PNF, U.S. Fish and Wildlife Service, and the State of Idaho.

A diversity of wildlife habitat occurs throughout the Brundage SUP area. Vegetative conditions and topography are variable; however, weather conditions tend to be consistent and predictable. Long winters with an abundance of precipitation, in the form of snowfall, are the key factors that make this area seasonal habitat for many wildlife species. Many non-game species of birds and mammals are found throughout the area and are considered general forest dwellers. Big game species are found seasonally at Brundage, including mule deer, white-tailed deer, elk, black bear, and mountain lion. Their seasonal use of the area is governed by snow conditions during late spring and early winter, as well as the presence (or lack thereof) of people recreating. The area is not considered spring and/or winter range for deer and elk.

There are several rare or listed fish and wildlife species found on the PNF, including chinook salmon, sockeye salmon, steelhead and bull trout. The salmon and steelhead are born in tributaries to the Salmon River, spend most of their lives in the Pacific Ocean, and return to their natal streams to spawn and die, while bull trout occupy many rivers, lakes and streams across the PNF. Rare or listed wildlife species that could occur in the analysis area include Canada lynx and wolverine. In addition, there are many Region 4 sensitive wildlife species on the PNF, including bighorn sheep, gray wolf, bald eagle and others.

7. VEGETATION

The vegetative composition of a ski area, beyond influencing the wildlife discussed above, also influences the erosion potential of the land and its ability to retain water. Further, maintaining the integrity of over- and understory vegetation is key to long-term viability of a ski area; vegetation management for developed and undeveloped portions of ski areas can influence snow retention, wildlife habitat and movement, soils detachment, water quality and visual quality. It is therefore important to analyze and understand the existing vegetation within a ski area boundary.

The vegetation stands in the Brundage SUP area range from dense stands of evergreen trees adjacent the base area to open hillsides with individual trees scattered throughout the upper elevations. Trees are primarily conifers, including ponderosa pine, Douglas-fir, grand fir (white), western red cedar, lodgepole pine, and more. Some hardwoods, such as white and green alder and white poplar, are also present. A variety of trees in the SUP area have been negatively impacted or killed by invasive insects and disease such as roots disease, western pine beetle, etc. Brundage has been removing hazard trees as necessary (such as trees that are dead/dying and pose a hazard to skiers or operations) but a more comprehensive vegetation management plan developed in the future through site-specific NEPA may be required to address tree health issues without impacting ski area operations such wind patterns or holding snow.

There are some rare or listed vegetation species found on the PNF that must be considered before development at Brundage can be undertaken. One threatened plant species, the whitebark pine, is found on the PNF and within the Brundage SUP area. Brundage is planting seedlings to help reforest Brundage's forests with whitebark pine. In addition, according to the latest Region 4 sensitive species list,

the following sensitive plant species are found on the PNF: swamp onion, Tolmie's onion, Candystick, Payson's milkvetch, White Cloud milkvetch, Cascade reedgrass, Cusick camas, Puzzling halimolobos, Hazel's prickly phlox, Sacajawea's bitterroot, Bank monkeyflower, Radiate goldenweed, Barton's blackberry, Tobias's saxifrage, Tolmie's saxifrage, and Short-slyle tofieldia. During site-specific NEPA analysis, species that specifically occur or have the potential to occur within the Brundage project area will be identified and impacts to these species would be analyzed.

APPENDIX D.
FOREST SERVICE DIRECTION

The Forest Service nationally supports the recreational opportunities that private ski areas provide. The Forest Service and National Ski Areas Association work in partnership to achieve common goals of managing and promoting active participation in alpine recreation and sports by all people.

Because it exists on NFS lands, Brundage operates under a SUP authorized under the National Forest Ski Area Permit Act of 1986, 16 U.S.C. § 497b. The Act authorizes the Forest Service to issue ski area permits:

> *"… for the use and occupancy of suitable lands within the National Forest System for Nordic and alpine skiing operations and purposes." The Act states that a permit "shall encompass such acreage as the Secretary [of Agriculture] determines sufficient and appropriate to accommodate the permittee's needs for ski operations and appropriate ancillary facilities."*

The basis for determining the types of activities and facilities appropriate for permitted winter sports resorts operating on NFS lands are expressed in federal laws and Forest Service policy directives, including the Forest Plan. The Forest Plan is a guiding document that provides the Forest Service with authority and direction pertaining to ski area management on NFS lands.[5] Brundage and the PNF are connected through a committed long-term partnership and together seek to provide quality recreational opportunities on NFS lands. By satisfying its current and future visitors, Brundage will grow as a healthy and competitive ski resort within its market niche. This, in turn, will help fulfill Forest Service policy, objectives, and direction for ski area management on the PNF.

The following list consists of the formative federal legislations which guide Forest Service administration of NFS lands and, more specifically, at winter sports resorts:

- The Multi-Use Sustained-Yield Act of 1960 mandates that the Forest Service manage NFS lands for "**outdoor recreation**, range, timber, watershed, and wildlife and fish purposes." 16 U.S.C. § 528 (emphasis added)
- The National Forest Management Act (NFMA) requires the Forest Service to develop Forest Plans that provide for multiple uses of NFS lands, including "coordination of outdoor recreation, range, timber, watershed, wildlife and fish, and wilderness." 16 U.S.C. § 1604(e)(1) (emphasis added)
- The National Forest Ski Area Permit Act of 1986 specifically endorses developed winter recreation on NFS lands and authorizes the Forest Service to issue SUPs that encompass "such acreage" as the Forest Service "determines sufficient and appropriate to accommodate the permittee's needs for ski operations and appropriate ancillary facilities." 16 U.S.C. § 497b(b)(3)
- The service-wide Memorandum of Understanding between the National Ski Areas Association and the Forest Service (FS Agreement No. 07-SU-11132424-246), recognizes "that ski areas can help meet increased demand for recreational opportunities in a managed setting." The Forest Service stated its commitment to "evaluate four-season recreation at ski areas to improve economic stability

[5] Payette National Forest, "Payette National Forest Revised Forest Plan," Forest Plan (McCall, Idaho: US Forest Service, July 2003), https://www.fs.usda.gov/detail/payette/landmanagement/planning/?cid=stelprdb5035589.

and enhance outdoor recreation opportunities during policy formation, master development planning, and project plans."

- The 2011 Ski Area Recreational Opportunity Enhancement Act (SAROEA) amended the National Forest Ski Area Permit Act of 1986. The 2011 SAROEA enables snow sports (other than Nordic and alpine skiing) to be permitted on NFS lands subject to ski area permits issued by the Secretary of Agriculture. In addition, it clarifies the authority of the Secretary of Agriculture to permit appropriate additional seasonal or year-round recreational activities and facilities on NFS lands subject to ski areapermits issued by the Secretary of Agriculture. Further information on SAROEA is provided below.

