



2017 MASTER DEVELOPMENT PLAN

February 2017

Prepared by:



TABLE OF CONTENTS

I.	INTRODUCTION	I-1
A.	LOCATION	I-2
B.	LAND OWNERSHIP.....	I-2
C.	CURRENT RESORT OPERATIONS SUMMARY	I-3
1.	<i>Winter</i>	I-4
2.	<i>Summer</i>	I-5
D.	BACKGROUND	I-6
1.	<i>Chronology of Development</i>	I-6
E.	ABSTRACT OF PLANNED MASTER DEVELOPMENT PLAN.....	I-8
1.	<i>Winter</i>	I-8
2.	<i>Summer</i>	I-9
F.	PAST PLANNING AND ENVIRONMENTAL DOCUMENTATION.....	I-9
G.	VISION AND DESIGN PHILOSOPHY	I-10
H.	STATEMENT OF GOALS AND OBJECTIVES.....	I-11
1.	<i>Goals</i>	I-11
2.	<i>Objectives</i>	I-11
I.	ACCEPTANCE BY THE FOREST SERVICE.....	I-12
J.	PUBLIC/MUNICIPAL REVIEW	I-12
II.	DESIGN CRITERIA	II-1
A.	DESTINATION RESORTS	II-1
1.	<i>Regional Destination Resorts</i>	II-1
2.	<i>National and International Destination Resorts</i>	II-2
B.	BASE AREA DESIGN.....	II-3
C.	MOUNTAIN DESIGN.....	II-3
1.	<i>Trail Design</i>	II-3
2.	<i>Lift Design</i>	II-6
3.	<i>On-Mountain Guest Services</i>	II-6
D.	CAPACITY ANALYSIS AND DESIGN	II-6
E.	BALANCE OF FACILITIES.....	II-7
F.	MULTI-SEASON RECREATION ACTIVITIES	II-7
1.	<i>Summer “Activity Zones”</i>	II-8
G.	APPLICABLE FOREST SERVICE POLICY & DIRECTION.....	II-9
1.	<i>Laws and Policy Directives</i>	II-9
2.	<i>GMUG Land and Resource Management Plan (Forest Plan)</i>	II-10
3.	<i>Recreation Opportunity Spectrum</i>	II-11
4.	<i>Visual Management System and the Built Environment Image Guide</i>	II-11
5.	<i>2011 Ski Area Recreational Opportunity Enhancement Act</i>	II-13
III.	SITE INVENTORY	III-1
A.	TOPOGRAPHY	III-1
B.	SLOPE GRADIENTS	III-1
C.	SOLAR ASPECT	III-2
IV.	EXISTING FACILITIES.....	IV-1
A.	SUMMARY OF THE EXISTING GUEST EXPERIENCE.....	IV-1
B.	EXISTING LIFT NETWORK.....	IV-2

C.	EXISTING TERRAIN NETWORK	IV-4
1.	<i>Terrain Variety</i>	IV-4
2.	<i>Developed Alpine Trails</i>	IV-5
3.	<i>Undeveloped and Gladed Terrain</i>	IV-15
4.	<i>Terrain Parks</i>	IV-16
5.	<i>Nordic Skiing and Showshoeing Trails</i>	IV-17
D.	EXISTING CAPACITY ANALYSIS	IV-17
1.	<i>Comfortable Carrying Capacity</i>	IV-17
E.	EXISTING GUEST SERVICES FACILITIES, FOOD SERVICE SEATING & SPACE USE ANALYSIS	IV-19
1.	<i>Guest Services</i>	IV-19
2.	<i>Space Use Analysis</i>	IV-19
3.	<i>Food Service Seating</i>	IV-23
F.	EXISTING PARKING CAPACITY.....	IV-25
G.	EXISTING RESORT OPERATIONS	IV-28
1.	<i>Ski Patrol/First Aid and Snow Safety</i>	IV-28
2.	<i>Snowmaking Coverage</i>	IV-29
3.	<i>Grooming</i>	IV-30
4.	<i>Maintenance Facilities</i>	IV-30
5.	<i>Utilities</i>	IV-30
6.	<i>Communications</i>	IV-30
7.	<i>Culinary Water and Sewer</i>	IV-30
H.	RESORT CAPACITY BALANCE AND LIMITING FACTORS.....	IV-32
I.	SUMMER OPERATIONS.....	IV-32
1.	<i>Summary of the Existing Summer and Multi-Season Guest Experience</i>	IV-32
2.	<i>Existing Summer and Multi-Season Facilities</i>	IV-33
3.	<i>Mountain Biking</i>	IV-33
4.	<i>Hiking</i>	IV-34
5.	<i>Summer and Multi-Season Guest Service Facilities Use</i>	IV-36
6.	<i>Existing Resort Summer Operations and Roads</i>	IV-36
V.	PREVIOUSLY-APPROVED PROJECTS, NOT YET IMPLEMENTED	V-1
A.	LIFTS	V-1
1.	<i>Palmyra Basin Lift (Lift 16)</i>	V-1
2.	<i>Gold Hill Summit Surface Lift (Lift 17)</i>	V-2
B.	TERRAIN.....	V-2
1.	<i>Clearing and Glading of Forest Vegetation</i>	V-2
C.	SNOWMAKING	V-2
1.	<i>Snowmaking Pond</i>	V-2
D.	GUEST SERVICES FACILITIES	V-2
1.	<i>Bon Vivant at Top of Polar Queen Express (Lift 5)</i>	V-2
2.	<i>Restaurant and Nordic Center at Top of Sunshine Express (Lift 10)</i>	V-3
3.	<i>Expansion of Plunge Restaurant (aka Giuseppe’s)</i>	V-3
VI.	UPGRADE PLAN	VI-1
A.	SUMMARY OF THE UPGRADE PLAN	VI-1
B.	UPGRADED LIFT NETWORK	VI-1
1.	<i>Palmyra Basin Lift (Lift 16)</i>	VI-1
2.	<i>Gold Hill Summit Surface Lift (Lift 17)</i>	VI-2
3.	<i>Gold Hill Lift Capacity Upgrade (Lift 14)</i>	VI-2
4.	<i>Plunge Lift Replacement (Lift 9)</i>	VI-2
5.	<i>Sunshine Express Replacement (including Gondola Option) (Lift 10)</i>	VI-2
6.	<i>Coonskin Lift Replacement (Lift 7)</i>	VI-3

7.	<i>North Meadows Area Conveyor Lift</i>	VI-3
8.	<i>Free Gondola Capacity Upgrades</i>	VI-3
C.	UPGRADED TERRAIN NETWORK.....	VI-5
1.	<i>Terrain Variety</i>	VI-5
2.	<i>Developed Alpine Trails</i>	VI-5
3.	<i>Undeveloped and Gladed Expert Terrain</i>	VI-17
D.	PLANNED CAPACITY ANALYSIS	VI-17
1.	<i>Comfortable Carrying Capacity</i>	VI-17
E.	UPGRADED GUEST SERVICES FACILITIES, FOOD SERVICE SEATING & SPACE USE ANALYSIS.....	VI-19
1.	<i>Guest Services</i>	VI-19
2.	<i>Space Use Analysis</i>	VI-20
3.	<i>Food Service Seating</i>	VI-21
F.	PLANNED PARKING CAPACITY	VI-21
G.	PLANNED RESORT OPERATIONS.....	VI-21
1.	<i>Ski Patrol/First Aid</i>	VI-21
2.	<i>Snowmaking Coverage</i>	VI-22
3.	<i>Grooming</i>	VI-22
4.	<i>Maintenance Facilities</i>	VI-22
5.	<i>Utilities</i>	VI-22
6.	<i>Communications</i>	VI-23
7.	<i>Culinary Water and Sewer</i>	VI-23
H.	RESORT CAPACITY BALANCE AND LIMITING FACTORS.....	VI-23
I.	SUMMER OPERATIONS.....	VI-24
1.	<i>Recreation Zone Designations</i>	VI-24
2.	<i>Summer and Multi-Season Activities and Facilities</i>	VI-31

List of Tables

Table I-1. Annual Skier Visits (2006–2016)	I-3
Table I-2. Terrain Quantity by Ability/Type	I-4
Table II-1. Terrain Gradients.....	II-4
Table II-2. Skier Ability Breakdown	II-4
Table II-3. Skier Density per Acre.....	II-5
Table IV-1. Lift Specifications – Existing Conditions	IV-3
Table IV-2. Terrain Breakdown – Existing Conditions.....	IV-5
Table IV-3. Terrain Specifications – Existing Conditions	IV-7
Table IV-4. Terrain Distribution by Ability Level – Existing Conditions	IV-14
Table IV-5. Undeveloped Terrain – Existing Conditions.....	IV-16
Table IV-6. Nordic Skiing and Snowshoeing Trails – Existing Conditions.....	IV-17
Table IV-7. Comfortable Carrying Capacity – Existing Conditions	IV-18
Table IV-8. Industry Average Space Use, Base Areas – Existing Conditions	IV-21
Table IV-9. Industry Average Space Use, On Mountain – Existing Conditions.....	IV-22
Table IV-10. Industry Average Space Use, Overall Resort – Existing Conditions	IV-23
Table IV-11. Restaurant Seats – Existing Conditions	IV-24
Table IV-12. Recommended Restaurant Seats – Existing Conditions	IV-24
Table IV-13. Public Parking – Existing Conditions	IV-25
Table IV-14. Hotel Parking – Existing Conditions	IV-26
Table IV-15. Mountain Village Condominium Parking – Existing Conditions.....	IV-27
Table IV-16. Mountain Village Employee Housing Parking – Existing Conditions	IV-27
Table IV-17. Recommended Parking – Existing Conditions	IV-28
Table IV-18. Sewer and Restroom Facilities – Existing Conditions	IV-31
Table IV-19. Hiking & Biking Trails Trail Distribution by Ability Level – Existing Conditions.....	IV-35
Table IV-20. Hiking & Biking Trails Ability Level Distribution – Existing Conditions	IV-36

Table VI-1. Lift Specifications – Upgrade Plan	VI-4
Table VI-2. Terrain Specifications – Upgrade Plan	VI-8
Table VI-3. Terrain Distribution by Ability Level – Upgrade Plan.....	VI-16
Table VI-4. Terrain Summary – Upgrade Plan.....	VI-17
Table VI-5. Comfortable Carrying Capacity – Upgrade Plan	VI-18
Table VI-6. Industry Average Space Use – Upgrade Plan.....	VI-20
Table VI-7. Recommended Restaurant Seats – Upgrade Plan	VI-21
Table VI-8. Zone Characteristics	VI-29
Table VI-9. Summer Use Zones at TSR	VI-30

List of Charts

Chart IV-1. Terrain Distribution by Ability Level – Existing Conditions.....	IV-15
Chart IV-2. Resort Balance – Existing Conditions.....	IV-32
Chart VI-1. Terrain Distribution by Ability Level – Upgrade Plan.....	VI-16
Chart VI-2. Resort Balance – Upgrade Plan	VI-23

List of Figures

- Figure I-1. Location Map
- Figure I-2. Land Ownership
- Figure III-1. Slope Analysis
- Figure IV-1. Existing Resort Facilities
- Figure IV-2. Existing Snowmaking
- Figure IV-3. Existing Utilities
- Figure IV-4. Existing Summer Trails and Multi-Season Facilities
- Figure VI-1. Proposed Resort Facilities
- Figure VI-2. Proposed Snowmaking
- Figure VI-3. Proposed Utilities
- Figure VI-4. Proposed Summer and Multi-Season Facilities
- Figure VI-5. Recreation Zone Designations



CHAPTER I. INTRODUCTION

I. INTRODUCTION

This 2017 *Master Development Plan* (MDP) for Telluride Ski Resort (TSR) updates the 1997 Draft *Telluride Ski Area Master Development Plan*, the associated 1998 Decision Notice for the Telluride Ski Area Improvements Environmental Assessment (EA), and the 1999 Record of Decision (1999 ROD) for the Telluride Ski Area Expansion Environmental Impact Statement (EIS). This MDP provides a detailed assessment of existing facilities and operations at TSR, as well as a comprehensive overview of planned elements within the TSR special use permit (SUP) area. The MDP discusses planned year-round activities including both winter and summer components slated for implementation over the next five to ten years. Acceptance of this MDP by the U.S. Forest Service (Forest Service) is consistent with the requirements of the TSR SUP, but does not approve any projects contained within the document. The MDP is designed to be dynamic, and may be amended periodically to reflect new developments in facilities and recreation.

The TSR experience remains one of the key reasons guests visit the Telluride area. With more than 1,365 skiable acres within its SUP, which covers 3,542 acres of National Forest System (NFS) lands (gross permit area of 3,735 acres,) TSR offers “something for everyone,” from the very first time beginner to the most adventurous skiers and snowboarders. The primary objective of the TSR experience is to bring all guests closer to nature by providing a unique, fulfilling, and invigorating recreational experience in a scenic alpine setting. This MDP utilizes innovative mountain planning techniques that will enhance the guest experience while maintaining appropriate skier densities and respecting the uniqueness of TSR’s natural environment.

Since 1983, TSR and the communities of Mountain Village and the Town of Telluride have undergone a major transformation. The mountain has seen the addition of new lifts with state of the art technology as well as the replacement of antiquated lifts with upgraded technology. In addition, a major transformation has taken place at the base of the mountain with the development of the Mountain Village complex. This development provides new lodging and retail opportunities for guests visiting Telluride and its surrounding NFS lands (Grand Mesa, Uncompahgre and Gunnison National Forests [GMUG]) for winter and summer recreation.

Nationally, the ski industry set an all-time record in annual skier visits in 2007/08 and 2010/11, with approximately 60.5 million visits. Over the last ten seasons (2004/05–2013/14), the average number of visits recorded nationally was 57.3 million. Skier visits during the 2007/08 and 2010/11 seasons were 5.2% above this ten-year average. Despite the national economic downturn in 2009, the 2008/09 ski season displayed the remarkable resilience of the ski industry.¹ The 2011/12 season saw a significant downturn, but skier visits have since rebounded. These years of generally consistent growth can be seen as a strong indicator of the industry’s durability in challenging economic times.

Exceeding the 60 million visit threshold during the 2007/08 and 2010/11 seasons was a significant milestone for the ski industry. These years highlight an era of strong performance within the U.S. ski industry that has been ongoing since the 2000/01 season, in which visits have reached 56 to 60 million in

¹ National Ski Areas Association. 2014. Kottke National End of Season Survey 2013/14. August.

good years and 54 to 55 million in poor years—both significantly above levels recorded in previous decades.²

Given the growth in the national skier market, it is important for resorts to constantly evaluate their offerings to serve the demand for alpine skiing. This MDP seeks to proactively address future trends in both winter and summer recreation at TSR. Understanding that guests' preferences are constantly changing, this MDP will address these trends in both proactive and creative ways. In so doing, the plan will reinforce the values of the Telluride community, the business objectives of Telluride Ski & Golf, LLC (TSG), and the natural resource and recreational goals of the GMUG.

In addition to its consistency with the 1991 Forest Plan, this MDP is consistent with the Ski Area Recreational Opportunity Enhancement Act of 2011 (SAROE) and subsequent Forest Service guidance, which permit additional seasonal and year-round activities and facilities on NFS lands that meet the setting and support snow sports as a primary driver for recreation and revenue at TSR.

The Goals and Objectives (p. I-11) identified by TSR spring from the desire to provide the highest quality guest experience that can be offered in the beautiful setting of the San Juan Mountains. Because TSR is a vacation destination, providing a high quality experience is paramount to the goals and objectives for future development of the ski resort

A. LOCATION

TSR is located on lands managed by the Norwood Ranger District of the GMUG within San Miguel County. Portions of the area are within the boundaries of the Town of Mountain Village and the Town of Telluride, Colorado. Telluride is approximately 200 miles southwest of Denver, 90 miles southeast of Grand Junction and 45 miles north of Durango. The resort is accessed from Interstate 70 at Grand Junction, then Highway 50 to Montrose, then Highway 550 to Ridgway, then Highway 62 to Placerville, and then Highway 145 into Telluride. Refer to Figure I-1 for a map of the vicinity.

The SUP area encompasses approximately 3,542 acres of land within the San Miguel River and Prospect Creek drainages. The elevation ranges from approximately 8,750 feet above mean sea level (amsl) at the base in Telluride, to about 12,650 feet amsl at the summit.

B. LAND OWNERSHIP

TSR is located adjacent to and within the boundaries of the Town of Mountain Village, the Town of Telluride, and San Miguel County, Colorado. TSR utilizes both private and NFS lands. The SUP area includes 3,542.22 acres of NFS land in the GMUG. The ski area also operates on several hundred acres of private land owned by TSG within the town boundaries of Mountain Village, Colorado. TSG also owns, or has easements to use, several mining claims within the Forest Service boundary. This private land is used for skiing, lifts, and restaurant operations in the winter; mountain biking/hiking, access for hang gliding and paragliding, and weddings/events during the summer season.

Refer to Figure I-2 for a Land Ownership map.

² Ibid.

C. CURRENT RESORT OPERATIONS SUMMARY

TSR currently operates 16 lifts (6 high-speed quads, 1 high-speed “Chondola,” 1 fixed-grip quad, 2 triples, 2 doubles, 2 surface lifts, and 2 magic carpets). The Telluride Mountain Village owner’s association funds, and the Town of Mountain Village owns and operates the three gondolas that are primarily used for transportation. “Developed lift-served terrain” includes 96 trails totaling approximately 1,023 acres. The remainder of TSR’s terrain is comprised of 73 acres of gladed terrain and 270 acres of un-developed “hike-to” terrain, which totals approximately 343 acres. Total vertical drop, including all skiable terrain is 4,425 feet. Lift-served vertical drop is 3,790 feet. Ski support facilities include four separate base areas: two in Mountain Village (bases at Village Express Lift, Sunshine Express Lift, and the Chondola), Oak Street/Town of Telluride (base at Oak Street Lift and gondola), and Coonskin (base of Coonskin Lift). It also includes five on-mountain restaurants and one warming hut. Presently, snowmaking is sufficient to cover approximately 300 acres. Summer activities include a golf course (located on private land), and trails for mountain biking and hiking.

TSR’s market is primarily composed of destination visitors and local pass holders, but also includes local regional visitors from Montrose, Durango, Cortez, and Grand Junction. The annual average visitation for skier’s over the last ten years is approximately 445,000 skier visits.

The facilities and infrastructure at TSR are owned and operated by TSG, a privately-held corporation. TSR enjoys widespread renown as one of the world’s premier destination resorts. It attracts both a wide national and international destination market and is also a regional destination, as is seen by visitation from local markets.

As shown in Table I-1, TSR’s annual visitation over the past ten seasons has averaged 445,668 with fluctuations resulting from varying snowfall and economic conditions. However, since the period’s low mark of 419,476 in 2008/09, there has been a strong upward trend with a 20% growth in annual skier visits between 2008/09 and 2015/16, with 10% growth over the last three ski seasons. TSR averages 138 operational days per season.

Table I-1. Annual Skier Visits (2006–2016)

Season	Visitation
2015/16	505,592
2014/15	478,211
2013/14	454,259
2012/13	420,362
2011/12	423,927
2010/11	423,621
2009/10	454,257
2008/09	419,476
2007/08	450,730
2006/07	426,244
Ten-Year Average	445,668

1. Winter

TSR offers 1,366 acres of total skiable terrain spread amongst the entire permit area. Of this total, approximately 1,023 acres are developed ski runs. An additional 343 acres fall into the category of lift-accessed and/or hike-to terrain that is controlled (gated) but minimally maintained (including bowls, glades, chutes, and hike-to terrain). The total terrain quantity within each pod is approximately as follows:

Table I-2. Terrain Quantity by Ability/Type

Pod	Acreage
Beginner	6
Novice	70
Low Intermediate	203
Intermediate	268
Advanced	125
Expert	351
Hike To	270
Glades	73
Total	1,366

Three lifts serve as the primary mountain access options from the Oak Street/Town of Telluride base area. The Free Gondola provides transportation between the Town of Telluride and Mountain Village along with its parking facilities. The Oak Street Lift provides access to the Plunge Lift. The Coonskin Lift also provides access to the Mountain Village portion of the mountain. Mountain Village skiers utilize either the Sunshine Express, or the Village Express to access the mountain.

TSR is currently served by 19 lifts:

- 3 eight-passenger detachable gondolas (operated by Town of Mountain Village, predominately for transportation)
- 1 Chondola
- 6 detachable quad chairlifts
- 1 fixed-grip quad chairlifts
- 2 fixed-grip triple chairlifts
- 2 fixed-grip double chairlifts
- 2 surface lifts
- 2 conveyor lifts (magic carpets)

The following programs and uses are a part of TSR's *winter* resort operations:

- Alpine skiing, snowboarding, Nordic downhill, snowshoeing, ski biking, and other snow sports activities supported by chairlifts
- Learning activities and lessons for all activities listed above
- Construction and maintenance of terrain parks for all levels of skiers and snowboarders
- NASTAR racing and special events/competitions in all of the above program uses
- A wide variety of children's programs
- Nature tours inside ski area boundaries
- On-mountain food service, retail opportunities, and performance centers
- On-mountain concerts and festivals on private lands (additional review per Forest Service Manual [FSM] 2340 required for such activities on NFS lands)
- Nighttime activities and dining opportunities at on-mountain facilities with access via lifts
- Snowmaking and snow grooming activities
- Vehicle and lift maintenance activities

2. Summer

Current summer resort operations at TSR primarily include dispersed activities, specifically lift-served hiking and mountain biking.

Additional summer resort operations include kid's camp, guided Hikes, nature center, weddings, and events. These activities are particularly important to the community and resort guests because they provide opportunities to participate in unique mountain experiences on NFS lands in a comfortable setting.

Existing uses and facilities include:

- Hiking trails
- Mountain biking trails (both cross-country and gravity)
- TSG golf course (located on private land)
- Wedding venues
- Kid's camp
- Nature center
- Hang gliding
- Paragliding
- Tennis
- Various events

Summer use at TSR is generated primarily by visitors from outside the valley, and the resort's proximity to the Town of Telluride is a major factor in summer visitation. While many attractions exist in Telluride and surrounding areas, the nature-based activities provided at TSR offer unique experiences for guests.

D. BACKGROUND

As mentioned above, TSR is primarily situated on land managed by the Norwood Ranger District of the GMUG, with portions of the TSG private land in the jurisdiction of the Town of Mountain Village. TSR is owned by TSG, and operates under a SUP from the Forest Service. The SUP requires the development of an MDP, which identifies management direction and opportunities for future management of the ski area on NFS land. Portions of the lower mountain in the Mountain Village area and all commercial and residential areas are located on private lands within the town limits of Town of Mountain Village. All zoning and land use issues are regulated by either the Town of Telluride, Town of Mountain Village or San Miguel County.

1. Chronology of Development

The formal establishment of TSR began in 1969 when a Forest Service Permit was issued to Telluride Ski Company (Telski) to determine the commercial feasibility of developing a ski area near Telluride, Colorado. As a result of the study, two Forest Service SUPs were issued to Telski in 1971 which allowed operation on approximately 2,500 acres. The agency requirement that Telski submit a MDP was met in 1971. By the end of 1972, Telski had built five double chairlifts and associated trails, as well as a day lodge with associated water and sewage facilities. By 1980 all the original developments authorized by the MDP were completed.