A. 2011 SKI AREA RECREATIONAL OPPORTUNITY ENHANCEMENT ACT

The 2011 SAROEA amended the National Forest Ski Area Permit Act of 1986. The 2011 SAROEA enables snow sports (other than Nordic and alpine skiing) to be permitted on NFS lands subject to ski area permits issued by the Secretary of Agriculture.[6] In addition, it clarifies the authority of the Secretary of Agriculture to permit appropriate additional seasonal or year-round recreational activities and facilities on NFS lands subject to ski area permits issued by the Secretary of Agriculture. Activities and facilities that may, in appropriate circumstances, be authorized under the Act include but are not limited to, zip lines and ropes courses, mountain biking trails, and Frisbee golf.

In April 2014, the Forest Service provided a Final Directive for Additional Seasonal or Year-Round Recreation Activities at Ski Areas that includes guidance for implementing the 2011 SAROEA. Forest Service Manual (FSM) 2343.14 states that the Forest Service will apply the following screening criteria during review of site-specific proposals prior to the initiation of a NEPA review process. During this master planning stage, projects are conceptual and do not include the level of design that would be required to fulfill all of the screening criteria; instead, site-specific detail is be provided during the project proposal stage to initiate the NEPA process. The screening criteria included in FSM 2343.14(1) guide the development of projects on NFS lands, and the activities and facilities associated with those projects must:

- (1)(a) Not change the primary purpose of the ski area to other than snow sports;
- (1)(b) Encourage outdoor recreation and enjoyment of nature and provide natural resource-based recreation opportunities;
- (1)(c) To the extent practicable, be located within the portions of the ski area that are developed or that will be developed pursuant to the MDP;
- (1)(d) Not exceed the level of development for snow sports and be consistent with the zoning established in the applicable MDP;
- (1)(e) To the extent practicable, harmonize with the natural environment of the site where they would be located by:
    - (1)(e)(1) Being visually consistent with or subordinate to the ski area's existing facilities, vegetation and landscape; and

[6] "Ski Area Recreational Opportunity Enhancement Act of 2011," Pub. L. No. 112–46 (2011), https://www.govinfo.gov/app/details/https%3A%2F%2Fwww.govinfo.gov%2Fapp%2Fdetails%2FPLAW-112publ46.

    - (1)(e)(2) Not requiring significant modifications to topography to facilitate construction or operations.
- (1)(f) Not compromise snow sports operations or functions; and
- (1)(g) Increase utilization of snow sports facilities and not require extensive new support facilities, such as parking lots, restaurants, and lifts.

Again, the above screening criteria will be applied for the planned activities in this MDP during the NEPA process that would occur with project proposal. At that point, design plans more detailed than those generated within this master planning process would be made available.

FSM 2343.14(8) provides narrower guidance for elements to be included in the master planning process. Specifically, the master planning process should:

- (8)(a) Establish zones to guide placement and design of additional seasonal or year-round recreation facilities, basing the zones on the existing natural setting and level of development to support snow sports;
- (8)(b) Depict the general location of the facilities; and
- (8)(c) Establish an estimated timeframe for their construction.

B. 2003 PNF LAND AND RESOURCE MANAGEMENT PLAN

The PNF Land and Resource Management Plan (Forest Plan) was originally published in 1988.[7] In 2003, the Forest Plan was revised to provide the present management direction for PNF lands. Because Brundage operates on the PNF, all planned projects must be consistent with management direction provided in the Forest Plan. The planning efforts behind the MDP considered this and planned projects that would be consistent with the Forest Plan.

Upon Forest Service acceptance of this MDP and subsequent acceptance of a proposal for a specific set of projects identified in this MDP, a site-specific NEPA process would commence. Site-specific NEPA would include a Forest Plan consistency analysis to identify the consistency of the proposed projects with management direction provided in the Forest Plan. Any proposed projects determined to be inconsistent with the Forest Plan in the consistency analysis would either necessitate a Forest Plan amendment (described below) or would need to be modified to achieve consistency with the Forest Plan.

The Forest Plan lays out management direction in two tiers: (1) Forestwide management direction; and (2) Management Area specific management direction. Only Management Area specific management direction is described in this section as Forestwide management direction extends beyond the scope of this document; however, Forestwide management direction will be considered within any site-specific NEPA occurring subsequent to the completion of this MDP.

It is also important to note the distinction in the Forest Plan between the terms “Management Area” and “Management Prescription Category.” The term “Management Area” is used to identify physical swaths of land on the PNF, whereas “Management Prescription Category” identifies the management direction applicable for sections of a management area. Various lands within a single Management Area may be

[7] Payette National Forest, “Revised Forest Plan.”

managed according to multiple Management Prescription Categories, depending on the nature of the lands in question and the intended use of those lands in the eyes of the Forest Plan. The terms "Management Area" and "Management Prescription Category" will hereafter be referred to using the acronyms "MA" and "MPC," respectively.

The following sections identify the Forest Plan management directions that are relevant to Brundage.

1. FOREST PLAN GUIDANCE FOR MANAGEMENT AREAS WITHIN BRUNDAGE'S SUP

Brundage's current SUP encompasses two Management Areas: Goose Creek/Hazard Creek (MA 06) and Payette Lakes (MA 07). Brundage's operational area is managed according to MA 06 MPC 4.2 – Roaded Recreation. A portion of Brundage's SUP (to the east of the ridge) extends into the Payette Lakes Management Area MA-07 and is managed according to MA 07 MPC 3.2. The proposed eastern SUP expansion would extend into MA 07 MPC 3.2. As noted in the Forest Plan, this expanded SUP area is also part of the French Creek IRA.

a) MA 06: Goose Creek/Hazard Creek Management Area

Under the PNF Forest Plan, MA 06 is comprised of land administered by the PNF within the Goose Creek, Hazard Creek, and Upper Little Salmon River watersheds of the Little Salmon River drainage. MA 06 covers parts of Adams, Valley and Idaho Counties, north of New Meadows and McCall, and is part of the New Meadows and McCall Ranger Districts. In total, MA 06 includes approximately 78,800 acres of the PNF (although this value includes several small private and state inholdings that together make up less than two percent of the MA). MA 06 is bordered by PNF lands to the north and northeast, State of Idaho land to the southeast, private land to the south, and a mix of private, Bureau of Land Management, and State of Idaho lands to the west.[8]

Brundage is among the special features of MA 06. The Revised Forest Plan notes that, as of its publication in 2003, Brundage draws over 100,000 visitors per year. The Forest Plan also notes that MA 06, and Brundage in particular, are among the highest recreation use areas on the PNF, with that recreation being characterized as high in the summer and winter. The Forest Plan identifies the Little Goose Creek subwatershed as a wildland-urban interface (WUI) area due to the presence of Brundage and other developed sites (e.g., Little Ski Hill, Rock Flat subdivision, meaning wildfire management is extremely important in this area.

Within management direction provided for MA 06, some resource-specific direction is provided that references Brundage directly. In particular, the following four objectives are identified:

- Soil, Water, Riparian, and Aquatic Resources – Work with Brundage Mountain Resort to address accelerated erosion from roads and trails.
- Recreation Resources – Consider and evaluate the expansion of the Brundage Mountain Resort and Little Ski Hill.
- Scenic Environment – Maintain scenic values as seen from the Highway 55 corridor (Goose Creek Canyon), Highway 95 corridor, Bear Creek Lodge, Little Ski Hill, and Brundage Mountain Resort and

[8] Payette National Forest, III–165.

Forest Road 257 to maintain a natural-appearing setting in high-use recreation areas and for visitors in and near the Forest.

- Lands and Special Uses – Update the existing site plan for the Brundage Mountain communications site to meet agency policy and eliminate potential use conflicts.

While achievement of these objectives is not required of the PNF, the objectives provide goals for land use managers to work toward.

b) MPC 4.2: Roaded Recreation Management Prescription Category

MPC 4.2 directs land uses on approximately 20% of PNF lands within MA 06, including Brundage's SUP. Certain standards and guidelines provide specific management direction for lands within MPC 4.2; standards are policies that must be adhered to, while guidelines are recommendations for which compliance is desirous but not necessary. The standards and guidelines provided for MPC 4.2 – Roaded Recreation are listed below.[9]

Road Standard

There shall be no net increase in road densities in the MPC 4.2 portion of the Little Goose Creek subwatershed unless it can be demonstrated through the project-level NEPA analysis and related Biological Assessment that:

- For resources that are within their range of desired conditions, the increase in road densities shall not result in degradation to those resources unless outweighed by demonstrable short- or long-term benefits to those resource conditions; and
- For resources that are already in a degraded condition, the increase in road densities shall not further degrade nor retard attainment of desired resource conditions unless outweighed by demonstrable short- or long-term benefits to those resource conditions; and
- Adverse effects to Threatened, Endangered, Proposed or Candidate (TEPC) species or their habitat are avoided unless outweighed by demonstrable short- or long-term benefits to those TEPC species or their habitat.

An exception to this standard is where additional roads are required to respond to reserved or outstanding rights, statute or treaty, or respond to emergency situations (e.g., wildfires threatening life or property, or search and rescue operations).

Vegetation Guideline

Vegetation management actions – including wildland fire use, prescribed fire, and mechanical treatments – may be used to maintain or retore desired vegetation and fuel conditions provided they do not prevent achievement of recreation resource objectives.

Fire Guideline

The full range of fire suppression strategies may be used to suppress wildfires. Emphasize strategies and tactics that minimize impacts to recreation developments and investments.

[9] Payette National Forest, III–174.

c) MA 07: Payette Lakes Management Area

Under the PNF Forest Plan, MA 07 is comprised of land by the PNF within the North Fork Payette River drainage north and east of McCall, Idaho. The management area lies in Valley County and is part of the McCall Ranger District. In total, MA 07 encompasses approximately 102,400 acres of land, about 98% of which are land administered by the Forest Service.[10] Brundage's existing SUP extends into MA 07 and the proposed expanded SUP extends into MA 07 further to the east. The only other recreational SUP in MA 07 is for Bear Basin Nordic Center in the southwest corner of the management area.

MA 07 provides management area description that implicate potential future operations in the eastside expansion. The Forest Plan notes that "[MA 07] provides a municipal watershed, scenic backdrop, and recreational playground for the city of McCall," and states that "Because this area and nearby McCall are popular recreation destinations, [recreational] users come from both local and regional population centers."[11]

d) MPC 3.2: Active Restoration and Maintenance of Aquatic, Terrestrial and Hydrologic Resources

MPC directs land use on approximately 17% of PNF lands within MA 07, including the land encompassed by Brundage's SUP both as-designated and as-proposed. The Forest Plan General Standard for MPC 3.2 states:

> *Management actions, including salvage harvest, may only degrade aquatic, terrestrial, and watershed resource conditions in the temporary (up to 3 years) or short-term (3-15 years) time periods, and must be designed to avoid degradation of existing conditions in the long-term (greater than 15 years).*[12]

Other Standards and Guidelines of MPC 3.2 include: a Vegetation Standard notes vegetation restoration and maintenance treatments; a Road Standard notes limits on road construction (because the proposed SUP expansion would also encompass the French Creek IRA, road construction would not occur in this area); and a Fire Guideline notes a full range of figure suppression strategies may be used to suppress wildfires.

C. FRENCH CREEK IRA

The majority of the planned SUP expansion area, including the Eastside and Lift G lifts and terrain pods, is located within the French Creek IRA, which covers the back [east] side of Brundage Mountain east of USFS Road 451. Roadless areas are inventoried NFS lands that contain prohibitions on road construction, road reconstruction, and timber harvesting.

The French Creek IRA was inventoried in 1998 as part of the nationwide inventory of roadless areas that led to the enactment of the 2001 federal Roadless Rule legislation. It was not until enactment of the 2001 Roadless Rule that any land use management restrictions were established within the French Creek IRA, or within any other lands identified as IRAs through the nationwide inventory in 1998. Since the enactment of the 2001 Roadless Rule, a number of states have enacted their own state-specific roadless rules, including Idaho; in all of these states, the state-specific roadless rule supersedes the federal legislation because it provides more site-specific management direction for designated IRAs than the federal legislation could achieve. Under both roadless rules, Management Classes are established to provide more specific guidance and requirements within each roadless area.

[10] Payette National Forest, III–181.
[11] Payette National Forest, III–186.
[12] Payette National Forest, III–188.

Analysis conducted for the 2008 Idaho Roadless Rule (the August 2008 Final Environmental Impact Statement for Roadless Area Conservation in Idaho) offered a detailed description of the French Creek IRA, which is provided in the following text.

> *The French Creek Roadless Area lies in the north central section of the PNF, on the New Meadows and McCall Ranger Districts. It includes Bear Pete Ridge and the head of French Creek, and extends south to Brundage Mountain. The French Creek Roadless Area is very rugged with steep river breaks, high alpine meadows, glacial cirque basins, and many small alpine lakes. Soils derive generally from granitic parent material and are mainly light-colored, coarse-textured, and rocky. Elevations range from 3,400 to 8,700 feet.*

The French Creek IRA provides opportunities for motorized and non-motorized recreation and features an extensive trail system. The area receives year-round use through activities such as backpacking, horseback riding, fishing, hunting, snowmobiling, and backcountry skiing. Snowmobiling has been increasing rapidly in this area, especially in the areas near Burgdorf and Brundage Mountain. The State of Idaho owns 640 acres within the roadless area. No other permanently encumbered land titles of record occur within the area. An estimated 2,000 acres of NFS lands along the eastern boundary of the IRA, north of McCall, are subject to consideration for mutual road systems under the assured ingress and egress provisions of the State of Idaho - Forest Service Cooperative Road Agreement (Cost-Share).