In 1980, and under new ownership, a new draft Environmental Assessment (EA) was submitted to further expand the ski area and its facilities. The 1980 EA was completed and a Decision Notice was issued in 1981, as well as an acceptance of the MDP for the Telluride Recreation Area. These actions allowed for the addition and modification of several lifts and brought the total potential development to 1,620 acres and potential comfortable carrying capacity (CCC) of 14,093 skiers.

In March 1982, Telski submitted the First Phase Mid Capacity Development Plan to the Forest Service. In 1983, an EA was completed and the agency issued a Decision Notice that approved a proposed action which planned for a capacity of 10,000 skiers per day, and added six new lifts, as well as a gondola linking the Town of Telluride with intermediate terrain and the then proposed Mountain Village development. The 1983 documents established a threshold level of 300,000 annual skier days at which time expansion would be considered.

In 1984 the SUPs were updated with one 30-year SUP and a concurrent annual permit which provided the basis for operation. The total NFS land area contained in these permits was 3,380 acres.

On November 13, 1992, a Decision Notice and Finding of No Significant Impact was issued by the Rocky Mountain Regional Forester authorizing a land trade between Telski and the Forest Service. The land exchange was completed to consolidate NFS lands, improve land management efficiency, and provide the opportunity for economic growth of industries and communities dependent upon outputs from the Forest

Service. After the land trade, the Forest Service total land area contained in the SUP area was changed to 3,761 acres.

During the 1992/93 ski season, skier days approached the 300,000 skier day threshold. As a result, Telski made a proposal to the Forest Service to develop portions of the permit area previously evaluated and approved in the decision notices of 1980 and 1983. Although previously approved, the need for site specific analysis and analysis of “new” proposed elements dictated that some form of National Environmental Policy Act (NEPA) process would apply. The Forest Service ultimately determined to analyze the proposal under the Environmental Impact Statement (EIS) process.

In February 1996, a Final EIS was completed and in July 1996, a Record of Decision (ROD) was issued. In September 1996, an appeal was filed with the Regional Forester. Although the decision was upheld by the Regional Forester, several conditions were added to the decision. As a result, on June 30, 1997 the Forest Supervisor withdrew the ROD. An interdisciplinary team was assembled by the supervisors and asked to follow up on all of the conditions and provide a report to the supervisor in the form of a Supplement to the Final EIS.

Due to the withdrawal of the ROD, the ski area requested to review—separate from the expansion proposal—some improvements to the existing ski area that were addressed in the expansion FEIS under the No Action Alternative. These improvements were proposed to be analyzed in a separate EA. The EA was completed in 1998 and a Decision Notice and Finding of No Significant Impact was issued in April 1998. Projects proposed in the EA included improvements to the Polar Queen Express and Apex Lift pods, the front hillside, and construction of the snowmaking water storage ponds; all but one of the snowmaking ponds have been constructed.

The *Final Supplement to the Final EIS for the Telluride Ski Area Expansion* was completed in June 1999. After review, the Forest Supervisor issued a ROD (1999 ROD) for the Telluride Ski Area Expansion on June 22, 1999. This 1999 ROD authorized MDP components. As of January 2015, all projects cited in the 1999 ROD have been implemented except:

- Palmyra Basin Lift and ski patrol facility
- Upper San Joaquin surface lift (aka Gold Hill Summit surface lift)
- Restaurant at the top of Polar Queen Express (Lift 5)
- Restaurant and Nordic center at the top of Sunshine Express (Lift 10)
- Expansion of the Plunge restaurant (aka Giuseppe’s)
- Increase in snowmaking capabilities
- Trails/glades

In February 2004 a 40-year SUP was issued. The permit covers 3,542 acres of NFS land within a gross permit area of 3,735 acres (refer to Figure I-2). This MDP includes the projects that were approved per the 1998 Decision Notice and the 1999 ROD but have not yet been implemented.

E. ABSTRACT OF PLANNED MASTER DEVELOPMENT PLAN

This MDP is divided into six chapters. Chapter I provides an introduction to the document. Chapter II describes the design criteria used for mountain planning specific to TSR. Chapter III provides a site inventory of the resort including topography and information relating to the SUP boundary and surrounding land ownership. Chapter IV describes existing resort facilities for both winter and summer, and evaluates the current balance of resort operations, facilities, and infrastructure including lifts, terrain, guest services, snowmaking, and parking. Chapter IV also provides the baseline conditions that drive the Upgrade Plan in Chapter VI. Chapter V discusses projects previously approved through Forest Service analysis but have not yet been implemented. Chapter VI details proposed upgrades and improvements to the experience at TSR.

This MDP includes several previously approved projects that have not yet been implemented:

- Palmyra Basin Lift and ski patrol facility
- Upper San Joaquin surface lift (aka Gold Hill Summit surface lift)
- Restaurant at the top of Polar Queen Express (Lift 5)
- Restaurant at the top of Sunshine Express (Lift 10)
- Expansion of the Plunge restaurant (aka Giuseppe's)
- Increase in snowmaking capabilities
- Trails/glades

Newly-planned projects included in this MDP include the following:

1. Winter

- North Meadows Area conveyor lift and beginner terrain (private land)
- Plunge Lift (Lift 9) replacement
- Sunshine Express (Lift 10) replacement (including Gondola option)
- Gold Hill Lift (Lift 14) capacity upgrade
- Coonskin Lift (Lift 7)
- Widen and realign Cake Walk
- Jaws access and access tract
- Widen the Galloping Goose trail
- Install an arch culvert and fill at Dynamo drain near the bottom of the Gold Hill Lift
- Bridge from base of Prospect Bowl Express (Lift 12) to base of Gold Hill Express (Lift 14)
- Gladed terrain
- Developed high traverses
- Grading the abrupt terrain change at the bottom of the Meadows ski trail (private land)

- Ski patrol stations
- Snowmaking coverage
- Snowmaking compressor building
- Lift operations building (private land)
- Vehicle maintenance facility (private land)
- Upgraded utilities
- Expanded road network
- Mountain communication

As a result of proposed and previously-approved changes, the CCC for Telluride will increase from 6,550 guests to 8,230 guests (an increase of 26%). The 1999 ROD sets the permitted capacity of TSR at 10,000 skiers at one time.

2. Summer³

- Future downhill mountain biking and cross-country biking trails
- Canopy tour
- Aerial trekking park
- Hiking and mountain biking trail system enhancements
- Additional winter and summer restrooms at the top of Village Express (Lift 4)

F. PAST PLANNING AND ENVIRONMENTAL DOCUMENTATION

Since its inception, TSR has undergone several iterations of planning and numerous environmental analyses for site-specific project proposals. The following list provides a summary of these planning and analysis phases:

- 1969 – Forest Service Permit issued to Telluride Ski Company (Telski) to determine the commercial feasibility of developing a ski area near Telluride, Colorado
- 1971 – two Forest Service SUPs were issued to Telski in 1971, which allowed operation on approximately 2,500 acres of NFS land
- 1971 – Telski submits a MDP
- 1972 – Telluride opens for operation
- 1980 – the 1971 MDP is fully implemented
- 1981 – a new MDP is accepted along with a Decision Notice on the associated EA

³ Summer activities will be centralized in the Mountain Village area, unless otherwise noted.

- 1983 – Decision Notice approved a proposed action (which planned for a capacity at 10,000 skiers per day), and added six new lifts as well as a gondola linking the Town of Telluride with intermediate terrain and the then proposed Mountain Village
- 1984 – Special Use Permit (SUP) updated with one 30-year SUP (permit covered 3,380 acres)
- 1992 – a Decision Notice and Finding of No Significant Impact was issued by the Rocky Mountain Regional Forester authorizing a land trade between Telski and the Forest Service (permit covered 3,761 acres)
- 1996 – Final EIS was completed for expansion within the permit; a ROD was issued; an appeal was filed with the Regional Forester in September
- 1997 – the Forest Supervisor withdrew his decision; an interdisciplinary team was assembled by the supervisors and asked to follow up on all of the conditions and provide a report to the supervisor in the form of a Supplement to the Final EIS
- 1998 – EA of Proposed Improvements to the Existing Telluride Ski Area
- 1998 – Decision Notice and Finding of No Significant Impact for the proposed improvements to the existing ski area
- 1999 – *Final Supplement to the Final EIS for the Telluride Ski Area Expansion* was completed in June 1999; upon review, the Forest Supervisor issued a ROD for the Telluride Ski Area Expansion on June 22, 1999, which authorized MDP components
- 2004 – Forest Service issued a 40-year SUP with a gross permit area of 3,735 acres
- 2009 – Telluride Resort – Snowmaking Expansion and Retrofit Piping Plan
- 2015 – Telluride Ski Area – Forest Vegetation Management Plan

G. VISION AND DESIGN PHILOSOPHY

Clarifying a vision and design philosophy is essential in the mountain planning process, as it helps to establish an overall theme and direction for all projects. TSR has always provided a high-quality experience for guests in a way that develops awareness of the mountain environment and the incredible natural resources that are found within and surrounding the resort. More recently, TSR has expanded its offerings to summer and multi-season activities, particularly since visitation by families and larger groups is especially evident in summer months.

Winter recreation at TSR is the primary reason the resort is a premier destination for guests not just from around the state, but from around the world. The TSR experience remains one of the key reasons guests visit the Telluride area. With more than 1,300 skiable acres, Telluride offers “something for everyone,” from the very first time beginner to the most adventurous extreme skiers and snowboarders.

Summer recreational opportunities popular in mountain resort communities have evolved in the past several decades beyond “traditional” activities, such as hunting, fishing and camping, to include a significant variety of activities that allow guests to experience the natural environment while still feeling comfortable in their surroundings, such as mountain biking, disc golf, and other activities. NFS lands managed under ski area SUPs are well-situated to provide these forms of recreation due to their existing

infrastructure, base area facilities, and dedicated staffing. TSR's approach is to provide a sense of adventure and interaction with the setting while eliminating some of the barriers that often prevent guests (particularly families, the elderly/aging or those with disabilities) from participating in outdoor recreational activities.

Consistent with SAREOA (refer to Chapter II), planned projects and activities have been designed in harmony with the natural environment in order to heighten the user's experience with their natural surroundings on the GMUG.

H. STATEMENT OF GOALS AND OBJECTIVES

1. Goals

The primary goal of TSG is to develop and operate the best, not the biggest and most visited, year-round alpine resort in North America. The proposed elements of the MDP are incorporated to maintain and add to the high quality experience that is expected by guests of TSR. The CCC at TSR is currently adequate and often under-utilized. Under this plan there is no intent to increase the permitted capacity of 10,000 skiers at one time. In the 1999 ROD, it was demonstrated that the CCC, as well as the terrain capacity, far exceeded the permitted capacity.

Towards that end, the following components form the basic tenants of the MDP:

- To develop and properly balance high-quality lift facilities with ski area slope characteristics in order to provide an exceptional ski experience.
- To provide great customer service and high-quality skier service facilities.
- To develop and operate the ski area in an environmentally sustainable manner.
- To support a sustainable economic framework for the ski operation, which allows for replacement of infrastructure upon expiration of its useful life.
- To provide a valuable and predictable recreational amenity for the people who live, work and are invested in the local communities.
- To provide quality jobs, housing opportunities, and a positive workplace environment, for the employees of TSG.
- To enhance the summer recreation opportunities for our guests and members of the community.

2. Objectives

To attain the goals set forth above, the following objectives have been developed:

- Work with the community and local governments to improve air access for destination visitors throughout the winter and summer season.
- Work with land owners, local governments, and the community to provide housing opportunities for employees.
- Optimize the quality of the ski terrain by properly designing, developing and maintaining ski runs and gladed "tree skiing" areas.

- Provide improvements such as high-speed lifts and terrain development, which are needed to ensure that TSR is capable of providing high-quality skiing experiences.
- Provide a snow safety plan to mitigate avalanche hazard within the ski area boundary.
- Install an efficient snowmaking system that provides predictable and high-quality snow coverage in key areas from the start of the season.
- Develop high-quality and diverse on-mountain restaurant facilities.
- Utilize “best management practices” to protect the environment in the course of developing and operating ski facilities over the long run.
- In addition to winter recreation, provide summer recreational opportunities, which are sensitive to the forest environment.
- Provide high-quality facilities and infrastructure for the staff to properly and safely operate the ski area.
- Utilize alpine architecture and design which supports the TSR brand and will communicate a sense of quality and character.
- Create event platforms, gathering spots, and seating areas supported by existing facilities and infrastructure to provide venues for unique events that would be enhanced by the surrounding Forest setting.
- Expand and enhance hiking trails and on-mountain opportunities, taking advantage of high alpine terrain and views.

I. ACCEPTANCE BY THE FOREST SERVICE

This MDP is the result of an iterative and collaborative process between TSR and Forest Service staff. Forest Service *acceptance* is consistent with the requirements of the TSR SUP and the 1991 Forest Plan. This MDP will also undergo analysis and review by the Towns of Telluride and Mountain Village, and San Miguel County, as necessary, to ensure that the goals and objectives presented herein are consistent with those of all other agencies with jurisdiction over the facilities at TSR.

It is understood that Forest Service *acceptance* of this MDP *does not imply authorization* to proceed with any of the new projects identified herein. None of the new projects identified in this MDP have been reviewed or approved under the requirements of NEPA, and all will require site-specific analyses before a decision can be made, or any projects are approved. Site-specific environmental analysis may result in a modification to planned projects. Furthermore, beyond NEPA analysis, implementation of projects identified in this MDP may be dependent upon approval of detailed plans contained in TSR’s annual operations/construction plans.

J. PUBLIC/MUNICIPAL REVIEW

TSG has conducted a public outreach process to gain information and insight in order to assist in the development of the MDP. During the summer, fall and winter seasons of 2009, TSG conducted three public meetings in Mountain Village, and conducted an on-line survey. A broad cross-section of full-time

residents, part-time residents, visitors, business owners and local elected officials participated. Over 190 people filled out surveys at these meetings.

In the fall of 2016 a draft MDP was reviewed by various stakeholders including Town and County staffs, Town councils, County Commissioners, and local community organizations. Their feedback was incorporated into the final MDP where appropriate.

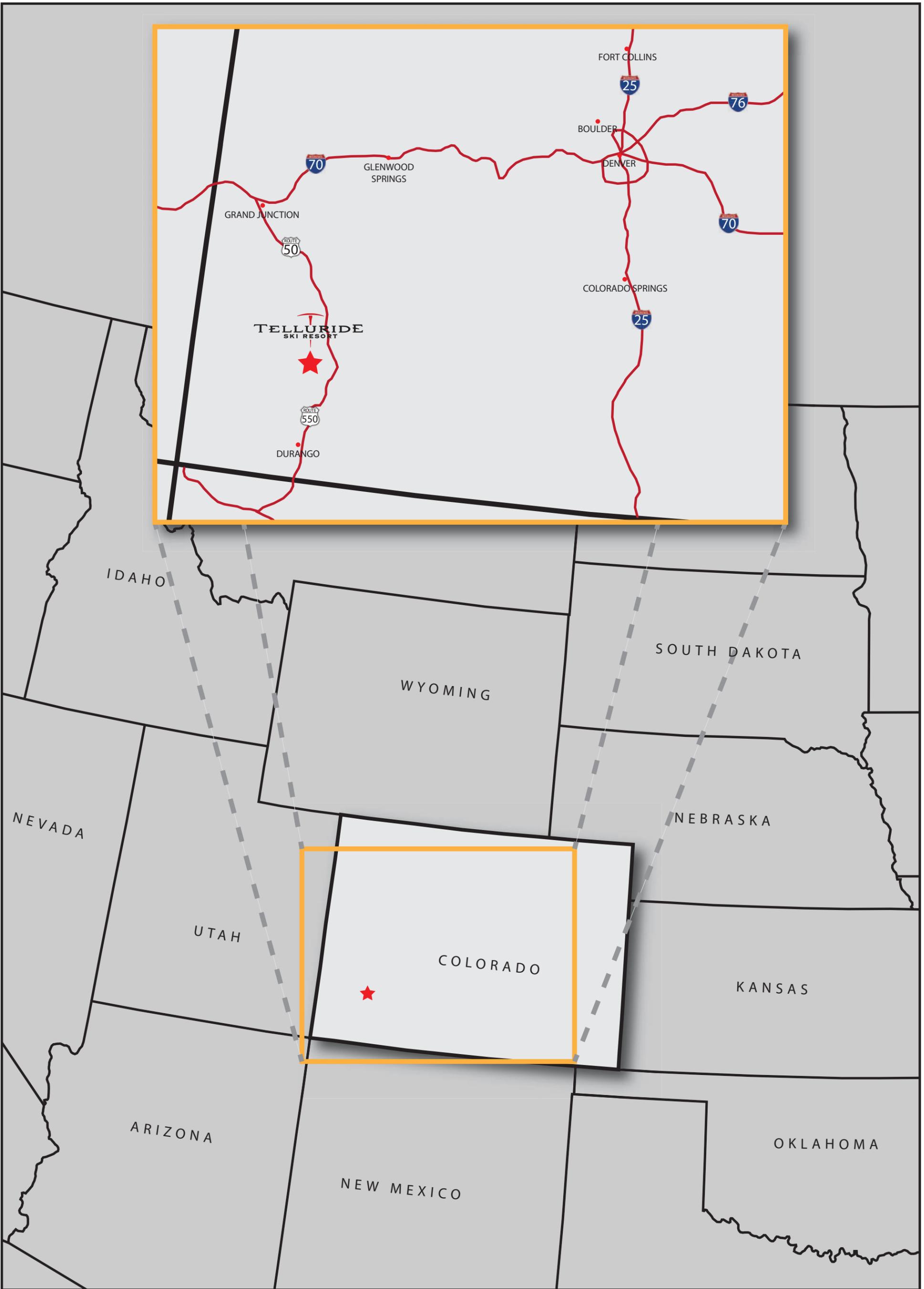
Meetings were also held with employees including ski school, ski patrol, mountain operations staff, administration staff, and other employees interested in providing feedback regarding summer and winter activities at the ski resort.

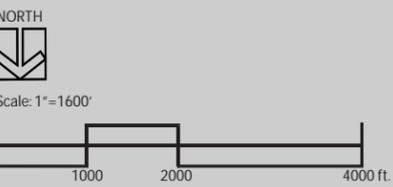
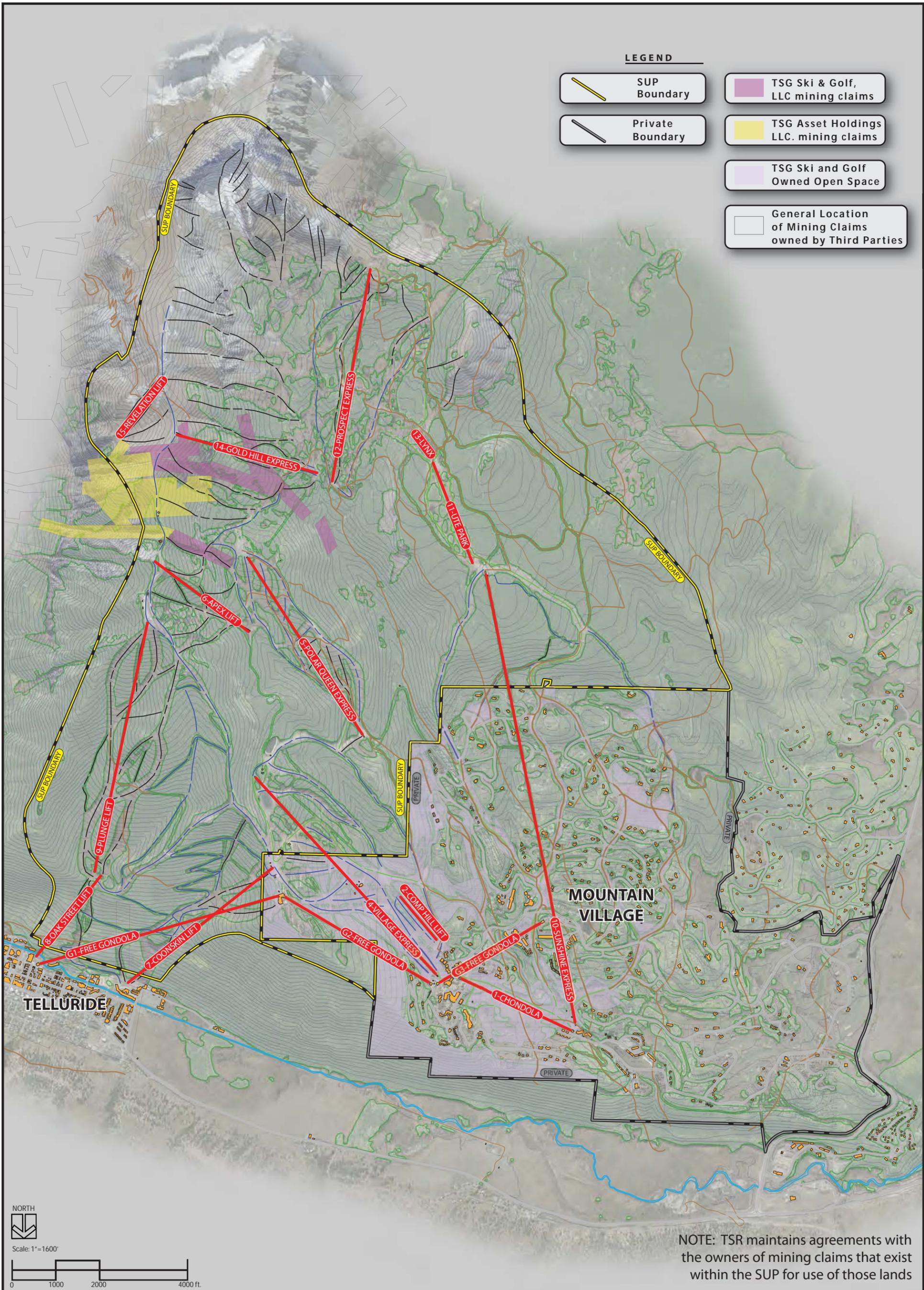
Many of the components listed in this MDP are consistent with the comments received during this process.

TSG held a series of public outreach sessions including stakeholders from the towns of Telluride and Mountain Village, and from San Miguel County. TSR also posted the MDP on their website and solicited comments about the document from the public via a press release in the local newspaper.

Prior to *acceptance* by the Forest Service, TSG will host a final public outreach session to solicit public comments.

This page intentionally left blank.







CHAPTER II. DESIGN CRITERIA

II. DESIGN CRITERIA

Establishing design criteria is an important component in mountain planning. Ski area development and improvements are influenced by design criteria in regards to how the various facilities are planned and implemented. Trail design, lift specifications, CCC, skier services, mountain operations infrastructure, and architectural themes are important considerations in developing a quality ski experience at TSR.

Following is an overview of the basic design criteria upon which this MDP is based.

A. DESTINATION RESORTS

One common characteristic of destination resorts is that they cater to a significant vacation market and thus 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 all encourage the development of a vital and balanced community. This interrelationship is helpful to the long-term success of the destination resort.

Destination mountain resorts can be broadly defined by the visitation they attract, which is, in most instances, either regional or national/international. Within these categories are resorts that are purpose-built and others that are within, or adjacent to, existing communities. TSR and the resort community of Town of Mountain Village is an example of such a resort that exists adjacent to an existing community (Town of Telluride) that is rich in cultural history, and provides a destination guest with a sense of the Mountain West and the mining and ski history of Colorado. This combination of a desirable setting and history supplements the overall experience of a guest visiting TSR, which has become a regional, national, and international destination resort.