Several permits have been issued for special uses within the roadless area, including snowcat skiing and backcountry skiing near Brundage, and outfitter and guide services for fly fishing and mountain bike tours.

The 2008 Idaho Roadless Rule designates areas of the French Creek IRA within and adjacent to Brundage's planned SUP expansion as Management Class Backcountry/Restoration. As noted in the *2008 Roadless Area Conservation, National Forest System Lands in Idaho Final Environmental Impact Statement*, Backcountry/Restoration areas would typically be managed for other resource benefits, such as wildlife or recreation, not typically including timber production.[13] Under this Management Class, road construction and reconstruction would be permissible if one or more of the following are met:

1. A road is needed to protect public health and safety in cases of significant risk or imminent threat of flood, fire, or other catastrophic event that, without intervention, would cause the loss of life or property, or to facilitate forest health activities permitted under timber cutting, sale, or removal (1) above; or
2. A road is needed to conduct a response action under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) or to conduct a natural resource restoration action under CERCLA, section 311 of the Clean Water Act, or the Oil Pollution Act; or
3. A road is needed pursuant to statute, treaty, reserved or outstanding rights, or other legal duty of the United States; or

   Road realignment is needed to prevent resource damage that arises from the design, location, use, or deterioration of a road and cannot be mitigated by road maintenance. Road realignment may occur only if the road is deemed essential for public or private access, natural resourcemanagement, or public health and safety; or

[13] 2008 Roadless Area Conservation, National Forest System Lands in Idaho Final Environmental Impact Statement. Available at: https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fsm8_036009.pdf.

4. Road construction is needed to implement a road safety improvement project on a road that has been determined to be hazardous based on accident experience or accident potential on that road; or
5. The Secretary of Agriculture determined that a Federal aid highway project, authorized pursuant to Title 23 of the U.S. Code (23 USC), is in the public interest or is consistent with the purpose for which the land was reserved or acquired and no other reasonable and prudent alternative exists; or
6. A road is needed in conjunction with activities permissible under the limited mineral exceptions for Backcountry.

In addition, timber cutting, sale, or removal is permissible under the following circumstance related to Brundage:

"The cutting, sale or removal of timber is: a. For personal or administrative use (36 CFR §223); or b. Incidental to the implementation of a management activity not otherwise prohibited (e.g., trail clearing); or c. It is within a substantially altered portion of an Idaho Roadless Area designated as Backcountry/Restoration, which has been altered because of the construction of a forest road and subsequent timber harvest."

Forest Service IRA policy does not prohibit ski area activities within IRAs; in fact, there are other ski areas operating on NFS lands that have received authorization to implement projects (e.g., remove timber, construct ski area infrastructure) within designated IRAs. Forest Service IRA policy simply directs that roads are prohibited in these areas, which means that ski area projects occurring in IRAs generally require more complicated design because roads cannot be built or otherwise utilized to facilitate construction of the projects (unless the roads fit within the categories listed previously). Under the 2008 Idaho Roadless Rule and 36 CFR 212.1, roads are defined as a motor vehicle route over 50 inches wide, unless identified and managed as a trail. Per 36 CFR 212.1, a trail is a route 50 inches or less in width or a route over 50 inches that is identified and managed as a trail.

With proper design measures, Brundage can achieve its vision and goals to construct planned ski area infrastructure within the French Creek IRA, while retaining the roadless values and characteristics.

Specific NEPA analysis would dictate how construction can occur within the French Creek IRA; however, at this time, Brundage anticipates proceeding with construction through use of trails (i.e., routes less than 50 inches wide or routes over 50 inches wide that would be managed as a trail). In accordance with this, construction could occur by foot, helicopter, or vehicles less than 50 inches wide such as ATVs.

D. RECREATION OPPORTUNITY SPECTRUM

The ROS is a framework for stratifying and defining classes of outdoor recreation environments, activities and experience opportunities on all NFS lands. It also provides a context and tool for estimating and describing recreation resources as well as effects to those resources from alternative management strategies and actions. All PNF lands correspond with one of the six established ROS classifications: urban, rural, roaded natural, semi-primitive motorized, semi-primitive non-motorized, and primitive.

The Brundage SUP area corresponds with the semi-primitive motorized ROS classification in both the winter and summer. The Forest Service defines this ROS classification as follows:

> *Moderate probability of solitude, closeness to nature, high degree of challenge and risk using motorized equipment; predominantly natural appearing environment; few users but evidence on trails; minimum of subtle, on-site controls; vegetation alterations few, widely dispersed, and visually subordinate.*

The Forest Plan describes this ROS classification in more detail, as follows:

> *These areas provide for motorized recreation opportunities in semi-primitive settings. In areas seen from travelways, a natural-appearing setting dominates the outdoor physical environment, with only subtle or minor evidence of human-caused modifications. Other areas could have moderately dominant alterations.*

While site specific NEPA analysis would discuss project compatibility with this ROS in additional detail. Brundage anticipates that the projects proposed in the existing and planned SUP area would be compatible with an ROS of Semi-Primitive Motorized given that motorized use is permitted and moderately dominant alterations can occur.

E. SCENERY RESOURCES

1. VISUAL MANAGEMENT SYSTEM

The Visual Management System (VMS) is a management tool that determines scenic values on NFS lands and establishes allowable levels of human-caused change to the scenic environment. The VMS is used to plan project activities in order to keep visual impacts within varied levels of acceptable change. Management of the scenic environment using the VMS requires the determination of Visual Quality Objectives (VQO), which are identified for PNF lands in the Forest Plan.

The five VQO classes established by the Forest Service are as follows: preservation, retention, partial retention, modification, and maximum modification. The VQO class applied to certain NFS lands is determined by consideration of viewer sensitivity, viewing distance zones, and inherent scenic qualities. The PNF lands where projects in this MDP are planned, including the projects in the proposed permit boundary adjustment, correspond with the Partial Retention VQO. The Forest Service defines the Partial Retention VQO as follows:[14]

> *Partial Retention – Allows management activities that remain visual subordinate to the characteristic landscape. Activities may repeat form, line, color and texture common to the characteristic landscape but changes in their qualities of size, amount, intensity, direction, pattern, etc., remain visually subordinate to the characteristic landscape. Activities may also introduce form, line, color, or texture that are found infrequently or not at all in the characteristic landscape, but they should remain subordinate to the visual strength of the characteristic landscape.*

2. BUILT ENVIRONMENT IMAGE GUIDE

The Built Environment Image Guide (BEIG) has been designed to ensure thoughtful design and management of the built environment on NFS lands, which includes: administrative and recreation structures, landscape structures, site furnishing, structures on roads and trails, and signs installed or

[14] USDA Forest Service. 1995. Landscape Aesthetics: A Handbook for Scenery Management.

operated by the Forest Service, its cooperators, and permittees.[15] It focuses on the image, appearance and structural character of facilities. Three core contexts are stressed throughout the BEIG: (1) environmental; (2) cultural; and (3) economic.

The BEIG provides general guidance regarding the image, aesthetics, and overall quality of recreational and administrative structures on NFS lands, but it does not contain enforceable "standards" pertaining to aesthetic quality as found in a typical Forest Plan. The environmental, cultural, and economic contexts within which the BEIG is based are important considerations in the development of structural facilities at Brundage. All built structures on NFS lands (excluding chairlift terminals) identified in this MDP would meet relevant direction provided by the BEIG. Brundage will strive to attain a consistent architectural theme for built infrastructure on NFS lands.

The environmental, cultural, and economic contexts within which the BEIG is based are important considerations in development of structural facilities (not includinglift terminals) within the Brundage SUP area and will be considered along with elements of the BEIG within the "Rocky Mountain Province" section (pages 159–178) when designing and constructing the planned projects. The BEIG offers the following relevant architectural guidelines for the Rocky Mountain Province related to materials and color:[16]

> *Materials: Use stone, wood, heavy timber, and other natural materials when they are available and practical to use. Substitute manufactured materials, such as synthetic stone, if they can achieve the appearance of natural materials. The key is to make the scale, color, and texture of materials correspond to the setting. Consider costs and availability in remote locations*
>
> *Colors: Analyze the local landscape for indigenous colors and materials. Use color schemes that are inspired by rock outcrops, leaves or needles, tree trunks and bark, and colors found on the forest floor. Dominate the palette with earth tones. Integrate colors with natural materials where possible. Use accent colors drawn from accents of the setting: the green or orange-rust of lichen, the red-brown of red-twig dogwood, the deep burgundy of willow stands, and the ivory of aspen bark.*

Brundage's existing facilities generally match these guidelines, as they include the varied use of stone, wood, and other natural materials and color schemes are similar to tree trunks and bark. Brundage anticipates that the architectural theme of any planned buildings on NFS lands will be similar to existing buildings and will follow the guidelines presented for the Rocky Mountain Province by the BEIG.

3. ACCESSIBILITY TO PUBLIC LANDS

In June 2005, the Forest Service released the *Accessibility Guidebook for Ski Areas Operating on Public Lands, 2005 Update*. This guidebook provides information for ski areas authorized under a SUP to work with the Forest Service in providing equal opportunities for all people, including those with disabilities.

Brundage will maintain consistency with this guidebook for future development projects occurring on public lands.

Ski areas operating under special-use authorization from the Forest Service are required to comply with both the Americans with Disabilities Act of 1990 (ADA) and Section 504 of the Rehabilitation Act of 1973 (Section 504). The ADA applies because Brundage operates as a "public accommodation;" moreover, Brundage is a business open to the public. Section 504 applies because Brundage operates under a SUP

[15] USDA Forest Service. 2001. The Built Environment Image Guide for the National Forests and Grasslands.

[16] Ibid.

authorized by the Forest Service. Through the SUP, the ski area agrees to abide by these and all other laws, regulations, and policies of the federal government.

Significant legislation that preceded the ADA includes the Architectural Barriers Act of 1968 (ABA) and the Rehabilitation Act of 1973, as amended. ABA was the first measure passed by Congress to ensure access to facilities. The ABA requires that all facilities built, bought, or leased by or for a Federal agency be accessible. Section 504 of the Rehabilitation Act states: “No otherwise qualified individual with a disability in the United States shall, solely by reason of his disability, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance or under any program or activity conducted by an Executive Agency.”

Brundage currently complies with this legislation through their active involvement in assisting disabled guests with skiing and other recreation activities. Through future site-specific NEPA and design development reviews, Brundage will work closely with the Forest Service to ensure accessibility measures are taken to provide equal opportunity to all users of public lands.

FIGURES

Brundage Mountain 2022 MDP

Figure 1: Vicinity Map

Legend

- Brundage Ski Area
- Major Road
- State Line

Prepared by: October 2022

SE GROUP

Seattle
Portland
Payette
Boise
Twin Falls
Pocatello
Tamarack Resort
Bogus Basin
Sun Valley Resort
Brundage Mountain
Washington
Idaho
Oregon
Montana
Wyoming
California
Nevada
Utah

Brundage Mountain 2022 MDP

Figure 2: Property Boundaries

Legend

- SUP Boundary
- Private Land
- National Forest Land
- State Land
- Roadless Area
- Wetlands and Streams
- Operational Boundary
- Ski Patrol
- Parking Lot
- Existing Ski Lift
- Planned Ski Lift
- Approved Ski Lift
- Mountain Roads

Prepared by: SE GROUP

October 2022

FRENCH CREEK ROADLESS AREA

IDAHO STATE LAND

PAYETTE NATIONAL FOREST

PAYETTE NATIONAL FOREST

SUP Boundary

SUP Boundary

LIFT G

EASTSIDE

LAKEVIEW LIFT

SARGENTS

WAYBACK

HIDDEN VALLEY

BLUEBIRD EXPRESS

CENTENNIAL

BEAR CHAIR

TEMPTATION

ACCESS LIFT - SOUTH

CONVEYOR

EASY STREET

ACCESS LIFT - NORTH

UPPER CONVEYOR

LOWER CONVEYOR

Note: The existing Special Use Permit shown on this figure reflects Brundage's recently approved Special Use Permit Boundary

N

SCALE (ft)

0 1,200 2,000 3,200 4,000

Brundage Mountain 2022 MDP

Figure 3: Slope Analysis

Legend

- SUP Boundary
- Private Land Boundary
- Operational Boundary
- Ski Trail by Ability Level
- Ski Patrol
- Parking Lot
- Existing Ski Lift

70% and Above	Expert Only
45 - 70%	Most Difficult
25 - 45%	More Difficult
8 - 25%	Easier
0 - 8%	Unsuitable for Sliding

Prepared by: SE GROUP

October 2022

Sargent Mountain 7,803'