1. Regional Destination Resorts

Destination resorts appeal and cater to a significant fly-in market, due to the remote location of the ski resort in relationship to large populated areas. The National Ski Area Association's National Demographic Studies indicate the Rocky Mountain region is by far the region where flights are most likely to be a part of the trip for overnight visitors (67% used flights). Together, TSR and the community both need to continue to provide reliable, consistent air service for destination travelers.

Destination guests expect opportunities in a variety of vacation experiences. This guest mindset stems from the expectation that their destination vacation will likely represent the highpoint of their skiing 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 part-time residency).

There is a growing demand for mountain destination resorts to provide activities outside of snow sports. At some of the more mature mountain destinations, non-skiing and non-wintertime guests account for a significant percentage of overall guest population. As a result, most ski areas are operating summertime activities including hiking, mountain biking, aerial adventure courses and canopy tours.

As a destination resort, the services are set up differently from a “drive market” resort. Although day skier parking is still needed for the regional drive market, the amount is less than what is needed for a predominantly “day-visit” ski resort. Much of the needed parking is provided by the lodging facilities that accommodate the destination travelers. The parking numbers reflected in this MDP take into account the fact that a large portion of the skier and summer visits come from destination travelers.

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 the mountain facilities and/or base village (or the Town of Telluride, in TSR’s case). TSR’s national/international guest expectations are higher than those of many of their regional destination guests. These guests expect abundant opportunities to participate in a variety of vacation experiences. This mindset stems from the expectation that their destination vacation will likely represent the apex of their skiing season, and hence their appetite for varied experiences will be great. Like regional destination guests, national and international guests may also desire to involve themselves in the resort and community on a more regular or permanent basis (through ownership of real estate and part-time residency).

There is a growing demand for mountain destination resorts to provide activities outside of snow sports. At some of the more mature mountain destinations, non-skiing wintertime guests account for a very substantial percentage of overall guest population. Furthermore, many of the guests who do ski will not use the mountain facilities every day of their visit. Thus, the ratio of total days skied to total room-nights can be as low as 1:2. Even for day-use guests at a destination resort, skiers are spending less of their day on the mountain. This is due to several factors, including: (1) shifting expectations of what a mountain vacation is about (participation in a variety of experiences, not just skiing); (2) the advent of high-speed lift technology (allows guests to satisfy their vertical demand in a shorter period of time); and (3) an aggregate population of guests, which is aging and requires lesser amounts of vertical demand. In the summer, the resort and community have very high summer utilization due to a dramatic increase in summer mountain vacations. All of these trends add up to a significant demand for attractions and amenities that complement a resort’s skiing facilities.

National and international destination resorts, including TSR, and the Towns of Telluride and Mountain Village, offer a wide variety of lodging types, including hostels, motels, hotels, inns, bed and breakfast inns, townhomes, condominiums, and single-family chalets. Visitor participation in the real estate market has diversified substantially in the last two decades and includes ownership—either whole or fractional—as well as “usage,” which comes in forms like timeshare and club participation. Typically, where the mountain facility is a primary driver for visitation, lodging is clustered at or near the mountain’s base area. Amenities usually include a wide variety of restaurants, lounges, shops, conference facilities, and perhaps theatres or concert venues, recreation centers (e.g., swimming, fitness equipment, and indoor courts), etc. Aside from alpine skiing, recreational activities may include snow tubing, Nordic skiing, snowshoeing, sleigh rides, snowmobiling, mountain and road biking, walking, golf, tennis, horseback riding, angling, swimming, spa treatments, etc.

A mountain resort that evolves at the edge of an existing community—particularly one that has a tourism-based economy—typically benefits from the significant infrastructure already in place (i.e., there is less need for a resort to develop infrastructure and create services at the base of the mountain). Some

mountain facilities have evolved immediately adjacent to the town and hence have developed virtually none of their own destination services.

B. BASE AREA DESIGN

The relationship between planning at a resort's base area developments and on-mountain lift and terrain network is critically important. 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 interrelationship of these elements varies considerably depending on the type of resort and its intended character. However, fundamental objectives of base area planning are to integrate the mountain with the base area for the creation of 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 by addressing base area components such as (but not limited to): 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 manner in which resort elements are inter-organized, both inside the resort core and within the landscape setting, along with architectural style, help 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
- Providing the necessary guest services (e.g., tickets and rentals)

TSR has two arrival portals, each with multiple access lifts, to the ski area, one at the Town of Telluride and one at the Town of Mountain Village. The two base areas are connected by a free Gondola public transportation system. Visitors staying at the base of the resort in either town can walk to the lift from their lodging accommodations.

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 terrain unique to each mountain. In essence, ability level designations are based on the maximum sustained gradient calculated for each trail. While short sections of a trail can be more or less steep without affecting the overall run designation, a sustained steeper pitch may cause the trail to be classified with a higher difficulty rating.

The following general gradients were used to classify the skier difficulty level of the mountain terrain.

Table II-1. Terrain Gradients

Skier Ability	Slope Gradient
● Beginner	8 to 12% (5–7°)
● Novice	to 25% (15°)
■ Low Intermediate	to 35% (20°)
■ Intermediate	to 45% (25°)
◆ Advanced	to 55% (30°)
◆ Expert	over 55% (30°)

In addition to these general categories for ski terrain area by ability level, other snow-surface areas within the ski resort include base areas, lift mazes and fall-line trail connectors (slope gradient 0 to 5%), and skiways and fall-line trail connectors (slope gradient 8 to 12%).

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 Rocky Mountain skier market is shown in Table II-2.

Table II-2. Skier Ability Breakdown

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

b. Trail Density

The calculation of capacity for a ski area is based in part on the target number of skiers and riders that can be accommodated, on average, on a typical acre of terrain at any one given time. The criteria for the target range of trail densities for North American ski areas are listed in Table II-3.

Table II-3. Skier Density per Acre

Skier Ability	Trail Density
● Beginner	25–35 skiers/acre
● Novice	12–25 skiers/acre
■ Low Intermediate	8–20 skiers/acre
■ Intermediate	6–15 skiers/acre
◆ Advanced	4–10 skiers/acre
◆ Expert	2–5 skiers/acre
◆ Bowls/Glades	0.5 skier/acre

TSR strategically maintains low trail densities across its resorts to ensure the high quality experience expected by its destination guests. Therefore, this MDP will use the lower end of the ranges for planning purposes.

These density figures account for the skiers that are actually populating the trails and do not account for other guests who are either waiting in lift lines, riding the lifts, or using the milling areas or other support facilities. Empirical observations and calculations indicate that, on an average day, approximately 40% of the total number of skiers/riders at a typical 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 day.

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 terrain for the full range of ability levels consistent with each level’s respective market demand.

In terms of a resort’s ability to retain guests, both for longer durations of visitation and for repeat business, one of the more important factors has proven to be terrain variety. This means providing developed runs for all ability levels: some groomed on a regular basis and some not—bowls, 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.

d. Terrain Parks

Terrain parks have become a vital part of most mountain resorts’ operations, and are now considered an essential mountain amenity. The presence of terrain parks at mountain resorts has changed various operational and design elements. The demand for grooming can increase, as terrain parks often require specialized or dedicated operators, grooming machines, and equipment (such as half-pipe cutting tools). Terrain parks typically require significant quantities of snow, either natural or man-made, often increasing

snowmaking demand. Terrain parks can affect circulation on the mountain, as the parks are often points of destination.

2. Lift Design

The goal for lift design is to serve the available terrain in an efficient manner—i.e., having the minimum number of lifts possible while fully accessing the terrain and providing sufficient uphill capacity to balance with the available downhill terrain capacity. In addition, the lift design has to take into consideration such factors as wind, round-trip utilization of the terrain pod, access needs, the ability to connect with other lift pods, the need for circulation space at the lower and upper terminal sites, access to residential development, and the presence of natural resources (e.g., visual impacts, wetlands, and riparian areas). The vertical rise, length, and ride time of lifts across a mountain are important measures of overall attractiveness and marketability of any resort.

3. On-Mountain Guest Services

On-mountain guest service facilities are generally used to provide shelter, food service (cafeteria-style or table service), restrooms, and limited retail, as well as patrol/first aid and other guest 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 a daily, at-one-time 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, without overburdening 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% higher than the design capacity.

This MDP will use the term comfortable carrying capacity (CCC) when referring to TSR’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.

CCC is derived from the resort’s supply of vertical transport (the vertical feet served combined with the uphill hourly capacities of the lifts) and demand for vertical transport (the aggregate number of runs desired multiplied by the vertical rise associated with those runs). The CCC is calculated by dividing vertical

supply (VTF/day) by vertical demand, and factors in the total amount of time spent in the lift waiting line, on the lift itself, and in the descent.

E. BALANCE OF FACILITIES

The mountain master planning process emphasizes the importance of balancing recreational facility development. The sizes of the various guest service functions are designed to match the CCC of the mountain. The future development of a resort should be designed and coordinated to maintain a balance between accommodating guest needs, resort capacity (lifts, trails, and other amenities such as tubing), and the supporting equipment and facilities (e.g., grooming machines, day lodge services and facilities, utility infrastructure, access, and parking). Note that it is also important to ensure that the resort's CCC balances with these other components, facilities, and services at the resort. Since CCC is primarily derived from the resort's lift network, it is possible to have a CCC that is effectively lower or higher than the other resort components.

F. MULTI-SEASON RECREATION ACTIVITIES

In light of the increasing challenges of operating a sustainable ski resort given the seasonal nature of the typical six-month operating season, there has recently been a great deal of interest within the industry in developing multi-season recreation facilities and activities for guests. As discussed in Chapter I, summer recreational activities tend to attract a more diverse range of new guests than does skiing. This comprehensive resort planning process assesses the best approach and program for adding multi-season activities and facilities in order to have the greatest potential for success given the unique characteristics that define TSR and its markets, and then will create a "road map" for their implementation.

A strategic approach must be taken to identify reasonable and realistic opportunities for multi-season recreational activities. This approach involves a case-by-case examination of several important criteria to determine the multi-season recreation elements that have the greatest potential for success. Criteria such as suitability of available land for recreation facilities and/or activities, operational compatibility with existing or proposed facilities, initial fiscal considerations, and visitation potential are all explored within this MDP. 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.

Providing diverse opportunities to a spectrum of visitors is central to TSR's summer activity goals. Non-skiing and multi-season activities are, and will continue to be, important guest offerings at Telluride because summer recreational activities tend to attract a more diverse range of new guests than do skiing and snowboarding (e.g., more balanced gender demographics, older median age, and more families), which is essential to the continued success of the resort.

As a four-season recreation destination, TSR has the opportunity to both provide and promote interactive, educational, natural resource-based recreation activities for all ages and demographics. Increasingly, there is potential to reach a wide range of ages and demographics, including those not currently being reached, through multi-season recreation activities. Activities such as mountain biking and hiking can appeal to the more fit and skilled user, while activities such as canopy tours and zip lines can appeal to less adventurous guests and persons with disabilities. TSR desires to facilitate exciting, challenging and

appropriate use of NFS lands, and in the process, to introduce new user groups to the range of recreational opportunities that exist within their National Forests.

Currently, TSR offers a relatively narrow range of previously authorized summer activities concentrated around the Mountain Village base area. These activities include scenic gondola rides, hiking, mountain biking, and various youth summer camp-related activities. These activities and associated infrastructure currently provide limited opportunities for summer guests and therefore provide only a limited introduction to opportunities on National Forest lands.

TSR has a tremendous opportunity to introduce guests, who often live in more urban and suburban environments, to the National Forest and a natural alpine environment in a fun and comfortable setting. Opportunities for environmental education, stewardship and overall public lands awareness are present across the TSR's SUP area. Developed activities in an appropriate setting will promote these opportunities, thereby achieving the goal of encouraging guests to further explore their public lands while feeling comfortable doing so. The Forest Service has acknowledged a demonstrated need to encourage the public, particularly youth, to explore the lands within the National Forests. As an identifiable and accessible portal to NFS lands, TSR has a unique opportunity to meet this need through the provision of a range of recreational opportunities experiences suitable to the diverse public groups that live in and visit the area.

The activities described in this MDP are designed to utilize existing ski area infrastructure (e.g., lifts and guest services facilities) to the extent possible in order to enhance existing snow sports activities 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 TSR and the local economy, particularly during the summer months. Snow sports are, and will continue to be, the primary use of NFS within the TSR SUP area, and are the primary economic driver for the Telluride area.

1. Summer "Activity Zones"

At a site-specific level, this MDP takes the existing setting, combined with the anticipated use of the area, to establish finer-grain prescriptions. The summer activity zones identified in Chapter VI of this MDP are based on the existing setting and level of development.

Through the planning process, five distinct zones have been identified within the TSR SUP area. These zones consider several characteristics similar to the Recreation Opportunity Spectrum (ROS) (discussion presented in Section G.3 of this chapter), 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 TSR as a developed ski area. 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.

The TSR SUP area is characterized by diverse settings, from developed and modified areas to remote and more primitive areas. The settings that exist within the SUP mirror what a guest could see and experience in different locations across the GMUG, ranging from high alpine environments, to riparian and wetland ecosystems, to forested settings in remote locations.

G. APPLICABLE FOREST SERVICE POLICY & 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.

TSR's SUP was issued under the National Forest Ski Area Permit Act of 1986, 16 USC § 497b. The Act authorizes the Forest Service to issue term ski area permits "...for the use and occupancy of suitable lands within the National Forest System for Nordic and alpine skiing operations and purposes."⁴ 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."⁵

The basis for determining the types of activities and facilities that are appropriate at winter sports resorts that are permitted to operate on NFS lands is contained in federal laws and Forest Service policy directives, and the GMUG Land and Resource Management Plan (Forest Plan). They also provide the Forest Service with authority and direction pertaining to ski area management on NFS lands.

TSR and the Forest Service are connected through a committed long-term partnership to provide quality recreational opportunities on NFS lands. By satisfying its current and future visitors, TSR will remain a healthy and competitive destination ski resort within its market niche. This, in turn, would help fulfill Forest Service policy, objectives, and direction for ski area management on the GMUG and the vitality of the local economy.

1. Laws and Policy Directives

This MDP provides for high quality recreation on NFS lands and contributes to the economic and operational viability of TSR and the communities that depend on the resort. This would help the Forest Service achieve the following legal and policy objectives:

- The Multiple-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."⁶
- The National Forest Management Act requires the Forest Service to develop Forest Plans that provide for multiple uses of forests, including "coordination of outdoor recreation, range, timber, watershed, wildlife and fish, and wilderness."⁷

⁴ 16 USC § 497b(b)

⁵ 16 USC § 497b(b)(3)

⁶ 16 USC § 528

⁷ 16 USC § 1604(e)(1)

- The National Forest Ski Area Permit Act of 1986 specifically endorses developed winter recreation on National Forest System lands and authorizes the Forest Service to issue special use permits like that issued at TSR that encompasses “such acreage” as the Forest Service “determines sufficient and appropriate to accommodate the permittee’s needs for ski operations and appropriate ancillary facilities.”⁸
- The Service-Wide Memorandum of Understanding between National Ski Areas Association and United States Department of Agriculture, 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 and enhance outdoor recreation opportunities during policy formation, master development planning, and project plans.”

2. GMUG Land and Resource Management Plan (Forest Plan)

a. 1983 GMUG Land and Resource Management Plan

The GMUG Forest Plan was approved in 1983 and amended in 1991. The Forest Plan provides current direction for activities across the GMUG by setting forth management goals, objectives, and standards and guidelines that are general requirements for the administration of NFS lands.

The general objectives of the Forest Plan are to provide for multiple use and sustained yield of products, services, and goods in a way that maximizes long-term net public benefits in an environmentally sound manner. This MDP is consistent with these management objectives.

The Forest Plan classifies NFS lands into management areas and provides the basic framework for the management of these lands and resources. The Forest Plan designates the TSR SUP area as Management Area 1B (MA-1B). MA-1B directs,

“Management emphasis provides for downhill skiing on existing sites and maintains selected inventoried sites for future downhill skiing recreation opportunities. Management integrates ski area development and use with other resource management to provide healthy tree stands, vegetative diversity, forage production for wildlife and livestock, and opportunities for non-motorized recreation.”

Historically, downhill skiing has been a recreation opportunity provided to the general public on NFS lands through the administration of SUPs.

Recreational uses at TSR play an important role in the sustainability of the economy in the greater Telluride valley. It is the lands of the GMUG that provide the natural resources necessary to meet these demands and needs, and these lands support a sustainable recreation and tourism based economy. The enhancement of summer uses and facilities will create a vibrant year-round resort that can provide economic stability for residents and business owners. This would help promote economically sustainable uses of NFS lands and support the economic viability of TSR and surrounding communities.

⁸ 16 USC § 497b(b)(3)

3. Recreation Opportunity Spectrum

At a macro level, the TSR SUP area is designated within the 1991 Forest Plan as an MA-1B and having an ROS setting of “Semi-primitive” (non-motorized) and states,

“Management integrates ski area development and use with other resource management to provide...opportunities for non-motorized recreation.”⁹

This setting is described in the Forest Service’s 1986 ROS Book as:

“A setting that has an area of primitive roads or trails that are not open to motorized use; is generally at least 2,500 acres in size; and is between 1/2 and 3 miles from all roads, railroads, or trails with motorized use. Access is via non-motorized trails or non-motorized primitive roads or cross-country. Low contact frequency with other visitors. High probability of solitude; natural-appearing environment. Note: “Primitive roads” are not constructed or maintained and are not generally suitable for highway type vehicles.”*

The assigned desired ROS condition class is the maximum level of use, impact, development, and management that an area should experience over the life of the Forest Plan. The ROS is not prescriptive; it serves as a tool for land managers to identify and mitigate change. Recreational carrying capacity is a consequence of adopting specific ROS classes for which a landscape will be managed.

4. Visual Management System and the Built Environment Image Guide

a. Visual Management System

The goal of landscape management on all NFS lands is to manage for the highest possible visual quality, commensurate with other appropriate public uses, costs, and benefits. The Forest Service began operating under the guidance of the Visual Management System (VMS) for inventorying, evaluating, and managing scenic resources on NFS lands in the mid-1970s. The VMS is defined in National Forest Landscape Management, Volume 2.¹⁰ The VMS provides a system for measuring the inherent scenic quality of any forest area as well as a measurement of the degree of concern for that quality. It also establishes objectives for alteration of the visual resource.

In 1995, the Scenery Management System (SMS) was introduced to inventory and analyze aesthetic values on NFS lands—replacing the VMS as new forest plans are adopted across the National Forest System. However, the SMS has not been adopted by all national forests, and, until such time that it is, the VMS will continue to be used for inventorying, evaluating, and managing scenic resources on the GMUG.

Per the 1983 Forest Plan, in Management Prescription 1B:

“Visual resources are managed so that the character is one of forested areas interspersed with openings of varying widths and shapes. Facilities may dominate, but harmonize and blend with the natural setting. Harvest methods in forested areas between ski runs is clearcutting in aspen, and lodgepole pine, shelterwood in interior ponderosa pine and

⁹ USDA Forest Service. 1991. Amended Land and Resource Management Plan – Grand Mesa, Uncompahgre, and Gunnison National Forests. p. III-92.

¹⁰ USDA Forest Service. 1974. National Forest Landscape Management, Volume 2. Washington, D.C.

mixed conifers, and group selection in Engelmann spruce-subalpine fir, or as specified in the permittee's site-specific Master Development Plan."

Per the VMS, NFS lands are assigned Visual Quality Objectives (VQOs) that define the degree of acceptable change to the visual resource from human created management activities. VQOs are based on the physical characteristics of the land and the sensitivity of the landscape setting as viewed by humans. They define how the landscape will be managed, the level of acceptable modification permitted in the area, and under what circumstances modification may be allowed. VQOs range from *Preservation* (untouched environment) to *Maximum Modification* (major disturbance).

General visual resource management in MA-1B is to "emphasize visually appealing landscapes (vista openings, rock outcroppings, diversity of vegetation, etc.). The standards and guidelines for visual resources include: "do not allow negative deviation from the adopted VQO of modification."

The Modification VQO is defined as:

"Management activities may visually dominate the original characteristic landscape. However, activities of vegetation and land form alteration must borrow from naturally established form, line, color, or texture so completely and at such a scale that their visual characteristics are those of natural occurrences within the surrounding area of character type. Activities which are predominately introduction of facilities such as buildings, signs, roads, etc., should borrow naturally established form, line, color, and texture so completely and at such scale that its visual characteristics are compatible with the natural surroundings."

To harmonize with these characteristics, planned activities within this MDP have been designed to correspond with the characteristics of these VQOs. Throughout implementation of the projects discussed in this MDP, TSR will work with the Forest Service to exceed these objectives as practicable.

b. Built Environment Image Guide

The Built Environment Image Guide (BEIG) has been designed to ensure thoughtful design and management of the built environment, which includes: administrative and recreation structures, landscape structures, site furnishing, structures on roads and trails, and signs installed or operated by the Forest Service, its cooperators, and its permittees. 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 would be found in a typical Forest Plan. As indicated on pages 250–252 of the BEIG, specific direction for the design of administrative and recreational facilities is found in the Forest Service Manual (FSM) and Forest Service Handbooks (FSH).

The environmental, cultural, and economic contexts with which the BEIG is based are important considerations in development of structural facilities (not including lift terminals) within the TSR SUP area. Furthermore, there are some elements of the BEIG within the "Rocky Mountain Province" section (pages 159–178) that should be taken into account when designing and constructing facilities on NFS lands.

5. 2011 Ski Area Recreational Opportunity Enhancement Act

The 2011 Ski Area Recreational Opportunity Enhancement Act (SAROE) amended the National Forest Ski Area Permit Act of 1986.¹¹ The 2011 SAROE 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 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, both zip lines and ropes courses, mountain biking trails, and Frisbee golf.¹²

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 SAROE.¹³ 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, nor should they, include the level of design to complete all of the screening criteria. This site-specific detail would be provided during the project proposal stage to initiate the NEPA process. The screening criteria included in FSM 2343.14 guide the development of projects on NFS lands and the activities and associated facilities must:

1. Not change the primary purpose of the ski area to other than snow sports;
2. Encourage outdoor recreation and enjoyment of nature and provide natural resource-based recreation opportunities;
3. To the extent practicable, be located within the portions of the ski area that are developed or that will be developed pursuant to the master development plan;
4. Not exceed the level of development for snow sports and be consistent with the zoning established in the applicable master development plan;
5. To the extent practicable, harmonize with the natural environment of the site where they would be located by:
 - Being visually consistent with or subordinate to the ski area's existing facilities, vegetation and landscape and
 - Not requiring significant modifications to topography to facilitate construction or operations;
6. Not compromise snow sports operations or functions; and
7. Increase utilization of snow sports facilities and not require extensive new support facilities, such as parking lots, restaurants, and lifts.

¹¹ Public Law 112-46-Nov. 7, 2011 125 Stat. 539

¹² Ibid. Section 3

¹³ Forest Service Manual 2343.14. April 16, 2014. Washington, D.C.

Again, the above screening criteria should be applied for the proposed activities in this MDP during the NEPA process. At this point, more detailed design plans would be available compared to the details available during the master planning process.

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

1. 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;
2. Depict the general location of the facilities; and
3. Establish an estimated timeframe for their construction.



CHAPTER III. SITE INVENTORY

III. SITE INVENTORY

Chapter III provides a brief overview of some of the unique physical characteristics of the SUP area that were taken into consideration in the preparation of this MDP.

A. TOPOGRAPHY

The topography across TSR is very complex. The high point within the SUP is Palmyra Peak at the top of Palmyra Basin (13,324 feet amsl). From this peak, two ridges extend in a northerly and northwesterly direction, forming the Prospect Creek drainage area, within which most of the ski area sits. Small portions of the ski area also fall into the Skunk Creek drainage to the west and the Bear Creek drainage to the east. The portion of the ski area above the Town of Telluride is within two small sub-drainages between Bear Creek and Prospect Creek. All of these drainages and sub-drainages flow into the San Miguel River. The topography at TSR is typical of this portion of the Rocky Mountains, consisting of a series of ridges and glaciated bowls with relatively flat terrain in the valleys. The ski terrain lies in the mostly north-facing slopes of these peaks and bowls, with some terrain falling to the east and west off the northward running ridges. This is an ideal topographic scenario for a ski area, as it provides a variety of aspects as well as efficient access and circulation to the terrain. Flatter areas in portions of the resort provide the most significant challenge to circulation within the ski area. Slopes range from near vertical in cliff zones to almost flat in the base area. This type of topography allows for a range of skiing opportunities.

The highest lift-served elevations at TSR are Revelation Lift, terminating at 12,515 feet amsl, Gold Hill Express Lift at 12,270 feet amsl, and Prospect Express Lift at 11,815 feet amsl. Hike-to ski terrain is available at higher elevations. The lowest elevation is at the bottom terminal of Coonskin Lift at 8,725 feet amsl. Thus, total lift-served vertical drop at TSR is approximately 3,790 feet, and total vertical drop of all ski terrain (including hike-to) is about 4,425 feet. The Mountain Village base is located at the base of Chair 4 at about 9,535 feet amsl.

B. SLOPE GRADIENTS

As discussed in Chapter II, 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.

Slope gradients at TSR are depicted in Figure III-1.

- 0 to 8% (0 to 5°):** too flat for skiing and riding, but ideal for lift base terminals and milling areas, base area accommodations and other support facility development
- 8 to 25% (5 to 15°):** ideal for beginners and novices, and typically can support some types of development
- 25 to 45% (15 to 25°):** ideal for intermediates, and typically too steep for development
- 45 to 70% (25 to 35°):** ideal for advanced and expert skiers/riders, and are closely managed by the resort operator for avalanche mitigation

>70% (>35°): 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 mitigation

As displayed in Figure III-1, slope gradients covering all ability levels are present, with a relatively even mix of terrain for each general skier ability level (beginner/novice, intermediate, and advanced/expert). As described in the topography section, the terrain at TSR is largely characterized by major ridges and sub-ridges that create a series of bowls and valleys. The bottoms of the bowls and valleys are quite flat, in some cases even too flat for consistent skiing. The terrain dropping off the ridges and sub-ridges tends to be quite steep at the higher elevations, in a few locations steeper than desired for skiing. In some cases, this variety of topographic features has created challenges for consistent fall-line skiing, but the ski area design has been successful in creating a ski trail network with relatively consistent grades and enjoyable fall-lines. The largest concentration of intermediate terrain occurs within the Prospect Creek drainage, while the most consistent novice-level terrain is found along the broad, hummocky ridge between the Prospect Creek and Skunk Creek drainages and in the Mountain Village area. Consistent advanced-and expert-level gradients are located on the slopes above Town of Telluride and the higher-elevation, west-facing ridges.

C. SOLAR ASPECT

Slope aspect plays an important role in snow quality and retention. The variety of exposures at TSR present opportunities to provide a range of slope aspects that allow guests to respond to changes in sun angle, temperature, wind direction, and shadows. Typical constraints in relation to the various angles of exposure are discussed below:

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:	at lower elevations, 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

As described in the topography section, the majority of the skiing terrain at TSR faces north, with many eastward and westward facing aspects. This range of exposures is ideal, allowing for good snow retention while providing a variety of sun exposures and snow conditions. East facing slopes, such as some of the runs off of the Coonskin Lift, provide decent snow retention and also have good sun exposure, particularly in the mornings. North-facing slopes provide better snow retention, and are found throughout the resort, such as in the Plunge, Polar Queen, Prospect Bowl and Sunshine/Ute Park areas. These areas have consistently good snow conditions. The west-facing slopes off of the Village Express, Apex and Gold Hill lifts are protected from the sun in the mornings but get sun exposure in the afternoons and exhibit good snow conditions due to elevation.

LEGEND

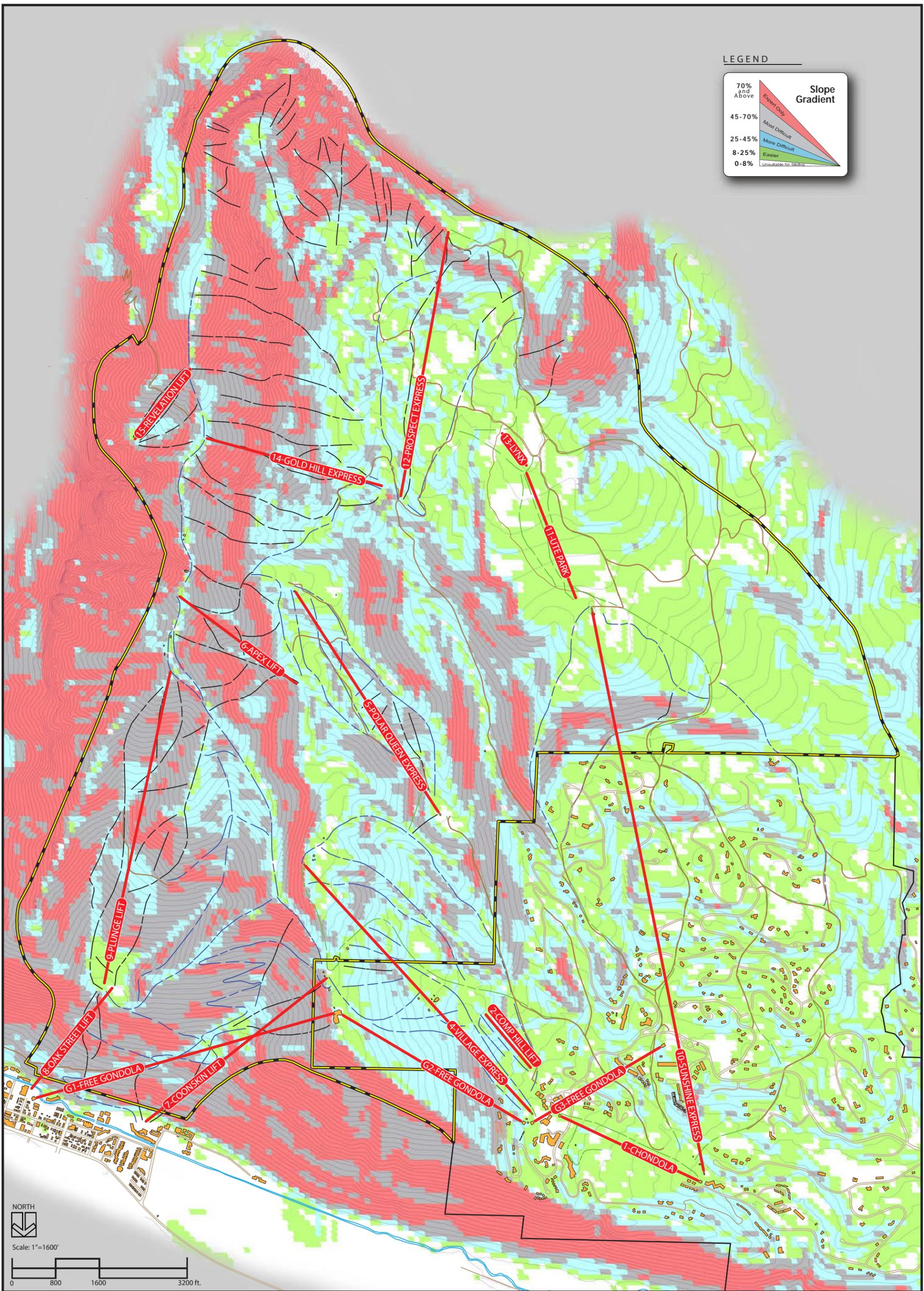
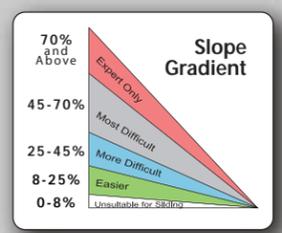


FIGURE III-1
SLOPE ANALYSIS



CHAPTER IV. EXISTING FACILITIES

IV. EXISTING FACILITIES

Chapter IV contains an examination and analysis of existing facilities at TSR. 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 and on-mountain structures, guest services, other resort functions/activities, day-use parking, operations, and utilities/infrastructure. The analysis of the inventoried data involves the application of industry standards to existing conditions at the resort. This process allows for the comparison of the TSR's existing facilities to those facilities commonly found at resorts of similar size and composition.

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 comfortable carrying capacity (CCC). This examination of capacities helps to identify strengths, weaknesses, opportunities, and constraints at a resort. The next step is the identification of any improvements that would bring the existing facilities into better balance, and assist the resort in meeting the ever-changing expectations of its marketplace. Accomplishing these objectives will result in a well-balanced resort, which provides an adequate array of services and experiences to satisfy guest expectations for a quality recreation experience.

The examination of existing facilities presented in this chapter correlates with Figure IV-1.

A. SUMMARY OF THE EXISTING GUEST EXPERIENCE

Determining the resort CCC is an important first step in evaluating the overall guest experience because it enables planners to understand the overall balance of the recreational facility. Empirical observations and a close examination of TSR's principal components reveal the existing mountain is fairly well balanced, indicating that any opportunities for expansions should address the full spectrum of facilities and skier ability levels, while focusing on particular areas to correct some small existing imbalances.

A resort's CCC is computed by analyzing the resort's supply of, and demand for, vertical lift transport. TSR's CCC was determined to be approximately 6,550 guests. From a terrain standpoint, the resort's trail network has sufficient capacity for approximately three times that number, resulting in skier densities that are on the low side of industry averages. This is a desirable situation and ensures an uncrowded experience, even on peak days. However, this analysis also indicates an imbalance: that there is not enough lift capacity to serve the terrain capacity.

Generally speaking, the current guest experience at TSR is excellent. The facilities are well-maintained, the snow is typically abundant, and the skiing is excellent. On most weekdays and non-peak weekends, actual daily visitation levels at the resort are below the calculated CCC, meaning that long lift lines are uncommon.

Daily skier visitation to TSR was analyzed as part of the Telluride Ski Expansion Final EIS and 1999 ROD. Based on the elements approved in the decision, the permitted skier visits was approved at a maximum of 10,000 skiers at one time. The supplemental analysis that was included as part of the decision demonstrated that the CCC, as well as the terrain capacity, far exceeded the permitted capacity.

Since the approval, all of the elements approved in the decision have been completed with the exception of the Palmyra Bowl Lift, the Gold Hill Summit surface lift, the full buildout of the restaurant at the top of Polar Queen Express (Lift 5), the restaurant and Nordic center at the top of Sunshine Express (Lift 10), the expansion of the Plunge restaurant (aka Giuseppe's), increased snowmaking capabilities, and trails and glades. This MDP will address these elements as part of the Upgrade Plan (refer to Chapter VI).

The skier visit total has not yet reached the 10,000 skier visit threshold since implementation of the ski expansion elements. The maximum skier visits experienced for one day at the TSR was approximately 8,800, which has occurred only in two seasons. The average number of skiers for the core season at the ski resort is approximately 3,900 skiers per day, with an average peak day for the past five seasons of 7,600.

The goals of TSR are to continue operating at less than full capacity, but add lifts and lift capacity where needed in order to improve circulation and keep wait times at lifts at a comfortable level and, therefore, maintain a high-level ski experience for guests.

Although the terrain capacity exceeds the current skier utilization, TSR wants to make upgrades to the aged infrastructure, add previously approved lifts and expand and improve restaurant and guest service facilities that will contribute to the resort's ability to capture and retain market share and offer an exceptional guest experience.

B. EXISTING LIFT NETWORK

The existing lift system includes both new and aged lifts. All lifts approved as part of the 1999 ROD have been constructed with the exception of the Palmyra Bowl Lift and the Gold Hill Summit surface lift. These lifts will be included in the upgrade plan along with lifts that are indicated for replacement/upgrade.

TSR currently operates 16 lifts (6 high-speed quads, 1 high-speed "Chondola," 1 fixed-grip quad, 2 triples, 2 doubles, 2 surface lifts, and 2 magic carpets, which are not included in the lift specifications table). The Telluride Mountain Village Owner's Association funds, and the Town of Mountain Village owns and operates the three gondolas that are primarily used for transportation. The resort's existing total uphill design lift capacity has been calculated at 22,448 people per hour (pph). Table IV-1 summarizes the technical specifications for the existing lifts. Figure IV-1 illustrates the location of existing lifts.

Overall, the TSR lift network services the available terrain efficiently and effectively. There are no redundant lift alignments and the only portion of the ski area that is not lift accessible is Palmyra Peak.

Approximately half of the lifts have been built in the past fifteen years, indicating that widespread lift replacements likely will not be required for some time—with a few notable exceptions. The clear exception to this is the Sunshine Express Lift, which is an original detachable lift built in 1986. Many of this lift's components are approaching their 25-year life expectancy, and require costly replacement and maintenance. The other notable exceptions are the free village-to-village gondola and the Chondola, both of which have significantly more use per year than standard ski lifts, as they are also used for transportation between villages.

Table IV-1. Lift Specifications – Existing Conditions

Lift Number	Lift Name, Lift Type	Top Elevation (ft)	Bottom Elevation (ft)	Vertical Rise (ft)	Slope Length (ft)	Average Grade (%)	Actual Design Capacity (pers/hr)	Rope Speed (fpm)	Carrier Spacing (ft)	Year Installed
1	Chondola/4DG	9,555	9,170	385	2,916	13	2,000	800	96	CTEC 1996
2	Terrain Park Poma	9,950	9,595	355	1,425	26	195	350	108	POMA 1985
4	Village Express/4D	10,770	9,526	1,244	6,227	20	2,800	1,000	86	DOPP 1999
5	Polar Queen Express/4D	11,195	10,259	936	4,899	20	2,400	1,000	100	DOPP 1999
6	Apex Lift/3C	11,969	10,825	1,144	2,957	42	1,500	500	60	CTEC 85/99
7	Coonskin Lift/2C	10,570	8,725	1,845	4,725	42	876	500	68	RIBLET 1975
8	Oak Street Lift/2C	9,805	8,750	1,055	2,686	43	900	450	60	SLI 72/85
9	Plunge Lift/3C	11,910	9,785	2,125	6,233	36	1,042	500	86	CTEC 1985
10	Sunshine Express/4D	10,905	9,170	1,735	10,544	17	1,200	1,000	200	DOPP 1986
11	Ute Park/4D	11,152	10,878	274	2,493	11	1,500	1,000	160	DOPP 2001
12	Prospect Bowl Express/4D	11,815	10,768	1,047	5,097	21	2,400	1,000	100	DOPP 2001
13	Lynx/P	11,157	11,123	32	701	5	585	472	48	DOPP 75/01
14	Gold Hill Express/4D	12,255	10,780	1,475	3,645	44	1,500	1,000	160	DOPP 2001
15	Revelation Lift/4C	12,515	11,730	785	1,841	47	1,240	450	87	POMA 2008
G1	Gondola/8G	10,540	8,760	1,780	6,019	31	920	1,000	522	CTEC 1996
G2	Gondola/8G	10,540	9,545	995	4,044	25	920	1,000	522	CTEC 1996
G3	Gondola/8G	9,545	9,540	5	2,770	0	660	1,000	727	CTEC 1996

Source: SE Group

c = carpet conveyor / p = platter lift

2C = fixed-grip double chairlift / 3C = fixed-grip triple / 4C = fixed-grip quad chairlift

4D = detachable quad chairlift / 4DG = detachable chondola

8G = eight passenger gondola

C. EXISTING TERRAIN NETWORK

Extensive terrain variety and outstanding views sets TSR apart from many ski resorts. Offering more variety for each of the ability levels provides more opportunities for guests to explore and enhance their experience throughout their stay. Because much of the market is comprised of destination skiers, it is important to have enough terrain variety to keep skiers and riders engaged for extended visits (five to seven days). Its diverse terrain offerings, including wide “flowing” groomed runs for beginners and intermediate skiers/riders, as well as gladed skiing, mogul skiing and hike-to terrain for a variety of levels, are why many of TSR’s guests choose the resort over other destination resorts. Although the available natural terrain and slopes provide many opportunities to enhance the skiing/riding experience, there are areas at TSR where access to and from lifts should be improved to enhance skier/rider circulation. The existence of “terrain traps” and difficult egress access-ways compromise the overall skier flow. TSR has identified areas that that need to be modified to improve circulation and/or access.

The breakdown of current terrain type is listed in Table IV-2. Existing alpine ski trails are depicted on Figure IV-1.

1. Terrain Variety

Terrain variety is the key factor in evaluating the quality of the actual skiing and riding guest experience (as opposed to lift quality, restaurant quality, or any other factor). Terrain variety is consistently ranked as one of the most important criterion 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.

As such, this analysis accounts for three separate types of terrain at TSR, totaling over 2,000 acres:

- Lift-accessed, developed trails for beginner, intermediate, and expert skiers and riders—accounting for 1,023 acres.
- Lift-accessed and/or hike-to terrain that is controlled (gated) but minimally maintained—accounting for about 343 acres (these areas include bowls, chutes, glades, and other natural terrain that exists above tree line in accessible high alpine areas).

- Undeveloped, densely-treed and/or inaccessible areas within the ski area boundary. This consists primarily of the natural (non-thinned or maintained) forested areas between the defined skiing areas and ski runs, and also accounts for some of the less-accessible open areas in the upper parts of the mountain—these areas total 650 acres of terrain.

Table IV-2. Terrain Breakdown – Existing Conditions

Terrain Type	Acreage
Developed Terrain	1,023
Hike-To	270
Glades	73
Undeveloped	650
Total	2,000+

2. Developed Alpine Trails

The existing developed alpine terrain network at TSR is depicted on Figure IV-1. This developed, or formalized, terrain network consists of the resort’s named, defined, lift-serviced, maintained trails. Despite the importance of undeveloped, alternate-style terrain, formalized runs represent the baseline of the terrain at any resort, as they are where the majority of guests ski/ride. Additionally, developed terrain is usually the only place to ski/ride during the early season, periods of poor or undesirable snow conditions, avalanche closures, and in certain weather conditions. As such, the developed trail network represents an accurate picture of the acreage utilized by the average skier/rider on a consistent basis, as well as that used by virtually all guests during the aforementioned conditions. Therefore, the full capacity of the resort must be accommodated by the total acreage of the *developed* terrain network, rather than relying on undeveloped terrain (which is not always available).

At TSR it can be difficult to differentiate between the developed terrain and the undeveloped terrain, much of which is either above tree line or otherwise generally open and skiable. Since there is not a distinct edge to many of the trails, it is difficult to define a fixed area for developed trails. This influences the actual usage patterns for the ski area; skiers are found skiing across the entire width of any given area. In quantifying the acreage of developed terrain, a distinct area can be used where trails are defined by tree edges. In open areas where the trails are not defined by tree edges, a greater width with less-distinct boundaries is used.

Based on the rationale presented in the preceding paragraphs, and for the purposes of this analysis, the developed trail network is calculated by accounting for defined trails within the TSR SUP area. As stated, it does not include open bowls, glades, chutes, densely-treed, inaccessible, or hike-to areas. This developed trail network is the basis for the trail acreage calculations, skier/rider classification breakdown, trail capacity, and density formulas. If this analysis were to account for terrain outside of the developed trail network, it would have a misleading effect on those calculations (i.e., lower trail densities, higher capacities, and an incorrect skier/rider classification breakdown). However, terrain outside of the developed network (in this case, open bowls, glades, chutes, and hike-to terrain) is crucial to terrain variety and the overall quality of the guest experience, and thus is addressed later in this section.

The developed trail network accommodates beginner through expert-level guests on 160 lift-served, named trails or trail segments spanning approximately 1,023 acres. Most beginner and intermediate runs are groomed on a regular basis.

Key aspects of terrain at TSR are explored in the following discussions.

a. **Beginner and Teaching Terrain**

Much of the teaching terrain and programming at TSR is in the Meadows Area, serviced by the Chondola. Additional beginner and teaching terrain is available in the Sunshine and Ute Park areas. The vast majority of novice-level terrain is accessed off these lifts, with single trails also off Village Express and Prospect Bowl lifts.

b. **Intermediate/Cruiser Terrain**

TSR is justifiably well-known for its intermediate-level cruising terrain, as there is a large quantity and good variety of this type of terrain. Significant amounts of this type of terrain are found off of Polar Queen, Village Express, and Prospect lifts.¹¹ These areas represent a large portion of the intermediate terrain at TSR, and are well-used.

c. **Maintained Expert Trails**

Most of the developed, maintained expert-level trails are found off of the Plunge, Oak Street, Coonskin, and Apex lifts. The upper lifts (Gold Hill and Revelation) mostly serve more open, natural advanced terrain.

Table IV-3 below lists the specifications for all the maintained terrain at TSR, including glades, and hike-to areas. While most of the traditional formalized trails are readily accessible, TSR also contains a large network of lesser-developed terrain, which is discussed later in this section. For purposes of this table, any trail defined as beginner, novice, low intermediate, intermediate, advanced, or expert is a part of the developed alpine trails, as previously described in this chapter. Any trail defined as glades or hike-to is a part of the undeveloped but maintained terrain, and is discussed later in this section. Undeveloped/inaccessible terrain is not addressed in this table.

¹¹ Cruiser terrain is described as relatively long ski trails with enough vertical drop that skiers/riders are able to continuously link varying radius turns with minimal interference from cross traffic or breaks in the fall-line. These trails are relatively wide with very good visibility and are groomed on a routine basis.