7,640 FT

HIDDEN VALLEY

ASPEN PATCH

DOBBER'S DREAM

GOOSE CREEK

FS ROAD 257

LAKEVIEW LIFT

BLUEBIRD EXPRESS

CENTENNIAL

BEAR CHAIR

EASY STREET

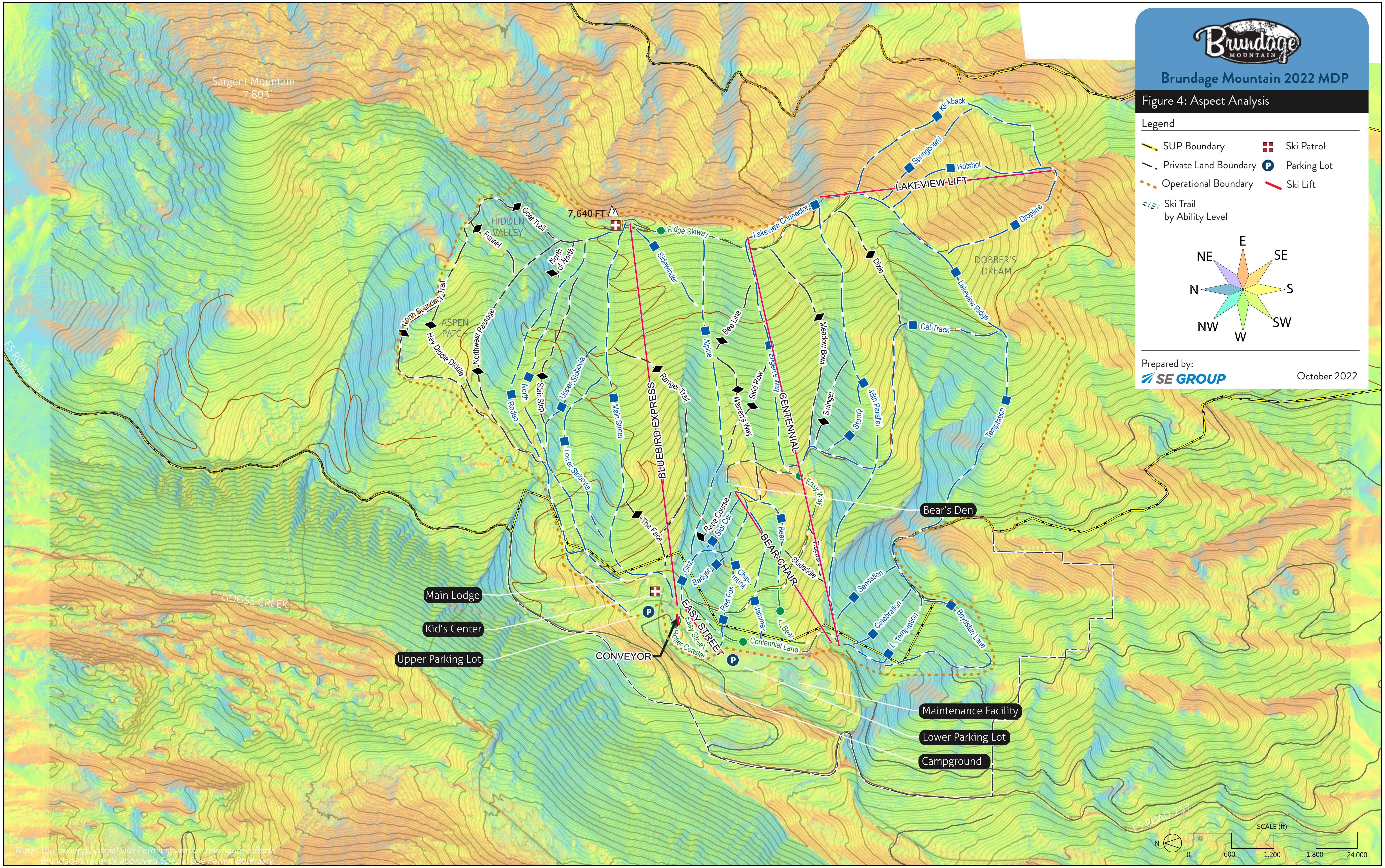
CONVEYOR

Kickback
Springboard
Hotshot
Dropline
Lakeview Connector
Ridge Skiway
Goat Trail
Funnel
North of North
Sidewinder
Divide
Lakeview Ridge
Cat Track
North Boundary Trail
Hey Diddle Diddle
Northwest Passage
Alpine
Bee Line
Meadow Bowl
Swinger
Stump
45th Parallel
Skid Row
Warren's Way
Eugene's Way
Ranger Trail
Upper Slobovia
Lower Slobovia
Main Street
North
Rodeo
Star Step
Temptation
The Face
Race Course
Slot Cat
Easy Way
Bear's Den
Griz
Badger
Red Fox
Chip-munk
Jammer
L. Bear
Centennial Lane
Roller Coaster
Easy Street
Skidaddle
Sensation
Celebration
L. Temptation
Boydstun Lane

Main Lodge
Kid's Center
Upper Parking Lot
Maintenance Facility
Lower Parking Lot
Campground

SCALE (ft)
N
0 600 1,200 1,800 24,000

Note: The existing Special Use Permit shown on this figure reflects Brundage's recently approved Special Use Permit Boundary.



Brundage Mountain
Brundage Mountain 2022 MDP
Figure 4: Aspect Analysis
Legend
SUP Boundary
Private Land Boundary
Operational Boundary
Ski Trail by Ability Level
Ski Patrol
Parking Lot
Ski Lift
E
SE
S
SW
W
NW
N
NE
Prepared by:
SE GROUP
October 2022
Sargent Mountain 7,803'
7,640 FT
HIDDEN VALLEY
ASPEN PATCH
DOBBER'S DREAM
GOOSE CREEK
FS ROAD 257
LAKEVIEW LIFT
BLUEBIRD EXPRESS
CENTENNIAL
BEAR CHAIR
EASY STREET
CONVEYOR
Kickback
Springboard
Hotshot
Dropline
Lakeview Connector
Ridge Skiway
Goat Trail
Funnel
North of North
North Boundary Trail
Hey Diddle Diddle
Northwest Passage
Rodeo
North
Stair Step
Upper Stobovia
Lower Stobovia
Main Street
Sidewinder
Ranger Trail
Alpine
Bee Line
Skid Row
Warren's Way
Engen's Way
Meadow Bowl
Swinger
Stump
45th Parallel
Dixie
Lakeview Ridge
Cat Track
Temptation
Easy Way
The Face
Race Course
Slot Car
Griz
Badger
Chipmunk
Red Fox
Jammer
Bear
Skidaddle
Lil Bear
Centennial Lane
Roller Coaster
Sensation
Celebration
L Temptation
Boydstun Lane
Bear's Den
Main Lodge
Kid's Center
Upper Parking Lot
Maintenance Facility
Lower Parking Lot
Campground
SCALE (ft)
0
600
1,200
1,800
24,000
Note: The existing Special Use Permit shown on this figure reflects Brundage's recently approved Special Use Permit Boundary.