Table IV-3. Terrain Specifications – Existing Conditions

Trail Area/Name	Top Elevation (ft)	Bottom Elevation (ft)	Vertical Rise (ft)	Slope Length (ft)	Average Width (ft)	Slope Area (acres)	Average Grade (%)	Max Grade (%)	Ability Level
Adverse Traverse	10,441	10,326	115.7	784	147	2.6	15	24	Novice
Allais Alley	11,834	10,929	905.2	2,235	85	4.4	45	67	Expert
Alliekit	12,435	12,074	361.0	543	80	1.0	91	107	Hike to
Alta	10,953	10,773	180.2	551	301	3.8	35	44	Intermediate
Andy's Gold	12,193	10,930	1,262.5	2,983	633	43.3	48	78	Expert
Apex	11,736	11,143	593.1	1,177	1,039	28.1	58	67	Expert
Bail Out	9,763	9,464	299.4	884	54	1.1	36	55	Expert
Bail Out 2	9,456	9,320	136.4	1,217	28	0.8	11	20	Novice
Bees Run	12,475	11,726	748.8	1,742	362	14.5	48	71	Expert
Beginner Park	11,137	10,900	236.9	2,264	132	6.9	11	17	Novice
Boomerang Lower	9,828	9,566	262.1	1,718	111	4.4	15	26	Low Intermediate
Boomerang Upper	10,758	9,854	904.3	6,033	108	14.9	15	35	Intermediate
Bottom 4 Detail	9,530	9,528	1.5	168	362	1.4	1	1	Beginner
Bridges	9,901	9,479	421.4	3,495	79	6.3	12	27	Low Intermediate
Bushwacker	11,799	9,778	2,020.8	6,376	210	30.8	34	60	Expert
Butterfly	10,571	10,099	472.6	2,285	246	12.9	21	34	Low Intermediate
Buzz's Glade	12,019	11,034	985.0	2,350	837	45.2	47	91	Glade
Cakewalk	10,252	10,078	174.4	2,716	71	4.5	6	12	Intermediate
Camels Garden	9,854	9,812	42.3	426	130	1.3	10	13	Novice
Capitol	12,459	12,142	317.1	487	72	0.8	88	104	Hike to
Captain Jack	11,013	10,503	510.5	1,527	1,122	39.3	36	51	Advanced
Cats Paw	9,454	9,013	441.3	992	153	3.5	50	61	Expert
Chongos	11,401	11,024	376.5	879	185	3.7	48	83	Glade

Table IV-3. Terrain Specifications – Existing Conditions

Trail Area/Name	Top Elevation (ft)	Bottom Elevation (ft)	Vertical Rise (ft)	Slope Length (ft)	Average Width (ft)	Slope Area (acres)	Average Grade (%)	Max Grade (%)	Ability Level
Confidence	11,811	11,418	393.6	925	107	2.3	48	64	Expert
Coonskin Lower	9,221	8,740	481.3	1,087	155	3.9	50	69	Expert
Coonskin Middle	9,575	9,407	168.1	562	120	1.6	32	44	Intermediate
Coonskin Upper	10,527	9,740	786.1	1,961	236	10.6	44	65	Expert
Couloir Bouvier	12,461	11,984	477.0	699	52	0.8	95	108	Hike to
Craig’s Couloir	12,416	12,194	221.9	327	44	0.3	94	99	Hike to
Crystal	11,780	11,506	274.1	536	53	0.7	60	73	Hike to
Dew Drop	11,128	10,511	616.9	2,762	230	14.6	23	40	Intermediate
Dihedral Chute	12,192	11,773	419.1	719	66	1.1	72	76	Hike to
Dihedral Face	12,207	11,542	665.0	1,202	424	11.7	67	77	Hike to
Double Cabin	11,100	9,245	1,855.0	15,071	145	50.2	12	30	Low Intermediate
Dynamo Upper	12,228	11,720	507.7	980	555	12.5	61	79	Expert
Dynamo Middle	11,581	10,924	657.0	2,291	200	10.5	31	76	Expert
Dynamo Lower	10,904	10,769	134.6	773	121	2.1	18	52	Advanced
Dynamo 2 Upper	11,328	10,872	456.9	1,493	133	4.6	32	59	Expert
Dynamo 2 Lower	10,851	10,803	47.1	165	138	0.5	30	30	Low Intermediate
East Drain	10,687	10,064	622.6	2,021	41	1.9	32	47	Glade
Easy Out	9,848	9,582	265.7	1,357	29	0.9	20	33	Low Intermediate
Electra	12,193	10,986	1,206.9	2,800	118	7.6	49	92	Expert
Electric Shock	12,622	12,293	328.7	564	205	2.7	73	85	Hike to
Enchanted Forest	10,637	10,387	249.9	647	38	0.6	42	58	Glade
Enchanted Forest 1	10,885	10,501	384.3	2,785	78	5.0	14	26	Low Intermediate
Galloping Goose Upper	11,808	10,533	1,274.9	11,463	60	15.7	11	26	Low Intermediate

Table IV-3. Terrain Specifications – Existing Conditions

Trail Area/Name	Top Elevation (ft)	Bottom Elevation (ft)	Vertical Rise (ft)	Slope Length (ft)	Average Width (ft)	Slope Area (acres)	Average Grade (%)	Max Grade (%)	Ability Level
Galloping Goose Lower	10,233	9,209	266	10,458	90	21.5	10	26	Low Intermediate
Genevieve	11,808	11,398	1,207	1,474	198	6.7	30	86	Hike to
Giant Steps	11,728	11,364	329	862	167	3.3	47	57	Expert
Goat Path	12,538	12,374	250	572	2,432	31.9	30	44	Hike to
Gold Hill 1	12,501	10,985	384	3,614	6	0.5	47	77	Hike to
Gold Hill 10	12,873	12,510	1,275	507	1,510	17.6	111	157	Hike to
Gold Hill 2	12,665	11,406	1,024	2,229	166	8.5	69	95	Hike to
Gold Hill 3	12,727	11,729	410	1,784	170	6.9	68	91	Hike to
Gold Hill 4	12,740	11,760	364	1,752	136	5.5	69	85	Hike to
Gold Hill 5	12,708	11,839	163	1,721	44	1.7	61	84	Hike to
Gold Hill 6	12,616	12,146	1,516	827	75	1.4	70	82	Hike to
Gold Hill 7	12,722	12,291	363	756	35	0.6	70	81	Hike to
Gold Hill 8	12,755	12,438	1,259	534	51	0.6	78	100	Hike to
Gold Hill 9	12,870	12,509	997	545	55	0.7	91	113	Hike to
Gold Hill Stairs	12,734	12,543	980	1,643	73	2.8	12	27	Low Intermediate
Gold Rush	10,751	10,513	869	568	110	1.4	46	54	Advanced
Happy Thought Lower	11,304	10,849	470	2,401	146	8.1	19	34	Low Intermediate
Happy Thought Upper	11,929	11,386	431	1,092	181	4.5	58	79	Expert
Happy Thought Middle	11,349	11,088	317	726	144	2.4	39	67	Expert
Hermit	10,536	10,224	361	932	134	2.9	36	47	Advanced
Holy Cow!	10,900	10,329	190	2,322	40	2.1	26	63	Expert
Hoot Brown Expert Terrain Park	10,394	9,559	238	3,452	163	12.9	25	38	Intermediate
Humbolt Draw	10,714	10,087	455	2,570	157	9.2	25	42	Intermediate

Table IV-3. Terrain Specifications – Existing Conditions

Trail Area/Name	Top Elevation (ft)	Bottom Elevation (ft)	Vertical Rise (ft)	Slope Length (ft)	Average Width (ft)	Slope Area (acres)	Average Grade (%)	Max Grade (%)	Ability Level
Jackpot	11,840	11,340	544	1,008	271	6.3	58	73	Hike to
Jaws Lower	9,419	9,196	261	427	60	0.6	61	67	Expert
Jaws Upper	9,774	9,451	311	910	63	1.3	39	64	Expert
Jello's Bowl	12,130	11,700	571	957	351	7.7	51	72	Hike to
Joint Point	11,614	11,362	835	509	141	1.6	57	62	Expert
Kant-Mak-M Lower	10,294	9,824	627	1,318	63	1.9	39	87	Expert
Kant-Mak-M Middle	10,931	10,612	500	1,361	47	1.5	25	85	Expert
Kant-Mak-M Upper	11,891	11,073	223	1,733	117	4.7	54	70	Expert
La Rosa	11,790	11,491	323	695	183	2.9	49	86	Hike to
Lakeview	12,084	11,403	431	1,355	123	3.8	59	80	Hike to
Last Chance	11,444	11,368	252	618	36	0.5	12	17	Novice
Liberty Bell	12,190	11,742	469	1,097	560	14.1	45	53	Advanced
Little Maude	11,145	11,012	319	1,402	122	3.9	9	25	Low Intermediate
Little Rose	12,188	11,011	818	2,982	273	18.7	43	75	Expert
Log Pile	11,375	11,041	299	1,094	963	24.2	32	44	Intermediate
Log Pile Trees	11,310	10,845	681	1,027	296	7.0	51	66	Glade
Lookout Lower	10,366	9,783	76	2,147	147	7.2	28	43	Intermediate
Lookout Upper	10,985	10,380	448	1,930	129	5.7	33	49	Advanced
Madison	11,400	10,776	132	4,692	279	30.1	13	36	Intermediate
Magnolia	11,801	10,775	1,177	5,803	268	35.6	18	50	Advanced
Majestic	12,286	11,741	333	1,431	92	3.0	42	63	Expert
Mammoth	11,862	10,844	465	2,544	214	12.5	44	67	Expert
Mammoth Ridge	11,850	11,734	583	1,527	70	2.4	8	29	Low Intermediate

Table IV-3. Terrain Specifications – Existing Conditions

Trail Area/Name	Top Elevation (ft)	Bottom Elevation (ft)	Vertical Rise (ft)	Slope Length (ft)	Average Width (ft)	Slope Area (acres)	Average Grade (%)	Max Grade (%)	Ability Level
Marmot	10,522	9,822	605	4,870	74	8.3	15	29	Low Intermediate
May Girl	11,251	11,042	624	1,471	334	11.3	14	26	Low Intermediate
Meadows	9,540	9,170	1,026	2,810	380	24.5	13	21	Novice
Milk Run Lower	9,464	8,739	545	1,614	334	12.4	51	70	Expert
Milk Run Upper	10,505	9,778	1,018	1,734	287	11.4	47	57	Expert
Milk Run Race Finish Lower	9,544	9,479	116	281	176	1.1	24	30	Low Intermediate
Milk Run Race Finish Upper	9,767	9,555	700	814	128	2.4	27	43	Intermediate
Millions	12,238	10,895	209	3,312	208	15.8	45	79	Expert
Misty Maiden	10,480	9,530	370	4,764	280	30.6	20	44	Intermediate
Misty Maiden Intermediate Park	10,030	9,936	724	470	186	2.0	21	26	Low Intermediate
Mountain Quail	12,218	11,406	728	2,061	167	7.9	43	72	Hike to
Nastar	10,235	9,947	65	1,077	218	5.4	28	34	Low Intermediate
Nellie	11,148	10,866	212	3,674	36	3.1	8	14	Novice
Nice Chute	11,933	11,567	1,343	671	65	1.0	66	88	Hike to
North Chute Lower	10,027	9,874	950	423	133	1.3	39	43	Intermediate
North Chute Middle	10,474	10,058	94	857	112	2.2	56	73	Expert
North Chute Upper	10,862	10,492	812	609	171	2.4	77	87	Expert
North Henry's	10,808	10,300	288	1,853	175	7.4	29	47	Advanced
Ophir Loop	11,190	10,316	282	4,740	106	11.6	19	44	Intermediate
Palmyra Basin	12,466	11,412	367	3,169	807	58.7	36	73	Hike to
Pandora	10,500	10,111	153	864	48	1.0	51	69	Expert
Peak-A-Boo	10,722	9,985	416	3,815	116	10.2	20	38	Intermediate
Peaks Trail	9,511	9,410	370	1,487	147	5.0	7	12	Beginner

Table IV-3. Terrain Specifications – Existing Conditions

Trail Area/Name	Top Elevation (ft)	Bottom Elevation (ft)	Vertical Rise (ft)	Slope Length (ft)	Average Width (ft)	Slope Area (acres)	Average Grade (%)	Max Grade (%)	Ability Level
Pick 'N' Gad	10,379	10,226	508	681	218	3.4	23	29	Low Intermediate
Plunge Lower	10,459	9,797	874	1,978	268	12.2	36	65	Expert
Plunge Upper	11,668	10,383	1,054	4,041	204	18.9	34	60	Expert
Polar Queen	11,190	10,290	388	5,031	154	17.8	18	35	Intermediate
Power Line	11,036	10,607	737	867	39	0.8	57	69	Expert
Prospect Woods	11,668	11,326	101	985	420	9.5	37	58	Glade
Review	11,974	11,491	153	912	416	8.7	64	84	Hike to
Roy Boy	13,067	12,489	661	974	81	1.8	77	101	Hike to
Sandia	11,504	10,759	1,285	4,952	223	25.3	15	36	Intermediate
Sandia 1	11,790	11,613	900	514	215	2.5	37	61	Expert
See Forever_14 to 15	12,474	12,247	429	1,252	61	1.8	19	41	Intermediate
See Forever_Happy Thought to Joint Point	11,969	11,723	342	2,108	75	3.6	12	26	Low Intermediate
See Forever_Lookout to Top of Coonskin	11,005	10,589	483	1,562	148	5.3	28	33	Low Intermediate
See Forever_Top of 14 to Top of 6	12,260	11,924	578	2,878	49	3.2	12	28	Low Intermediate
See Forever_Top of 9 to Lookout	11,722	11,008	746	4,015	108	9.9	18	37	Intermediate
Seniors	13,208	12,418	177	1,317	111	3.4	76	104	Hike to
Sheridan Headwall	10,427	10,260	227	607	194	2.7	29	47	Advanced
Silver Glade	11,502	11,188	246	633	110	1.6	57	67	Glade
Silver Tip	10,840	10,685	416	472	288	3.1	35	43	Intermediate
Silver Tip Trees	10,789	10,636	336	463	290	3.1	35	38	Glade
Silvercloud	12,458	11,753	714	1,677	248	9.5	47	60	Expert
Smuggler	10,528	10,148	790	1,180	483	13.1	34	45	Intermediate
South Henry's	10,697	10,390	166	811	315	5.9	41	46	Advanced

Table IV-3. Terrain Specifications – Existing Conditions

Trail Area/Name	Top Elevation (ft)	Bottom Elevation (ft)	Vertical Rise (ft)	Slope Length (ft)	Average Width (ft)	Slope Area (acres)	Average Grade (%)	Max Grade (%)	Ability Level
Spiral Stairs	11,215	10,553	315	1,346	92	2.8	57	72	Expert
Stella	11,469	11,181	155	1,496	151	5.2	20	58	Expert
Sully's	11,681	10,830	153	2,045	160	7.5	46	75	Expert
Sundance	10,060	9,635	705	3,407	76	6.0	13	24	Novice
Sundance 1	10,900	10,067	381	4,782	95	10.5	18	35	Low Intermediate
Sunrise	12,792	12,348	307	692	1,247	19.8	84	92	Hike to
Sweet Martha	11,638	11,516	662	585	256	3.4	22	47	Hike to
Teddy's Way	10,374	10,065	288	3,072	15	1.0	10	27	Low Intermediate
Telluride Terrain Park	9,933	9,692	852	918	205	4.3	27	34	Low Intermediate
Telluride Trail	10,557	8,740	425	14,137	4	1.2	13	33	Low Intermediate
Terrain Park Access	9,946	9,595	833	1,399	351	11.3	26	38	Intermediate
The Fans	11,719	11,063	444	1,863	119	5.1	38	74	Hike to
Tram Shot	12,910	12,472	122	723	2,038	33.8	78	88	Hike to
UTE Park	11,144	10,876	310	2,525	25	1.4	11	15	Novice
West Drain Lower	10,758	9,336	241	10,393	20	4.9	14	29	Low Intermediate
West Drain Upper	10,482	9,908	1,817	2,631	43	2.6	22	30	Low Intermediate
Village Bypass	11,139	10,659	351	2,593	377	22.5	19	25	Novice
Wildcat	11,754	11,202	655	1,204	242	6.7	53	86	Expert
Westlake	12,034	11,627	438	729	239	4.0	68	86	Hike to
Woozley's Way Lower	11,880	11,290	267	1,802	188	7.8	35	50	Advanced
Woozley's Way Upper	11,286	10,789	1,422	3,254	97	7.3	15	38	Intermediate
Zulu Queen	11,688	11,316	574	778	210	3.7	55	66	Expert
Total				328,649		1,366			

d. Terrain Distribution by Ability Level

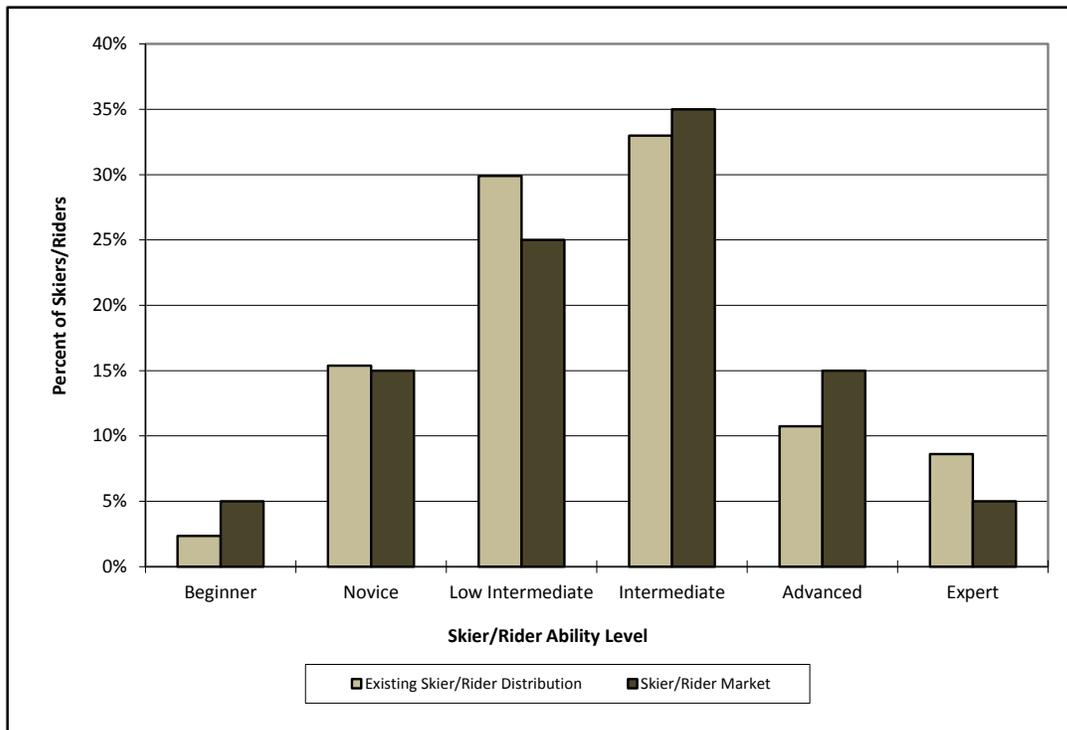
This terrain distribution analysis considers the 1,023 acres within the developed terrain network at TSR (note that Table IV-4 also includes chutes, bowls, glades, and hike-to terrain not included in the developed terrain network, but discussed below). The terrain distribution through the full range of ability levels is relatively close to the ideal breakdown for the regional destination skier/rider market. The terrain classification breakdown of the existing resort is set forth in Table IV-4 and Chart IV-1. The last column in this table represents what can be considered the skill level distribution in the relevant skier/rider market and provides a comparison with the actual skier/rider distribution at TSR.

Table IV-4. Terrain Distribution by Ability Level – Existing Conditions

Skier/Rider Ability Level	Trail Area (acres)	Skier/Rider Capacity (guests)	Actual Skier/Rider Distribution (%)	Relevant Skier/Rider Market (%)
Beginner	6	192	2	5
Novice	70	1,251	15	15
Low intermediate	203	2,434	30	25
Intermediate	269	2,686	33	35
Advanced	125	875	11	15
Expert	351	702	9	5
Total	1023	8,140	100	100

Source: SE Group

Chart IV-1. Terrain Distribution by Ability Level – Existing Conditions



Source: SE Group

Chart IV-1 illustrates a relatively close match between existing terrain distribution at TSR and the market demand for beginner-, novice-, and low intermediate-ability levels. The fact that the amount of low intermediate terrain exceeds the national market average reflects the large amount of natural terrain of this category to be found on the mountain. The slight deficiency of developed advanced level terrain is offset by the large amount of undeveloped terrain available, as discussed below.

3. Undeveloped and Gladed Terrain

There is a significant amount of maintained undeveloped terrain at TSR; the topography within the SUP area includes steps, chutes, bowls, and glades intermingled within, and outside of, the developed and maintained terrain network. The undeveloped terrain at TSR fall into two categories: lift accessed undeveloped, but maintained, terrain; and densely-treed, less accessible areas. They are discussed briefly below.

a. Undeveloped, but Maintained, Terrain

This type of terrain accounts for 343 acres. These areas are detailed in Table IV-5 and include controlled open bowls, glades, chutes, and hike-to terrain. Much of this terrain is gated, which allows TSR ski patrol to control access in the early season, periods of poor or undesirable snow conditions, avalanche closures, and in certain weather conditions.

As discussed previously under “Developed Alpine Trails,” for the purposes of this analysis, the developed trail network does not include open bowls, glades, chutes, and hike-to terrain. Were this analysis to account for terrain outside of the developed trail network, it would have a misleading effect on all of the

terrain distribution calculations discussed above. However, terrain outside of the developed network is very important to terrain variety and the overall quality of the guest experience.

Table IV-5 summarizes the maintained, undeveloped terrain at TSR.

Table IV-5. Undeveloped Terrain – Existing Conditions

Terrain Type	Trail Area (acres)
Glades	73
Hike-to	270
Total	343

Source: SE Group

b. Densely-treed and less accessible areas

This consists primarily of the natural (non-thinned or maintained) forested areas between the defined skiing areas and ski runs, and also accounts for some of the less accessible open areas in the upper parts of the mountain. These areas total approximately 650 acres of terrain.

4. Terrain Parks

Terrain parks have become a vital part of most mountain resorts’ operations, and are now considered an essential mountain amenity. Popularity of terrain parks continues to increase, and is dependent on regional location of the resort, demographics of the resort’s target guests, and, significantly, the quality of the parks. A key component to a resort’s overall terrain park strategy is progression, which refers to increasing levels of difficulty in the parks.

Terrain Parks are an important component of TSR to meet the desires and expectations of visitors. To offer skiers and riders of all abilities the chance to improve their freestyle skills, TSR currently builds, operates, and maintains three primary terrain parks, with a good progression for first-time park users to experts. Individual park areas do not mix features with different ability levels. The parks are currently located off the Village Express and Ute Park lifts. Current parks include:

- *Ute Park* – Located off the Ute Park Lift at the top of the Sunshine Express this is the introductory park. It consists of beginner- and low intermediate-level features.
- *Hoot Brown Intermediate Park* – Located off the Village Express, to the right of Lower *Misty Maiden*. This is the next progression step up, and consists of all low intermediate- and intermediate-level features.
- *Hoot Brown Advanced Park* – Located off the Village Express, to the right of the Butterfly run. This park consists of advanced- and expert-level features.

TSR constantly evaluates optimum locations and varies park elements and locations frequently. TSR will continue this practice as conditions warrant, in locations that are appropriate based on the evolving needs of park users.

5. Nordic Skiing and Showshoeing Trails

The existing Nordic skiing and snowshoeing trails are located at the top of the Sunshine Express (Lift 10) and include over 11 miles of trails. The trail access, via the lift or uphill skiing in this pod, makes access to the Nordic skiing and snowshoeing trails less than ideal. The lift can only download a total of three chairs at one time for a total capacity of 12 people. This is a limiting factor for this type of use. However, it has been determined that this location is not ideal for Nordic skiing, so a lack of download capacity is not the primary factor for limiting this use. The location of these trails is shown on Figure IV-1 and the trail information is listed in Table IV-6.

Table IV-6. Nordic Skiing and Snowshoeing Trails – Existing Conditions

Trail Name	Ability Level	Start Point	End Point	Vertical (feet)	Total Distance
Lynx Loop	Moderate to Difficult	Top-A-Ten	Top-A-Ten	540	2.4 miles (3.8 km)
Boomerang Loop	Moderate to Difficult	Galloping Goose	Galloping Goose	305	1.1 miles (1.8 km)
Magic Meadows Loop	Moderate	Top-A-Ten	Top-A-Ten	265	2.5 miles (4 km)
To Alta Lakes	Moderate	Boomerang Loop	Alta Lakes	300	1.4 miles (2.3 km)
Galloping Goose	Moderate	Bottom of Sunshine Express	Top-A-Ten	1,735	3.6 miles (5.8 km)
Total	342			3,145	11 miles (17.7 km)

D. EXISTING CAPACITY ANALYSIS

1. Comfortable Carrying Capacity

The reader is referred to Chapter II, Section D for a detailed discussion of capacity analysis and design, defined as CCC.

A detailed calculation of CCC was completed for this MDP, as shown in Table IV-7. The CCC of TSR was calculated at 6,550 skiers at one time.

Table IV-7. Comfortable Carrying Capacity – Existing Conditions

Map Ref.	Lift Name, Lift Type	Slope Length	Vertical Rise	Actual Design Capacity	Oper. Hours	Up-Mtn. Access Role	Misload/Lift Stop	Adjusted Hourly Cap.	VTF/Day	Vertical Demand	CCC
		(ft)	(ft)	(guests/hr)	(hrs)	(%)	(%)	(guests/hr)	(000)	(ft/day)	(guests)
1	Chondola/4DG	2,916	385	2,000	7.00	25	5	1,400	3,773	4,778	790
2	Terrain Park Poma	1,425	355	195	7.00	0	10	176	436	5,960	70
4	Village Express/4D	6,227	1,244	2,800	7.00	25	20	1,540	13,410	10,906	1,230
5	Polar Queen Express/4D	4,899	936	2,400	6.50	25	5	1,680	10,221	15,542	660
6	Apex Lift/3C	2,957	1,144	1,500	6.50	15	10	1,125	8,366	23,387	360
7	Coonskin Lift/2C	4,725	1,845	876	7.00	75	10	131	1,697	23,417	70
8	Oak Street Lift/2C	2,686	1,055	900	6.50	85	10	45	309	23,400	10
9	Plunge Lift/3C	6,233	2,125	1,042	6.50	20	10	729	10,075	22,840	440
10	Sunshine Express/4D	10,544	1,735	1,200	7.00	40	5	660	8,016	10,255	780
11	Ute Park/4D	2,493	274	1,500	5.75	20	5	1,125	1,772	3,953	450
12	Prospect Bowl Express/4D	5,097	1,047	2,400	5.75	0	5	2,280	13,726	14,571	940
13	Lynx/P	701	32	585	5.75	0	10	527	97	1,089	90
14	Gold Hill Express/4D	3,645	1,475	1,500	5.75	25	5	1,050	8,905	31,292	280
15	Revelation Lift/4C	1,841	785	1,240	5.75	0	10	1,116	5,037	22,349	230
G1	Gondola/8G	6,019	1,780	920	7.00	75	5	184	2,293	15,494	150
G2	Gondola/8G	4,044	995	920	7.00	95	5	-	0	11,842	-
G3	Gondola/8G	2,770	5	660	7.00	95	5	-	0	78	-
Total		69,222		22,638				13,768	88,133		6,550

Source: SE Group

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

1. Guest Services

Guest services are provided at several locations in TSR: Mountain Village Center, Meadows Base, Coonskin and Oak Street in the Town of Telluride. Existing guest service facilities are identified on Figure IV-1.

a. Base Area Guest Services

There are four guest service facilities located at various portals of the ski resort. The primary facility is located at the base of the resort in Town of Mountain Village center. The Mountain Village Skier Service building is the primary on-site location for lift ticket and multiple day pass sales, adult and children's ski school lessons, children's ski rentals, nursery and restrooms. The other Guest Service locations are located at the base in the Town of Telluride, and one at the Meadows base area. These facilities are primarily for lift ticket and multi-day pass sales and are located at the base of access lifts. Guest service locations are depicted on Figure IV-1.

Ski and boot storage is also available in a separate building located at the base of the Village Express in the Town of Mountain Village center.

It should be noted that a significant portion of the guest service facilities (particularly ski rentals and food and beverage facilities) in the Town of Mountain Village and the Town of Telluride are not owned or operated by TSR. In fact, TSR does not own or operate any rental or repair facilities.

This existing space use analysis considers only base village space that is owned and operated by TSR. As a result, the comparisons to the total recommended amount of space will always be low, as the existing totals do not account for guest service space that is not owned by TSR. As stated, examples of this are third-party rental shops in the Towns of Telluride and Mountain Village, the private restaurants in the Towns of Telluride and Mountain Village, retail stores, etc. It is beyond the scope of this document to analyze third-party base village guest service space.

b. On-Mountain Guest Services

On-mountain skier services are fairly extensive at TSR. There are five on-mountain restaurants (Allred's, Alpino Vino, Bon Vivant, Giuseppe's, and Gorrone Ranch) and one warming hut (High Camp).

2. Space Use Analysis

Sufficient existing guest service space should be provided to accommodate the existing resort CCC of 6,550 guests per day. A logical distribution of the CCC to each facility location is utilized to determine guest service capacities and space requirements at base area and on-mountain facilities. The CCC is 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. Since the on-mountain guest services are available, and returning to the base area for lunch is not necessary, a significant number of skiers remain on the mountain for lunch or breaks from skiing.

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.

Tables IV-8, IV-9, and IV-10 compare the current total space use allocations of the guest service functions to industry norms for a resort of similar market orientation and regional context as TSR (based upon a CCC of 6,550 skiers). Square footages contained in this chart are calculated to illustrate how TSR compares to industry averages, and should not be considered absolute requirements.

Service functions that were considered in the total square footage recommendations include the following:

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 space.

Bar/Lounge: All serving and seating areas, often designated as restricted use, for the serving and consumption of alcoholic beverages. Since 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 lunch rooms associated with ski school functions. Storage and employee lockers directly associated with ski school are included.

Rentals/Repair: All rental shop, repair services, and associated storage areas. The assumed target number of units in the rental fleet is 40% of CCC.

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. Includes seasonal and daily lockers.

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.

A recommended range in space requirement for each function was calculated for each location, then totaled and compared to the total space for that location.

Table IV-8. Industry Average Space Use, Base Areas – Existing Conditions

Service Function	Existing Total	Recommended Range	
		Low	High
Ticket Sales/Guest Services	2,250	1,470	1,800
Public Lockers	3,166	4,420	5,400
Rentals/Repair	--	10,480	11,790
Retail Sales	18,793	3,090	3,780
Bar/lounge	--	4,640	5,670
Adult Ski School	2,000	2,360	2,880
Kid's Ski School	4,000	4,720	5,760
Restaurant Seating	10,418	16,520	20,190
Kitchen/Scramble	--	13,220	16,150
Rest rooms	4,300	3,300	4,040
Ski Patrol	3,300	1,320	1,620
Administration	10,762	3,090	3,780
Employee Lockers/Lounge	5,540	1,240	1,510
Storage	3,226	3,140	4,640
Circulation/Mechanical/Walls	12,906	12,580	18,560
Total Square Feet	80,661	85,590	107,570

Table IV-9. Industry Average Space Use, On Mountain – 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	11,661	14,430	17,630
Kitchen/Scramble	6,997	11,540	14,110
Rest rooms	4,861	2,890	3,530
Ski Patrol	2,850	1,150	1,410
Administration	--	--	--
Employee Lockers/Lounge	--	--	--
Storage	1,318	1,350	2,020
Circulation/Mechanical/Walls	5,274	5,400	8,070
Total Square Feet	32,961	36,760	46,770

Table IV-10. Industry Average Space Use, Overall Resort – Existing Conditions

Service Function	Existing Total	Recommended Range	
		Low	High
Ticket Sales/Guest Services	2,250	1,470	1,800
Public Lockers	3,166	4,420	5,400
Rentals/Repair	--	10,480	11,790
Retail Sales	18,793	3,090	3,780
Bar/lounge	--	4,640	5,670
Adult Ski School	2,000	2,360	2,880
Kid's Ski School	4,000	4,720	5,760
Restaurant Seating	22,079	30,950	37,820
Kitchen/Scramble	6,997	24,760	30,260
Rest rooms	9,161	6,190	7,570
Ski Patrol	6,150	2,470	3,030
Administration	10,762	3,090	3,780
Employee Lockers/Lounge	5,540	1,240	1,510
Storage	4,545	4,490	6,660
Circulation/Mechanical/Walls	18,180	17,980	26,630
Total Square Feet	113,622	122,350	154,340

As shown in the space use tables, total TSR guest use space is below, but only slightly below, the recommended range. As noted above, the existing base village space only reflects guest service space that is owned and operated by TSR, and so does not account for the private restaurants, ski rental shops, retail, and others. It is reasonable to assume that these third-party restaurants and stores (which are outside the scope of this analysis) make up the difference. While it appears that Telluride has an abundance of Retail Sales space, much of that comes from their need to service a multitude of portals, where most areas only have or need to service one portal.

3. Food Service Seating

Food service seating at TSR is provided in the base villages and in six separate locations on the mountain.

A key factor in evaluating restaurant capacity is the turnover rate of the seats. A turnover rate of 2 to 4 times throughout the day is the standard range utilized in determining restaurant capacity. Sit-down dining at resorts typically results in a lower turnover rate, while “fast food” cafeteria-style dining is characterized by a higher turnover rate. Furthermore, weather has an influence on turnover rates at resorts, as on snowy days guests will spend more time indoors than on sunny days. Based on observed operating characteristics at TSR, an average turnover rate of 3 was used for the on-mountain facilities and a turnover rate of 4 was used for the base area facilities, as shown in Table IV-12.

The following table summarizes the seating requirements at TSR. As with the total guest use space analysis, it is important to note that this analysis only accounts for restaurant seats that are owned and operated by TSR; thus, not all of the 1,093 Mountain Village restaurant seats are taken into account. It is reasonable to assume that the deficiency is easily made up for by the numerous private restaurants in the Town of Mountain Village and the Town of Telluride.

Table IV-11 lists the existing on-mountain restaurants, respective capacities, and the type of restaurant. Figure IV-1 shows the locations on the mountain. As stated previously, there are additional restaurants that have been approved but not yet constructed. These restaurants are included in Chapter VI - Upgrade Plan, which discusses both upgrading existing restaurants and adding new restaurants.

Table IV-11. Restaurant Seats – Existing Conditions

On-Mountain Restaurants	Indoor Seats	Outdoor Seats	Total Seats	Theme
High Camp	32	30	62	Warming Hut
Allred's ^a	192	0	192	Contemporary American
Alpino Vino	28	40	68	High Alpine Wine Bistro
Giuseppe's	30	64	94	New Orleans inspired fare
Gorroneo	200	240	440	Historic Ranch
Big Billies	470	30	500	Cafeteria (includes children's ski school)
Bon Vivant	0	60	60	Bistro
Total	760	464	1,224	

^a Allred's only operates during evening hours; therefore, Allred's seating is not included in on-mountain seating total.

Table IV-12. Recommended Restaurant Seats – Existing Conditions

	Base Area	On-Mountain	Total Resort
Lunchtime Capacity (CCC)	3,672	3,206	6,878
Average Seat Turnover	4	3	
Existing Seats	500	760	1,260
Required Seats	918	1,069	1,987
Difference	-418	-309	-727

F. EXISTING PARKING CAPACITY

The existing parking facilities at TSR include both public and private parking areas. Since access to TSR includes portals in both the Town of Telluride and the Town of Mountain Village there are public and private parking areas in both towns.

TSR is a destination resort so many visitors fly to the area and do not rent a vehicle. There is a free public transportation system including the gondola and busses so vehicles are not required when visiting the destination. Also, if travelers either rent a vehicle or drive, parking is often included as part of their lodging (which is included in the following tables).

The following tables show existing public parking spaces and private parking that is available for guests of the various hotels, lodges and condominiums.

Table IV-13. Public Parking – Existing Conditions

Location	Current Parking Capacity (spaces)
Telluride	
Lot L (Shandoka)	330
Carhenge	290
Lot B	80
<i>Telluride Total</i>	<i>700</i>
Town of Mountain Village	
Meadows Run	110
Town Hall Plaza	60
Gondola	460
North Village	25
Heritage Public Parking	106
Blue Mesa	18
Shirana	11
<i>Mountain Village Total</i>	<i>790</i>
Total Public Parking Spaces	1,490

Table IV-14. Hotel Parking – Existing Conditions

Location	Current Parking Capacity (spaces)
Telluride	
Hotel Telluride	38
Ice House	18
New Sheridan Hotel	0
The Victoria Inn	13
Camel’s Garden	25
Hotel Columbia	20
Manitou B&B	0
Montana Placer Inn	0
Mountainside Inn	12
<i>Total Telluride Hotel Parking Spaces</i>	<i>126</i>
Mountain Village	
Bear Creek Lodge	63
Hotel Madeline	82
The Peaks	100
Mountain Lodge	55
Franz Klammer	47
Inn at Lost Creek	27
Lumiere	30
<i>Mountain Village Hotel Parking Total</i>	<i>404</i>
Grand Total Hotel Parking Spaces	530

Table IV-15. Mountain Village Condominium Parking – Existing Conditions

Location	Current Parking Capacity (spaces)
Village Center	
Franz Klammer	20
Blue Mesa Lodge	53
Blue Mesa Condominiums	14
Heritage Crossing	40
Centrum	11
Palmyra	17
Westermere	11
Shirana	8
Granita	13
Telemark	12
Dakoda	12
Kayenta	0
Village Creek	0
<i>Total Village Center Condo Parking Spaces</i>	<i>211</i>
Outside Village Core	
Condominiums	630
<i>Total Outside Village Core Parking Spaces</i>	<i>630</i>
Total Mountain Village Condominium Parking	841

Table IV-16. Mountain Village Employee Housing Parking – Existing Conditions

Housing Type	Current Parking Capacity (spaces)
Employee Apartment	394
Employee Apartment inside Village Core	7
Employee Condominium	297
Employee Condominium inside Village Core	5
Employee Dorm	30
Total Employee Housing Parking Spaces	733

As demonstrated in these tables, parking for TSR guests is available across multiple lots.

Table IV-17. Recommended Parking – Existing Conditions

CCC + other guests	6,878
Average vehicle occupancy	2.5
Required skier car parking spaces	2,751
Required employee car parking spaces	550
<i>Required Parking Spaces Total</i>	<i>3,301</i>
Telluride Public Parking	700
Mountain Village Public Parking	790
<i>Public Parking Sub-Total</i>	<i>1,490</i>
Telluride Hotel Parking	126
Mountain Village Hotel Parking	404
<i>Hotel Parking Sub-Total</i>	<i>530</i>
Mountain Village Condominium Parking	841
Total Existing Guest Parking Spaces	2,861
MV Employee Housing Parking	733
Total Existing Parking Spaces	3,594
surplus	293

Vehicle occupancy counts confirm that average car occupancy at TSR is 2.5 people per car, which is aligned with national averages of 2.3 to 2.8 people per car.

Using this average vehicle occupancy, there is a parking capacity for 7,152 guests. This represents a 602 person parking surplus over that called for by the existing CCC.

In addition, a significant portion of the arrival capacity is in the form of shuttles and buses. The Galloping Goose Transit System is operated by the Town of Telluride and operates 365 days a year, every 20 minutes. As stated previously, many destination visitors on ski vacations do not rent a car.

The combination of parking capacity and transit options provides surplus access capacity to TSR.

G. EXISTING RESORT OPERATIONS

1. Ski Patrol/First Aid and Snow Safety

There are currently six ski patrol stations located throughout TSR. Locations for the patrol stations are driven by the size of the resort and the variety of terrain aspects that need to be patrolled by on-ski patrollers. These patrol station locations allow patrollers to be in position to respond to the majority of the terrain by skiing. This improves the response time when patrol is called for assistance. Patrol station locations are indicated on Figure IV-1.

The TSR snow safety plan includes avalanche identification factors, terrain analysis, weather and snowpack analysis, hazard reduction techniques, explosives storage, handling and deployment, and rescue equipment and procedures. The plan also identifies, within the existing managed terrain, individual slide paths and control routes used to minimize avalanche hazards.

Individuals desiring to access NFS land from the ski area can access from Forest Service designated backcountry access points. Once a skier exits the ski area boundary, the ski area and ski patrol have no duty to provide care and rescue services. There are five Forest Service designated access points through Telluride SUP. One is located near the top of the Plunge Lift, two are located on Gold Hill Ridge, one at Palmyra Peak, and one at Bald Mountain saddle.

2. Snowmaking Coverage

a. Snowmaking System

The existing snowmaking system covers approximately 300 acres of ski trails (refer to Figure IV-2). TSR obtains its snowmaking water supply from Prospect Creek, the San Miguel River, and the San Miguel River alluvium. The water is either pumped directly into the snowmaking distribution system or to on- mountain storage ponds. The existing storage ponds include Prospect Creek Reservoir alternate number 1 and Prospect Creek Reservoir alternate number 3. An additional storage pond, Prospect Creek Reservoir alternate number 2, has been approved but has not yet been built. The existing reservoirs (ponds) hold 19 acre-feet and 22 acre-feet respectively. The pond storage is primarily used to buffer demand into the distribution system. Water can be pumped into the ponds when there are warmer temperatures that are not conducive to making snow but produce higher streamflow for water supply. When temperatures are colder and supply in the creek and river is diminished the stored water in the ponds can be utilized for snowmaking. The reservoirs and the points of diversion are integral to the snowmaking water supply, which includes numerous water rights held collectively by TSG and Town of Mountain Village.

The water case that provides for snowmaking water is Case No. 90CW112 (which amended the previous Case No. 80CW405). In addition to the Prospect Creek and San Miguel River diversions, TSR also purchases water from the Town of Mountain Village that is pumped from wells located in the San Miguel River alluvium (Wells 9 & 10). This snowmaking water is included in the 90CW112 water right. Water from the TMV wells is pumped to their pump station located adjacent to the lower Telluride trail. This pump station delivers water to the snowmaking ponds at approximately 1,200 GPM.

A new water rights application is currently before the court for consideration, which includes reasonable future development needs for the Town of Mountain Village and the Telluride Ski & Golf Resort beyond those contemplated in the 90CW112 plan. The new water right also adds additional replacement supply to allow for augmentation that would support the total supply needs. The new Case No. is 10CW206 and is currently under consideration for ruling of Referee, Judgement and Decree.

The snowmaking season starts in late October with the ponds at full capacity. Water is either pumped from the ponds or directly from the diversions into the distribution system, which is centralized at the Misty Maiden pump station. Water can also be pumped from the diversions directly into the storage ponds for later distribution. The Upper Prospect Creek diversion can pump up to 500 GPM and the Prospect Creek pump station pumps up to 300 GPM. The Misty Maiden pump station currently has two high-pressure pumps and two low-pressure pumps that have a total capacity of 2,600 gallons per minute.

During the summer of 2016 TSG will complete the full buildout of the pump station, which will include one additional high-pressure pump and one additional low-pressure pump, adding 1,300 GPM of pumping capacity.

TSR has approval to build an additional pump station at the San Miguel River (the Oak Street Pump Station and pipeline,) which at full buildout will have the capability to pump up to 4,050 GPM.

3. Grooming

Groomed terrain is important to the majority of guests who visit destination resorts, including TSR's. TSR grooms approximately 700 acres of terrain—of which, 400 to 500 acres is groomed every night of the ski season. The resort operates two shifts of seven to nine snow cats each night. Their fleet includes three winch cats, two park cats, six free groomers, one snowmaking cat, two haul cats, and one cat dedicated to avalanche mitigation.

4. Maintenance Facilities

TSR's vehicle, snowmaking and lift maintenance facilities are located on private land just off of the Prospect Creek Road with access to the Village Bypass and Boomerang ski trails. The access trail from the vehicle maintenance facility to the ski area includes snowmaking in order to keep the snow surface clean. The warehouse for food and beverage is located at the same site as vehicle maintenance. Building maintenance is based out of the Big Billie's facility.

5. Utilities

Electric power is supplied to the ski area from San Miguel Power, which has adequate capacity. Electric lines run to all of the existing lifts and on mountain facilities. Natural gas is provided by Source Gas and is run to the major food service and maintenance facilities. Fiber has been installed in limited areas of the mountain but is becoming a necessity for operations. See Figure IV-3 for existing utilities.

6. Communications

TSR utilizes an on mountain phone system at Gorrone, Allred's, and the lift operation buildings. There are two dispatchers at ski patrol and mountain operations, and key personnel are equipped with radios. Most employees carry cell phones and TSR utilizes an all mountain text system for emergencies, lost children, closure violator alerts, etc. Wi-Fi is available in limited areas, but there is demand for the service to be expanded.

7. Culinary Water and Sewer

Gorrone, Tomboy, Crazy Elk, and the Top of Ten all have potable water that is piped from the Town of Mountain Village. Water service to the Bon Vivant is from a private well. Potable water is hauled from the Town of Mountain Village to Alpine Vino, High Camp, and Giuseppe's.

Sanitary sewer and restroom facilities are detailed in Table IV-18.