Brundage Mountain

Brundage Mountain 2022 MDP

Figure 5: Existing Winter Conditions

Legend

- SUP Boundary
- Private Land Boundary
- Operational Boundary
- Ski Lift
- Ski Trail by Ability Level
- Snowmaking Coverage
- Ski Patrol
- Parking Lot
- Mountain Roads
- Wetlands and Streams
- Snowmobile Trail

Prepared by: SE GROUP

October 2022

RECREATION AREA

HIDDEN VALLEY

ASPEN PATCH

DOBBER'S DREAM

RECREATION AREA

7,640 FT

Goat Trail

Funnel

North of North

North Boundary Trail

Hey Diddle Diddle

Northwest Passage

Ridge Skiway

Lakeview Connector

Sidewinder

Alpine

Beg Line

Rodeo

North

Star Step

Upper Slobovia

Lower Slobovia

Main Street

Ranger Trail

BLUEBIRD EXPRESS

Warren's Way

Skid Row

CENTENNIAL

Meadow Bowl

Swinger

Stumble

45th Parallel

Kickback

Springboard

Hotshot

LAKEVIEW LIFT

Dropline

Divide

Lakeview Ridge

Cat Track

Temptation

Easy Way

Bear's Den

The Face

Race Course

Ski Cat

Grin

Badger

Chip-munk

Red Fox

Jammer

BEAR CHAIR

L. Bear

Skiddaddle

Sensation

Celebration

L. Temptation

JOHNNY'S GLADE

Boydstun Lane

Centennial Lane

EASY STREET

Easy Street

River Coaster

CONVEYOR

Main Lodge

Kid's Center

Upper Parking Lot

Maintenance Facility

Lower Parking Lot

Campground

GOOSE CREEK

FS ROAD 257

SCALE (ft)

N

0 600 1,200 1,800 2,400

Note: The existing Special Use Permit shown on this figure reflects Brundage's recently approved Special Use Permit Boundary

Brundage Mountain 2022 MDP

Figure 6: Mountain Roads and Utilities Plan

Legend

- SUP Boundary
- Private Land Boundary
- Operational Boundary
- Ski Lift
- Ski Trail by Ability Level
- Water Utilities
- Sewer
- Groundwater Drain
- Ski Patrol
- Parking Lot
- Mountain Roads
- Wetlands and Streams
- Primary Power
- Secondary Power
- Communications
- Snowmobile Trail

Prepared by: SE GROUP

October 2022

7,640 FT

HIDDEN VALLEY

ASPEN PATCH

DOBBER'S DREAM

LAKEVIEW LIFT

BLUEBIRD EXPRESS

CENTENNIAL

BEAR CHAIR

EASY STREET

JOHNNY'S GLADE

CONVEYOR

FS ROAD 257

Bear's Den

Water Tank

Water Well

Main Lodge

Kid's Center

Upper Parking Lot

Maintenance Facility

Lower Parking Lot

Campground

Base Area Utilities Zoom-in

Note: The existing Special Use Permit shown on this figure reflects Brundage's recently approved Special Use Permit Boundary.

SCALE (ft)

N

0 600 1,200 1,800 2,400

Brundage Mountain

Brundage Mountain 2022 MDP

Figure 7: Existing Summer Conditions

Legend

- SUP Boundary
- Private Land Boundary
- Operational Boundary
- Summer Use Lift
- Winter Use Lift
- Parking Lot
- Hiking Trail
- MTB Trail
- Wetlands and Streams
- Mountain Roads

Prepared by: SE GROUP

October 2022

7,640 FT

Rock Garden

FS 456 Brundage Lookout

Lakeview Vista

LAKEVIEW LIFT

South Lodge Lane

High Voltage

Zorro

Grower

Hidden Valley Downhill Trail

Elk Trail

Wildcat DH

Grouse

FS ROAD 257

BLUEBIRD EXPRESS

CENTENNIAL

USFS 456

Bear's Den

Black Bear Loop

To Elk

BEAR CHAIR

Main Lodge

Upper Parking Lot

GOOSE CREEK

Greenhorn

Black Bear

Hammerhead

Thorn Creek

Maintenance Facility

Lower Parking Lot

Campground

FS ROAD 257

N

SCALE (ft)

0 600 1,200 1,800 2,400

Note: The existing Special Use Permit shown on this figure reflects Brundage's recently approved Special Use Permit Boundary.


Brundage Mountain
Brundage Mountain 2022 MDP
Figure 8: Winter Upgrade Plan
Legend
Existing
SUP Boundary
Private Land
Existing Ski Lift
Ski Run by Ability Level
Wetlands and Streams
Ski Patrol
Parking Lot
Mountain Roads
Snowmobile Trail
Operational Boundary
Planned
SUP Boundary
Residential Development
Mountain Roads
Parking
Water Tank
Snowmobile Trail Reroute
Catchment Trail
Ski Lift
Previously Approved Lift
Ski Run
Possible Maintenance Building Location
Recreation Area
Ski Lift
Nordic Trails
Prepared by:
October 2022
SE GROUP
Eastside Hut
Sargent's Hut
Sargent Mountain 7,803'
Warming Hut
Lakeview Hut
Summit Hut
7,640 FT
LAKEVIEW LIFT
EASTSIDE
LIFT G
SARGENTS
WAYBACK
HIDDEN VALLEY
BLUEBIRD EXPRESS
CENTENNIAL
BEAR CHAIR
EASY STREET
TEMPTATION
Expanded Bear's Den
Centennial Midstation
Bear's Den
New Day Lodge
Main Lodge
Kid's Center
Upper Parking Lot
ACCESS LIFT - NORTH
UPPER CONVEYOR
LOWER CONVEYOR
Day Lodge
Campground
Lower Parking Lot
Maintenance Facility
ACCESS LIFT - SOUTH
Day Lodge
HIDDEN VALLEY
DOBBER'S DREAM
SUP BNDY
FS ROAD 257
FS ROAD 451
FS ROAD 257
GOOSE CREEK
SCALE (ft)
0 750 1,500 2,250 3,000
N
Note: The existing Special Use Permit shown on this figure reflects Brundage's recently approved Special Use Permit Boundary

Brundage Mountain 2022 MDP

Figure 9: Snowmaking Upgrade Plan

Eastside Hut
Sargent's Hut
Sargent Mountain 7,803'
Warming Hut
Summit Hut
7,640 FT
Lakeview Hut
Centennial Midstation
Bear's Den
Expanded Bear's Den
New Day Lodge
Main Lodge
Kid's Center
Upper Parking Lot
ACCESS LIFT - NORTH
UPPER CONVEYOR
LOWER CONVEYOR
Day Lodge
Campground
Lower Parking Lot
Maintenance Facility
Day Lodge
ACCESS LIFT - SOUTH
LIFT G
EASTSIDE
SARGENTS
WAYBACK
HIDDEN VALLEY
BLUEBIRD EXPRESS
CENTENNIAL
BEAR CHAIR
EASY STREET
LAKEVIEW LIFT
TEMPTATION
HIDDEN VALLEY
ASPEN PATCH
DOBBER'S DREAM
GOOSE CREEK
FS ROAD 257
FS ROAD 451
SUP BNDY