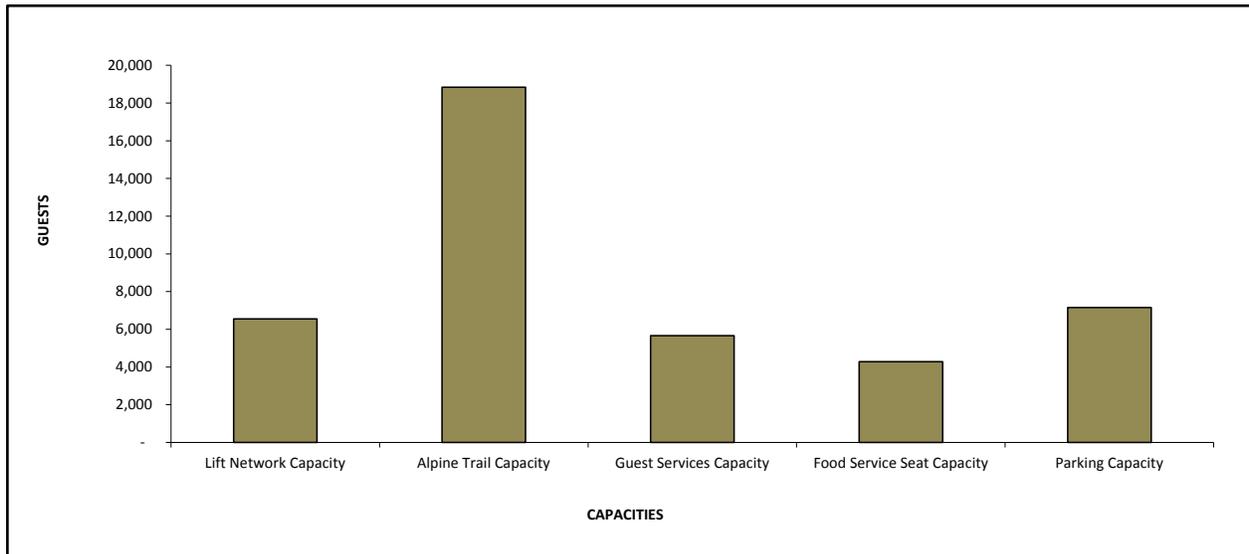
Table IV-18. Sewer and Restroom Facilities – Existing Conditions

Name/Location	Toilet Type	# of stalls (Men)	Urinals	# of stalls (Women)	# of stalls (Unisex)
Big Billie's	Town Sewer (Mountain Village)	4	6	8	--
Gondola (Mountain Village)	Town Sewer (Mountain Village)	6	3	8	--
Gondola (Station St. Sophia)	Town Sewer (Mountain Village)	1	1	2	--
Gondola (Town of Telluride)	Town Sewer (Town of Telluride)	1	1	2	--
Gorrono	Town Sewer (Mountain Village)	4	4	8	--
Bon Vivant	Septic	1	3 (waterless)	3	--
Guissepe's	Clivus	1	2 (waterless)	2	--
Alpino Vino	Clivus	1	1	2	--
High Camp	Clivus	1	1 (waterless)	2	--
Ute Park	Vault	--	--	--	2
Top of Coonskin Lift Portable	Portable Toilet	--	--	--	2
Bottom of Plunge Lift Portable	Portable Toilet	--	--	--	1
Between Bottom Prospect Bowl Express & Gold Hill Express Portable	Portable Toilet	--	--	--	2
<i>subtotals</i>		20	22	37	7
Total		86			

H. RESORT CAPACITY BALANCE AND LIMITING FACTORS

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

Chart IV-2. Resort Balance – Existing Conditions



Source: SE Group

Chart IV-2 indicates that most of TSR’s capacities are fairly well balanced. The surplus of terrain network capacity is reflected in low skier densities at TSR and a high level of terrain variety, which is a very positive situation. The guest services capacity and food service seating capacity are low, since they do not account for the third-party guest service space and restaurant seats that are available in the towns. There is surplus access capacity, particularly when shuttle bus capacity is added to the parking capacity.

I. SUMMER OPERATIONS

1. Summary of the Existing Summer and Multi-Season Guest Experience

The existing summer guest experience at TSR is characterized by limited developed recreational opportunities. The Town of Mountain Village Owner’s Association and the Town of Mountain Village offers free public transportation via the Free Gondola which provides the public with access to TSR and the surrounding NFS lands for summer recreation such as hiking and mountain biking. While these activities provide exceptional educational and recreational exposure to NFS guests, the physical abilities and required skill-set necessary for these activities may be alienating to some populations.

In general, there is a lack of adventurous, exploratory activities on NFS lands that do not require a significant learning curve, or a high level of skill or fitness level, in order to participate. Developing these types of opportunities will encourage guests, and youth in particular, to learn about the natural world that exists around them within the National Forest.

Summer visitation at TSR is generated and sustained by the activities and events that exist within the Town of Telluride and the Town of Mountain Village. The recreational activities offered on NFS lands at TSR may attract locals and those already visiting the area, but generally do not generate visits in-and-of themselves. In other words, few visitors are coming to TSR solely for the recreational activities offered on NFS lands.

Existing summer trails and facilities are shown on Figure IV-4.

2. Existing Summer and Multi-Season Facilities

a. Town of Telluride and Town of Mountain Village (Private Lands)

The Towns of Telluride and Mountain Village business community offers a variety of recreational opportunities for guests, including mountain biking, hiking, camping, fly fishing, horseback riding, river sports, 4x4 off-roading, ATV motorcycling, golfing, rock climbing, disc golf, skate parks, running, picnicking, swimming pools, scenic vistas, hot air balloon rides, stand-up paddle boarding, Gravity Play, and court sports. There are also events scheduled throughout the summer, including the Sunset Concert Series, TSRC Town Talks, Youth Camps, Telluride Plein Air, Movies Under the Stars, Red White and Blue Concert, Rundola, and the Telluride Bluegrass Festival. The Telluride Tourism Board is responsible for marketing events within the town, but also markets events occurring on NFS lands and in surrounding areas.

b. Gorrono Restaurant and San Sophia Ceremony Site

TSR currently provides wedding venues located at the Gorrono Restaurant and San Sophia Ceremony site. Both of these locations are on private land. Weddings have been approved as a use at the Bon Vivant restaurant but currently the site has not been used as a summer venue. In the future, this site will include an indoor restaurant and a bigger kitchen facility, which will enable the opportunity to offer a summer wedding/event venue. Aside from these event venues, no facilities within TSR's SUP continuously operate during the summer season.

3. Mountain Biking

Mountain biking has become one of the most popular activities throughout the San Juan Mountains over the past two decades. There are numerous mountain biking trails spread across TSR's SUP area, including NFS trails. Cross-country mountain biking trails were built with federal funding and are currently being managed by the Forest Service with cooperation of TSG and Town of Mountain Village. Cross-country trails have been popular with local riders, and recently have become more popular with destination guests. In total, there are approximately 32 miles of trails open to mountain biking that are either wholly, or partially, on NFS lands within the TSR SUP area. Guests have free access to this trail network from the Free Gondola, where they can access mid- and upper-mountain trails from the adjacent trail network.

The Forest Service and TSG have agreed in a Memorandum of Understanding that it is in the best interest of both parties for TSG to resume responsibility of managing the cross-country mountain biking trails. TSG proposes to, in the future, manage those trails that are within the SUP boundary, along with other summer uses and activities considered in this MDP. If accepted by the Forest Service, TSG will include management responsibilities of the existing cross-country mountain biking trails in its annual summer operating plan.

Operated by the Town of Mountain Village, the existing downhill trails are located on TSG’s private land in the Town and are free to the public. The existing trails are too difficult for beginner and low intermediate riders. These difficult trails do not attract a large number of destination visitors due to the lack of variety for all ability levels. Visiting families prefer to participate in activities with lower risk, such as scenic chairlift rides and hiking, further restricting the volume of trail users.

TSR strives to provide four types of mountain biking experience—traditional cross-country, downhill, flow and all-mountain/enduro. Each of these types of biking has its own unique equipment and desired experience, and thus its own trail design needs.

Traditional cross-country riders generally utilize lighter equipment with smaller suspension systems, and typically climb uphill under their own power (i.e., they typically do not use lift service). The existing trail network at TSR does not serve this market as trail heads begin at the top terminal of the gondola. Furthermore, some cross-country trails also serve as mountain operations roads, which inherently does not provide the desired recreation experience, and poses potential conflicts between cross-country riders and mountain operations vehicles.

Downhill riding is categorized strictly as gravity riders, as this form of riding requires zero to minimal uphill travel. Bikes designed for downhill use typically include longer-travel suspension designed to descend steep, rough terrain without the need to ascend for long periods. Downhill riders often wear protective equipment, such as full-face helmets, long-sleeves, and body armor. Generally, downhill riders utilize lifts or shuttles to transport them uphill. They seek opportunities to test their abilities on terrain features such as jumps, drops, wall rides, and rock gardens.

Flow riders typically descend terrain and seek out terrain features similar to downhill riders; however, the relative intensity and “roughness” is subdued resulting in a smoother descent. Flow trails share many characteristics found in downhill trails and predominately attract families, beginners, intermediate and advanced intermediate riders.

Similar to downhill and flow riders, all-mountain/enduro riders fall into the category of gravity riders. A growing category of riders are considered all-mountain/enduro riders. This category blends cross-country and downhill, with a focus on more downhill riding. They utilize lifts, but are not averse to ascending trails.

As these categories continue to grow, additional trail development will be necessary to provide the level of variety sought by these riders. Feedback from mountain biking guests indicate the need for additional flow terrain that is suitable for all ability levels.

4. Hiking

Both guided and non-guided hiking opportunities are available in the greater Telluride region. These tours vary in length and difficulty, and feature interpretation by qualified naturalists. They provide opportunities for guests to experience the National Forest and learn about the plants and wildlife that inhabit it.

Approximately 37 miles of trails open to hiking exist across the Town’s and TSR’s SUP. Note that this does not include mountain service roads, which are also open to hiking. Several trails—including Ridge Trail, Telluride Trail, and Camel’s Garden—are hiking-only, with the remainder of trails on public and private land servicing multiple recreationalists, including mountain biking and equestrian use. There is a general

lack of locational diversity in TSR’s trails. Many miles of hiking trails also exist outside the TSR’s SUP area on NFS lands.

Table IV-19 details the existing hiking trails available at TSR.

**Table IV-19. Hiking & Biking Trails
Trail Distribution by Ability Level – Existing Conditions**

Trail Name	Ability Level	Length (miles)	Trail type	Ownership
Boulevard Trail	Beginner	2.38	Single track	MV
Basin Trail	Expert	4.5	Service road	NFS
Big Billies Trail	Intermediate	0.3	Single track	TSG
Boomerang to Alta Lakes	Intermediate	2.0	Service road	NFS
Boomerang to Valley Floor	Intermediate hiking/ Expert biking	0.75	Service road	NFS/MV
Camel’s Garden*	Intermediate	0.46	Single track	NFS/ TSG
Coonskin Loop	Intermediate	1.4	Service road	NFS/TSG
Jurassic Trail	Intermediate	0.75	Single track	TSG
Meadows Trail	Intermediate	1.0	Single track	TSG
Prospect Trail	Intermediate biking/ Expert hiking	7.9	Single track	NFS
Ridge Trail*	Intermediate	1.54	Single track	NFS
See Forever Trail	Expert	2.6	Service road	NFS/TSG
Sheridan Trail	Intermediate hiking/ Expert biking	4.6	Service road	NFS/TSG
Telluride Trail*	Intermediate	3.6	Service road	NFS/TSG
Village Trail	Intermediate	3.4	Single track	NFS
Total		37.18		

* indicates trails that are only open to hiking

Hiking trails within the SUP area supplement those that exist on NFS lands, within the Towns, and other lands in the surrounding area. Connections, such as Telluride trail, Boomerang trails, and Boulevard trail are essential to the overall trails system in the greater Telluride region.

Table IV-20 shows the distribution of hiking trails by ability level.

**Table IV-20. Hiking & Biking Trails
Ability Level Distribution – Existing Conditions**

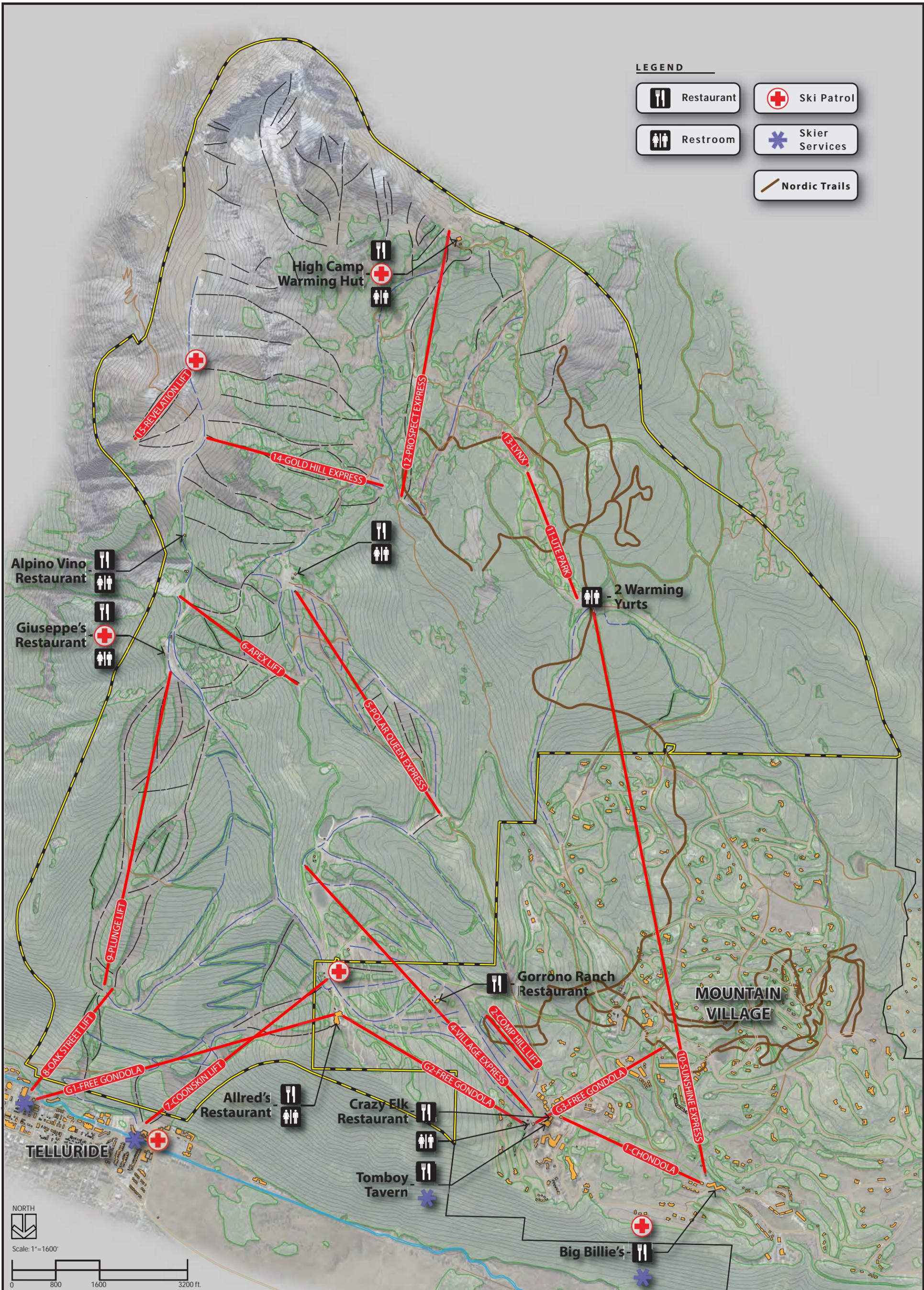
Ability Level	Total Mileage		Percent of Total	
	Hiking	Biking	Hiking	Biking
Beginner	2.38	2.38	7%	8%
Intermediate	19.27	21.35	52%	67%
Advanced	15	7.95	41%	25%
Total	36.65.	31.68	100%	100%

5. Summer and Multi-Season Guest Service Facilities Use

The Town of Telluride and the Town of Mountain Village are the centers of summer activities and guest services within the Telluride region. Equipment rental, retail sales, food and beverage services, restrooms, and various other guest service facilities are available in each Town. The Free Gondola provides primary access to the National Forest, as well as to the trail network along the southern border of the Mountain Village.

6. Existing Resort Summer Operations and Roads

In addition to operations in the Mountain Village base area, various other resort operations take place throughout the summer. Maintenance crews work on the mountain daily, implementing summer construction plans, lift and trail maintenance, facility and infrastructure maintenance, and other tasks related to offering a quality summer experience and preparing the mountain for the winter season. This road network serves a variety of purposes in the summer month; mountain operations/maintenance, access to private lands, and for recreation purposes. On-mountain maintenance efforts are invested throughout the summer to maintain and manage service roads for summer recreation for public use. Gates are located at key locations at the service roads to keep unauthorized motor vehicles from traveling on the service roads.

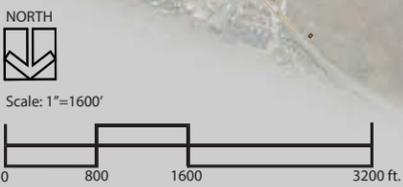
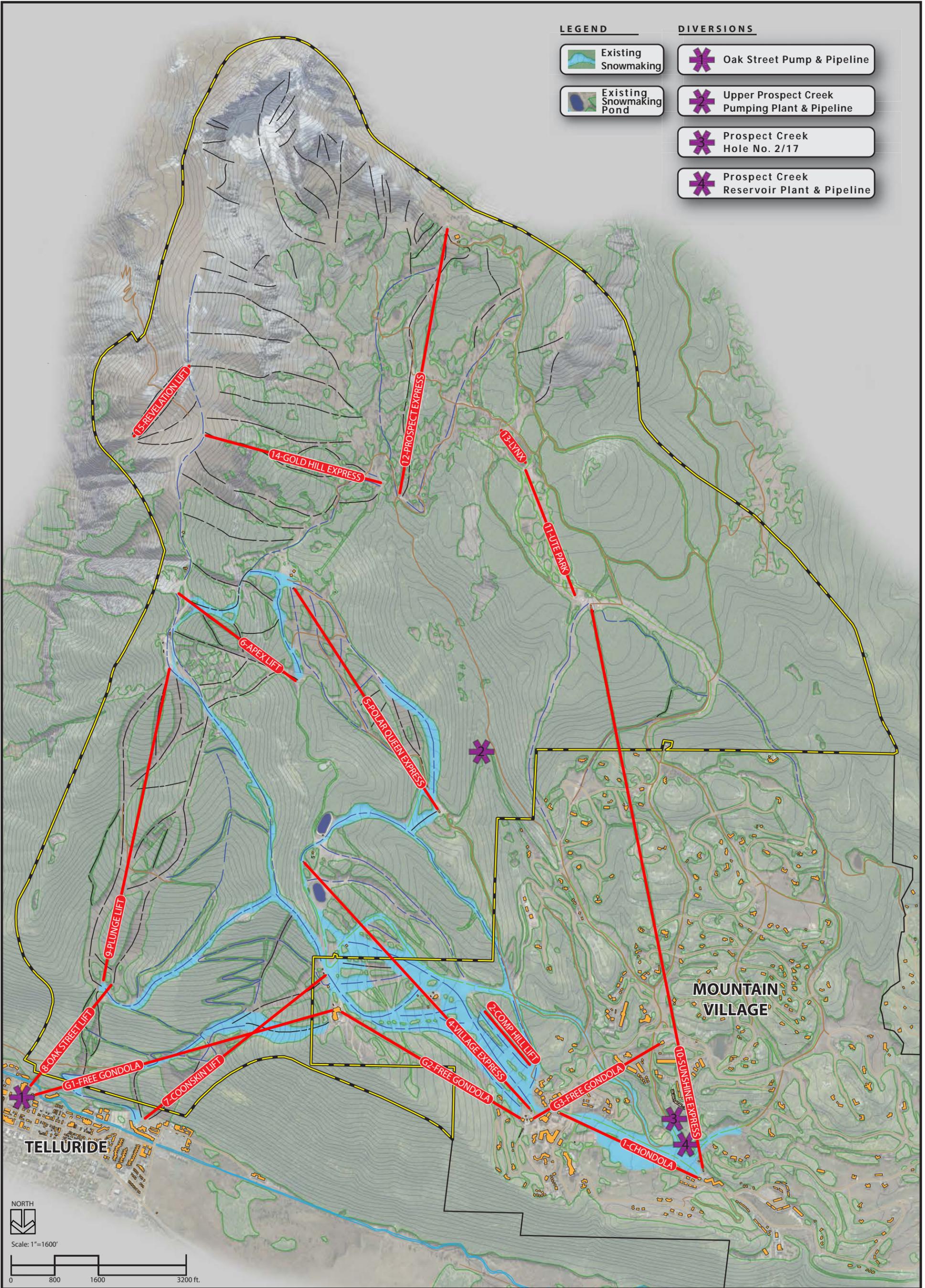


LEGEND

- Existing Snowmaking
- Existing Snowmaking Pond

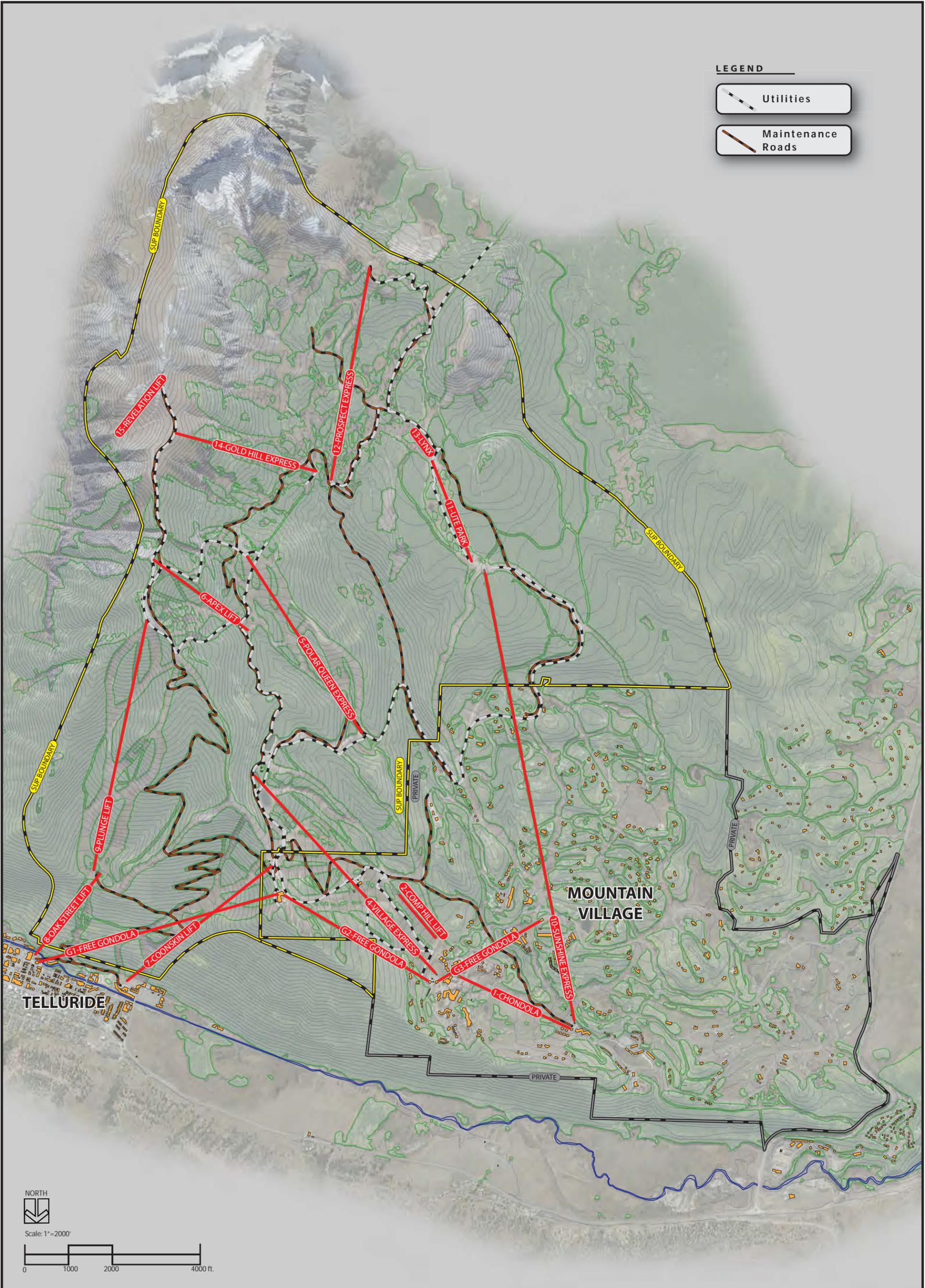
DIVERSIONS

- Oak Street Pump & Pipeline
- Upper Prospect Creek Pumping Plant & Pipeline
- Prospect Creek Hole No. 2/17
- Prospect Creek Reservoir Plant & Pipeline