Legend

Existing

- SUP Boundary
- Private Land
- Existing Ski Lift
- Ski Run by Ability Level
- Wetlands and Streams
- Ski Patrol
- Parking Lot
- Mountain Roads
- Snowmobile Trail
- Snowmaking Coverage
- Operational Boundary

Planned

- SUP Boundary
- Residential Development
- Mountain Roads
- Parking
- Snowmaking Coverage
- Recreation Area
- Nordic Trails
- Catchment Trail
- Ski Lift
- Previously Approved Lift
- Ski Run
- Snowmobile Trail Reroute
- Possible Maintenance Building Location

Prepared by: SE GROUP

October 2022

N

SCALE (ft)

0 750 1,500 2,250 3,000

Note: The existing Special Use Permit shown on this figure reflects Brundage's recently approved Special Use Permit Boundary.

Brundage Mountain 2022 MDP

Figure 10: Mountain Roads and Utilities Upgrade Plan

Eastside Hut
Sargent's Hut
Sargent Mountain 7,803'
Warming Hut
Lakeview Hut
Summit Hut
7,640 FT
Expanded Bear's Den
Centennial Midstation
Bear's Den
Water Tank
Water Well
New Day Lodge
Main Lodge
Kid's Center
Upper Parking Lot
Day Lodge
Campground
Lower Parking Lot
Maintenance Facility

LIFT-G
EASTSIDE
SARGENTS
WAYBACK
HIDDEN VALLEY
BLUEBIRD EXPRESS
CENTENNIAL
BEAR CHAIR
EASY STREET
TEMPTATION
LAKEVIEW LIFT
ACCESS LIFT - SOUTH
ACCESS LIFT - NORTH
UPPER CONVEYOR
LOWER CONVEYOR
HIDDEN VALLEY
ASPEN PATCH
DOBBER'S DREAM
GOOSE CREEK
SUP BNDY
FS ROAD 451
FS ROAD 457

Base Area Utilities Zoom-in

Legend

Existing

- SUP Boundary
- Operational Boundary
- Private Land
- Existing Ski Lift
- Ski Run by Ability Level
- Wetlands and Streams
- Ski Patrol
- Parking Lot
- Mountain Roads
- Snowmobile Trail
- Sewer
- Groundwater Drain
- Water Utilities

Planned

- SUP Boundary
- Residential Development
- Mountain Roads
- Parking
- Water Tank
- Snowmobile Trail Reroute
- Primary Power
- Water Tank
- Ski Lift
- Previously Approved Lift
- Ski Run
- Possible Maintenance Building Location
- Secondary Power
- Communications
- Water Utilities
- Nordic Trails

Prepared by: SE GROUP

October 2022

Note: The existing Special Use Permit shown on this figure reflects Brundage's recently approved Special Use Permit Boundary.

N

SCALE (ft)
0 750 1,500 2,250 3,000

Brundage Mountain

Brundage Mountain 2022 MDP

Figure 11: Summer Zones

Legend

Existing
- SUP Boundary
- Private Land
- Summer Use Ski Lift
- Winter Use Ski Lift
- Operational Boundary
- Ski Patrol
- Parking Lot
- Mountain Roads
- MTB Trail by Ability Level

Planned
- SUP Boundary
- Residential Development
- Mountain Roads
- Winter Use Ski Lift
- Previously Approved Winter Use Lift
- Previously Approved MTB Trail

Summer Zones
- Zone 1
- Zone 2
- Zone 3
- Zone 4
- Zone 5

Prepared by: SE GROUP

October 2022

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21

LIFT G
EASTSIDE
SARGENTS
WAYBACK
HIDDEN VALLEY
BLUEBIRD EXPRESS
CENTENNIAL
BEAR CHAIR
LAKEVIEW LIFT
EASY STREET
ACCESS LIFT - NORTH
UPPER CONVEYOR
LOWER CONVEYOR
TEMPTATION
ACCESS LIFT - SOUTH
Centennial Midstation

Note: The existing Special Use Permit shown on this figure reflects Brundage's recently approved Special Use Permit Boundary.

Outer Mountain Opportunities

- Expanded trail system for mountain biking and hiking
- Guided hikes and interpretive nature walks
- Adventure races
- Wilderness skill camps

Overall Mountain Opportunities

- Summit viewing platform and cafe - larger event platform
- Stargazing - guided night hikes
- Expanded lift served mountain biking
- Zip /canopy tour
- Guided/interpretive hiking tours - digital app tour, interpretive signage, achievement badges for youth involvement
- Adventure races
- Glamping sites

Private Land Opportunities

- Event venue space for races, clinics, camps, and festivals
- Interpretive nature walks or art walks
- Natural play area
- Food festivals of food truck events
- Mountain bike skills progression area
- Mountain bike festival and skills clinics
- Glamping, expand service for camping and RV's
- Concert series
- e-bike tours

Brundage Mountain

Brundage Mountain 2022 MDP

Figure 12: Summer Opportunities

Legend

Existing

- SUP Boundary
- Private Land
- Summer Use Ski Lift
- Winter Use Ski Lift
- Operational Boundary
- Ski Patrol
- Parking Lot
- Mountain Roads
- MTB Trail by Ability Level

Planned

- SUP Boundary
- Residential Development
- Mountain Roads
- Winter Use Ski Lift
- Previously Approved Winter Use Lift
- Previously Approved MTB Trail

Prepared by: SE GROUP

October 2022

Note: The existing Special Use Permit shown on this figure reflects Brundage's recently approved Special Use Permit Boundary.

LIFT G
EASTSIDE
SARGENTS
WAYBACK
HIDDEN VALLEY
HIDDEN VALLEY
ASPEN PATCH
BLUEBIRD EXPRESS
CENTENNIAL
LAKEVIEW LIFT
DOBBER'S DREAM
SUP BNDY
BEAR CHAIR
EASY STREET
TEMPTATION
ACCESS LIFT - SOUTH
ACCESS LIFT - NORTH
UPPER CONVEYOR
LOWER CONVEYOR
Main Lodge
Upper Parking Lot
Centennial Midstation
Bear's Den
Maintenance Facility
Lower Parking Lot
Campground
FS ROAD 257

SCALE (ft)
N
0 750 1,500 2,250 3,000