LEGEND

- Utilities
- Maintenance Roads



Scale: 1"=2000'

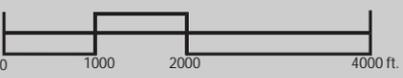


FIGURE IV-3
EXISTING UTILITIES AND SUMMER SERVICE ROADS

LEGEND



**Beginner
Bike Trails**



**Intermediate
Hiking Trail**



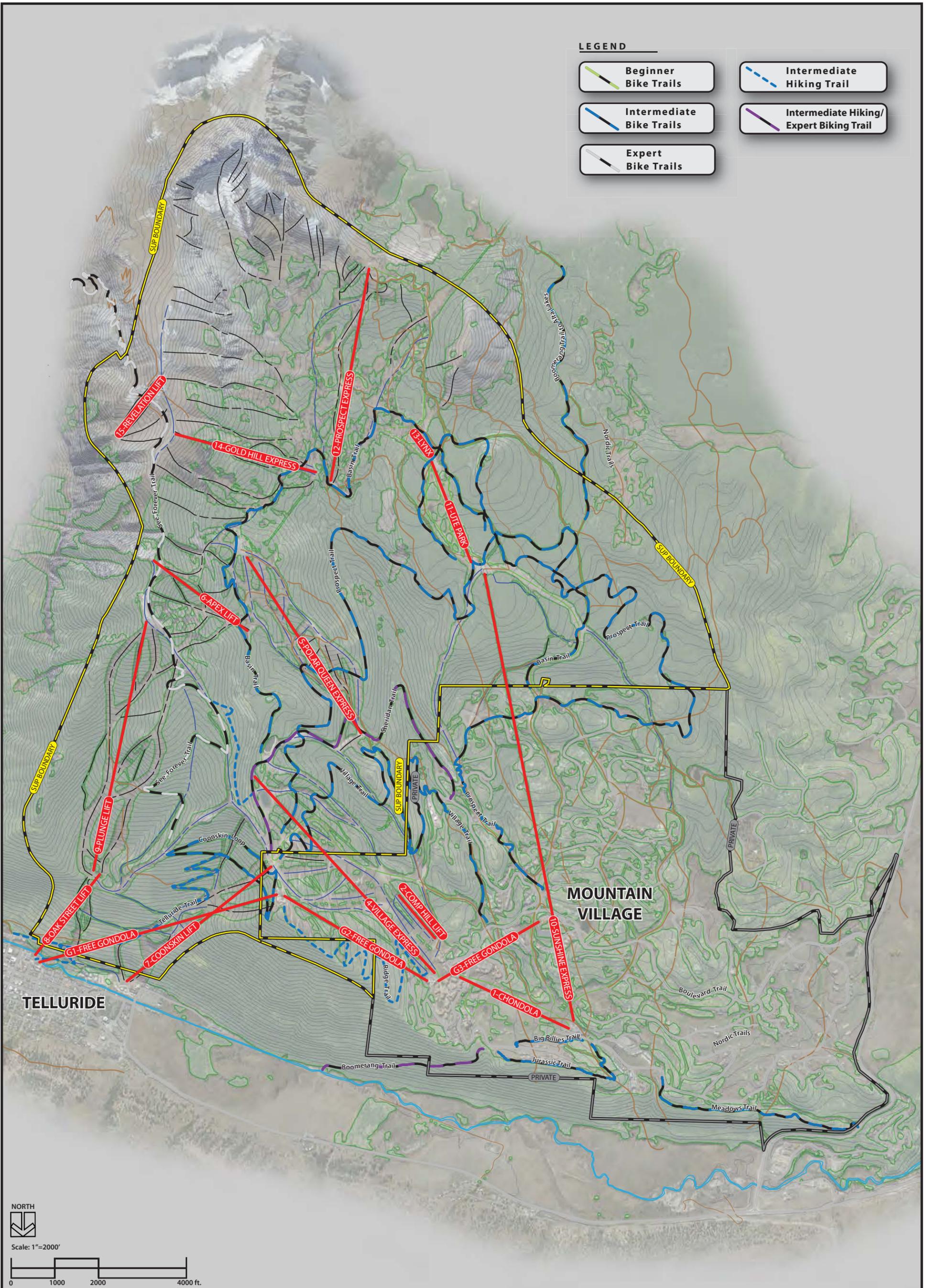
**Intermediate
Bike Trails**



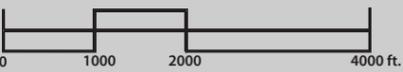
**Intermediate Hiking/
Expert Biking Trail**



**Expert
Bike Trails**



Scale: 1"=2000'



**FIGURE IV-4
EXISTING SUMMER TRAILS
AND MULTI-SEASON FACILITIES**

December 2016
Contour Interval: 50 ft.

Prepared By:
SE GROUP



CHAPTER V.
PREVIOUSLY APPROVED PROJECTS,
NOT YET IMPLEMENTED

V. PREVIOUSLY-APPROVED PROJECTS, NOT YET IMPLEMENTED

The projects detailed in this section have been previously approved, but have not yet been implemented. It is anticipated that the majority of these projects will ultimately be implemented as capital for on-mountain improvements becomes available. 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 changed environmental and social conditions, and/or new planning and regulatory guidance. Applicable approvals are contained in the 1998 Telluride Ski Area Improvements EA and the subsequent Decision Notice, along with the 1999 ROD (refer to Chapter I).

The 1999 ROD approved a variety of projects, including lifts, snowmaking, trails/glades and facilities. While resource analysis was completed and these projects are considered previously approved, it is understood that certain resource conditions (e.g., watershed and wildlife) may have changed since the 1999 ROD was published. Therefore, additional site-specific analysis will likely be required prior to implementation of certain projects. To date, all projects approved in the 1999 ROD have been implemented except:

- Palmyra Basin Lift and ski patrol facility
- Gold Hill Summit surface lift
- Restaurant at the top of Polar Queen Express (Lift 5)
- Restaurant and Nordic center at the top of Sunshine Express (Lift 10)
- Expansion of the Plunge restaurant (aka Giuseppe's)
- Increase in snowmaking capabilities
- Trails/glades

A. LIFTS

1. Palmyra Basin Lift (Lift 16)

The Palmyra Basin Lift was approved in the 1999 ROD. The lift will have a capacity of 1,200 pph. The top terminal will be built on a moraine in Palmyra Basin. The lift will serve intermediate skiing with the expert skiing via the hike to Palmyra Peak from the top of the Prospect Basin Lift.

Over the past several years ski patrol has increased avalanche mitigation in this area with the addition of a variety of avalanche mitigation tools which minimize avalanche hazards. Ski patrol has established routes for avalanche control at Palmyra Ridge and Peak, assuring that the terrain can be managed and opened for the skiing public.

A patrol facility was also approved in the 1999 ROD, which would be attached to the upper lift operations building.

2. Gold Hill Summit Surface Lift (Lift 17)

The Gold Hill Summit surface lift was approved in the 1999 ROD as the Upper San Joaquin surface lift. It was approved as a surface lift with an uphill capacity of 600 pph. TSR has built the Revelation Lift and a short snow cat road that provides hike to access to the Gold Hill Summit surface lift. This lift will provide access to the summit of Gold Hill that serves the Upper Gold Hill chutes and the Gold Hill backcountry access gates.

B. TERRAIN

1. Clearing and Glading of Forest Vegetation

The 1999 ROD approved clearing, grading, earthwork, and glading in the Prospect Basin expansion area (including lifts and trails), totaling 435 acres. Exact locations were not specified; however, the intent was to implement clearing and glading as it is detailed in summer construction plans on an annual basis, as appropriate.

C. SNOWMAKING

1. Snowmaking Pond

The 1998 Decision Notice and Finding of No Significant Impact for proposed improvements to the existing ski area approved an additional pond that will be constructed as previously approved by the Forest Service. The pond is located between the two existing ponds and will add approximately 10 acre-feet of water storage. This water storage has an existing court decreed water right.

D. GUEST SERVICES FACILITIES

1. Bon Vivant at Top of Polar Queen Express (Lift 5)

The 1999 ROD authorized a guest services facility and a seating capacity for this location of 700 (total daily capacity of 2,800 persons). TSR is currently operating a small scale restaurant with outdoor seating for 60 people. There are also public restrooms included at the restaurant. Both the restaurant and the bathrooms operate on a septic system that was designed and built for expansion of the restaurant facility.

The next phase of the previously-approved expansion is to include a restaurant facility that has a full kitchen and bar with seating capacity for up to 100 people. This restaurant will also service the existing deck and additional outdoor/tent seating of up to 100 people provided for summer events.

The new facility will capture views of Palmyra Peak and Gold Hill and will continue to offer French country cuisine within an authentic setting. Building architecture and materials will be consistent with Forest Service guidelines utilizing timbers and rustic wood highlights to be consistent with the existing deck.

2. Restaurant and Nordic Center at Top of Sunshine Express (Lift 10)

The 1999 ROD authorized a seating capacity of 100 persons (four seatings per day for a total of 400 persons per day). The building architecture will be simple and siting will take advantage of views and solar orientation.

After further consideration of having a Nordic center in this location, it has been determined to not be the best use of the area; therefore, TSR will not pursue inclusion of a Nordic center in the building.

3. Expansion of Plunge Restaurant (aka Giuseppe's)

The 1999 ROD authorized a seating capacity of 200 persons (four seatings per day for a total of 800 persons per day). The current seating is inadequate, especially for indoor seating needed on cold windy days.

The future restaurant will include expanded indoor and outdoor seating, as well as improved kitchen and restroom facilities. The views of all the surrounding mountain ranges at this restaurant location are spectacular, and the expanded seating will provide opportunity for more guests to enjoy the natural surroundings at TSR.

This page intentionally left blank.



CHAPTER VI. UPGRADE PLAN

VI. UPGRADE PLAN

This MDP has been prepared in compliance with the terms and conditions of the Forest Service-issued 40-year Term SUP for TSR. As stated previously, Forest Service *acceptance* of this MDP does not convey *approval* of any projects contained herein. Implementation of any projects on NFS lands within the TSR SUP area is contingent upon site-specific environmental review and approval via NEPA. Planned projects contained in this Master Plan are conceptual in nature and may be refined in the future, as long as the original intent of a planned project is maintained.

The Upgrade Plan is depicted on Figures VI-1 through VI-5.

A. SUMMARY OF THE UPGRADE PLAN

The purpose of this Upgrade Plan is to provide direction for the future development of the TSR, which ensures a balance of facilities and a variety of amenities and opportunities—all leading to high quality guest experience. It is designed to improve the recreational experience, circulation on the ski area, as well as operational efficiencies.

This plan will allow TSR to continue to be efficient in its operations, remain competitive in the national and international destination skier market, help retain existing guests, and attract new visitors.

This Upgrade Plan focuses on the intentions of TSR to enhance the total guest experience through a series of improvements. This would be achieved by implementation of strategic enhancements across the existing SUP area. The initial phase of projects is scheduled to occur within five years after acceptance of this MDP. The second phase of projects would occur in five to fifteen years after acceptance of this MDP.

B. UPGRADED LIFT NETWORK

As described in Chapter V, there are two previously approved lift installations and lift upgrades that have not yet been implemented, in addition to other proposed upgrades:

1. Palmyra Basin Lift (Lift 16)

The Palmyra Basin Lift was approved in the 1999 ROD. This lift will have a capacity of 1,200 pph and will serve intermediate skiing terrain. The top terminal will be built on a moraine in Palmyra Basin. Expert skiing from Palmyra Peak will not be accessed by the Palmyra Basin Lift, but rather via a hike from the top of the Prospect Express Lift.

Over the past several years avalanche mitigation in this area has been improved by ski patrol with the addition of a variety of avalanche mitigation tools that can be utilized in mitigating avalanche hazards within Palmyra Basin. Ski patrol has established routes for avalanche control at Palmyra Ridge and Peak, which has given assurance that the terrain can be managed and opened for the skiing public. TSR continues to evaluate a variety of alternative methods for avalanche mitigation within the area. One promising method that TSR is investigating is the use of gas exploders, commonly referred to by the brand name Gazex, as part of their avalanche mitigation efforts.

2. Gold Hill Summit Surface Lift (Lift 17)

The Gold Hill Summit surface lift was approved in the 1999 ROD as the Upper San Joaquin surface lift. The lift was approved as a surface lift with an uphill capacity of 600 pph. A short snow cat road from the top of the Revelation Lift provides hike-to access to the proposed Gold Hill Summit surface lift. This lift would provide access to the summit of Gold Hill to serve the Upper Gold Hill chutes.

3. Gold Hill Lift Capacity Upgrade (Lift 14)

The capacity of the existing Gold Hill Lift would be increased to its previously approved capacity by simply adding chairs to the existing lift.

The Gold Hill Lift was originally approved as two lifts: the Gold Hill Lift and Upper Gold Hill Lift. The uphill capacity for the former was 1,500 pph and the latter was 1,200 pph. After further analysis and review it was determined that one chairlift could be built to serve the terrain, and the current Gold Hill Lift was approved with a design capacity of 2,200 pph. The existing Gold Hill Lift was built with an initial capacity of 1,500 pph, but was designed for an ultimate capacity of 2,200 pph. The Gold Hill Lift has proven to be very popular, especially when opening after a snowstorm, and TSR is now ready to upgrade the lift with additional carriers to its full design capacity of 2,200 pph.

4. Plunge Lift Replacement (Lift 9)

The existing Plunge Lift was built in 1985. It is a fixed-grip triple chair that operates at 500 fpm and has a capacity of 1,042 pph. This lift is approaching the end of its useful lifespan. Additionally, the chair length is over 6,000 feet, resulting in a ride time of 12 minutes. Intermittent downtime due to lift maintenance issues causes the ride time to be extended at times. Although the chair provides reasonable access for the terrain and skier ability, the ride time and reliability is not consistent with the expectations of TSR guests. As a detachable lift, the chair would operate at 1,000 fpm, cutting the ride time in half. The proposed replacement lift would be installed with an initial capacity of 1,800 pph and design capacity of 2,400 pph. In the future, more carriers could be added to reach the design capacity. The terrain within this lift pod is mostly expert and the existing trail acreage can comfortably handle the additional uphill capacity. There is opportunity to expand terrain within the pod with glading, which will be discussed in the terrain upgrade section.

5. Sunshine Express Replacement (including Gondola Option) (Lift 10)

A new detachable quad chairlift with a capacity of 2,400 pph is proposed to replace the existing Sunshine Express Lift, which has an uphill capacity of 1,200 pph. The proposed lift would utilize the same alignment as the existing lift. The existing lift was built in 1986 and is approaching the end of its useful life span. Although long lift lines are generally not an issue, during busy periods the lift lines can grow to an unacceptable 20 minutes. One of the causes for increased wait times is a large number of skiers and riders in the area downloading the lift. Also, intermittent downtime due to lift maintenance issues related to the age of the lift also causes the lift lines to grow to an unacceptable length.

An alternate to a detachable chairlift that TSR is also considering is a detachable 8-person gondola with a mid-way station in the vicinity of the Town Hall/Village Market and Double Cabins ski run (on private lands). This would allow the first leg of the gondola to double as a transportation leg to move people from

the Meadows area to the Town Hall area and leg three of the town transportation gondola. If this alternate is ultimately pursued, cabins from the “Chondola” (Lift 1) may be removed and replaced with chairs, which would increase the uphill capacity for that chairlift. The bottom and middle terminal of the proposed Sunshine Express would be on private land with the top terminal on NFS land.

6. Coonskin Lift Replacement (Lift 7)

The existing Coonskin Lift would be replaced with a newer lift with capacity to be determined based on future planned development/density at the base area. For the vast majority of the season the uphill capacity of the existing lift is adequate; during “powder days” long lift lines do form.

Primarily, because of the age of the lift, it is being considered for replacement. Under the current demand at this lift, a fixed grip triple chair with a capacity up to 1,200 pph would be the likely maximum to be proposed.

If the Town of Telluride plans for growth of short-term accommodations in the base area, a detachable quad could be considered along with potential re-alignment to a top terminal location at Lookout ski trail and See Forever trail. This top terminal location would help circulation by providing access to the Polar Queen Express (Lift 5) base terminal. TSG will work with Town of Telluride to fully understand the future of the Coonskin base area prior to determining lift capacity.

7. North Meadows Area Conveyor Lift

In order to improve the beginner experience, an additional conveyor lift is proposed in the North Meadows Area. This lift and the associated terrain provide an appropriate low gradient area of about 2 acres that will benefit the “never ever” skier. The uphill capacity of the lift would be 600 pph. This lift is located on private land.

8. Free Gondola Capacity Upgrades

The three free gondolas that provide transportation between and within the Towns of Telluride and Mountain Village would have additional carriers added to take the lifts closer to their design capacity.

Table VI-1. Lift Specifications – Upgrade Plan

Lift Number	Lift Name, Lift Type	Top Elevation (ft)	Bottom Elevation (ft)	Vertical Rise (ft)	Slope Length (ft)	Average Grade (%)	Actual Design Capacity (pers/hr)	Rope Speed (fpm)	Carrier Spacing (ft)	Year Installed
1	Chondola/4DG	9,555	9,170	385	2,916	13	2,000	800	96	CTEC 1996
2	Terrain Park Poma	9,950	9,595	355	1,425	26	195	350	108	POMA 1985
4	Village Express/4D	10,770	9,526	1,244	6,227	20	2,800	1,000	86	DOPP 1999
5	Polar Queen Express/4D	11,195	10,259	936	4,899	20	2,400	1,000	100	DOPP 1999
6	Apex Lift/3C	11,969	10,825	1,144	2,957	42	1,500	500	60	CTEC 85/99
7	Coonskin Lift/3C	10,570	8,725	1,845	4,725	42	1,200	500	50	TBD
8	Oak Street Lift/2C	9,805	8,750	1,055	2,686	43	900	450	60	SLI 72/85
9	Plunge Lift/4DG	11,910	9,785	2,125	6,233	36	2,400	1,000	100	TBD
10	Sunshine Express/8G	10,905	9,170	1,735	10,544	17	2,400	1,000	200	TBD
11	Ute Park/4D	11,152	10,878	274	2,493	11	1,500	1,000	160	DOPP 2001
12	Prospect Bowl Express/4D	11,810	10,768	1,042	5,097	21	2,400	1,000	100	DOPP 2001
13	Lynx/P	11,157	11,123	32	701	5	585	472	48	DOPP 75/01
14	Gold Hill Express/4D	12,255	10,780	1,475	3,645	44	2,200	1,000	109	DOPP 2001
15	Revelation Lift/4C	12,515	11,730	785	1,841	47	1,240	450	87	POMA 2008
G1	Gondola/8G	10,540	8,760	1,780	6,019	31	1,070	1,000	449	CTEC 1996
G2	Gondola/8G	10,540	9,545	995	4,044	25	1,070	1,000	449	CTEC 1996
G3	Gondola/8G	9,545	9,540	5	2,770	0	1,200	1,000	400	CTEC 1996
	Palmyra Basin	12,315	11,150	1,165	3,594	0	1,200	450	68	TBD
	Gold Hill Summit	12,740	12,575	165	1,509	0	600	450	45	TBD
	North Meadow Conveyor	9,390	9,360	30	461	0	600	120	12	TBD

Source: SE Group

c = carpet conveyor / p = platter lift / C2 = fixed-grip double chairlift / C3 = fixed-grip triple / C4 = fixed-grip quad chairlift / DC4 = detachable quad chairlift / 4DG = detachable chondola
G8 = eight passenger gondola

C. UPGRADED TERRAIN NETWORK

1. Terrain Variety

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

2. Developed Alpine Trails

As discussed in Chapter IV, TSR has excellent terrain variety for all ability levels. As a result, there are no significant expansions to the developed terrain network proposed. Rather, improvements are focused on enhancing the guest experience through improved circulation routes, glading and additional beginner terrain.

TSR has learned over the years of challenges on some egress trails that are not available for skier circulation from lift pod to lift pod, as well as lift pod to base areas, due to low snow, particularly in early season. These areas cause frustration with skiers and riders who often have to take an additional lift ride to get on a maintained circulation route. There are other circulation routes that could be enhanced to improve the skier and rider access through grading the trail to take out abrupt changes in grade, or eliminating dips in the terrain that interrupt the flow of the trail. Certain areas of the resort would benefit from the creation of new circulation routes.

a. Widen Cake Walk

Cake Walk is a narrow circulation route to and from the bottom of the Polar Queen Express. With several uphill trails merging into Cake Walk, widening the trail and improving the grade would cause skier traffic to flow more freely. Additionally, the wider trail platform would facilitate more efficient snowmaking, which is also proposed, and grooming operations. An area of approximately 3 acres would be graded.

b. Jaws Access and Skiway

The current access into the Jaws ski trail is narrow and does not typically have a quality snow surface because it is steep and rocky. To improve the access, a skiway would be graded into Jaws, and then continue as a skiway to the intermediate Telluride Trail to provide an intermediate egress out of the bottom of the Plunge Lift pod. Snowmaking would be added to the skiway to aid in providing early season egress. This egress is desired because in the early season this pod skies well on natural snow but egress is problematic, as the guest is forced to ride the lift out and ski down See Forever to Lookout then down Easy Out. If the lift were to go down, guests must walk up to Easy Out to get to other areas of the resort. The current egress from the Plunge Lift, via Bail Out, is steep and difficult for intermediate skiers, and may not have adequate snow in the early season.

c. North Meadows

This area will be more fully utilized with the addition of a conveyor lift and snowmaking. Grading will be done in the area to improve the terrain for beginner skier/riders, and improve the golf course driving range (summer use) as well. This area is on private land.

d. Widen the Galloping Goose Trail

It is proposed to widen the Galloping Goose Trail where it narrows just pass the saddle before Bald Mountain. This is the easiest way down and at the end of the day and on busy holidays the narrow width of the trail creates congestion for skiers and riders. The proposed grading would cover an area of approximately 2 acres.

e. Culvert the Drainage in Lower Dynamo

An arch culvert is proposed for installation in the drainage in Lower Dynamo near the bottom of the Gold Hill Lift. This ski trail was not graded when the Gold Hill Lift was constructed in order to avoid disturbing the area around the drainage. The abrupt terrain change associated with the drainage causes skiers/riders to slow down before crossing the drainage, forcing them to go uphill with a loss of momentum, which makes it difficult to get to the lift. The abrupt terrain change is also problematic for skiers when visibility is marginal. By installing an arch culvert and filling in the depression at the drainage the circulation to the north side of the lift will be greatly improved. After several years of skiing and riding in this area, the proposed improvements have proven to be necessary to create an acceptable skier/rider experience, especially during low snowpack years. The proposed area of disturbance is approximately 0.3 acre.

f. Prospect Bowl Express to Gold Hill Express Bridge

A bridge is proposed from the base of Prospect Bowl Express to the base of Gold Hill Express. This bridge would greatly improve skier circulation and the existing condition where skiers are skiing toward each other as they share a skiway to the two lifts on opposite sides of the drainage.

g. Meadows Grading

The abrupt terrain changes at the bottom of the Meadows ski trail (private land) would be graded to be more appropriate for the beginner skiers utilizing this area. This area is on private land and would cover approximately 1.5 acres.

h. Developed High Traverses

The terrain on Gold Hill has areas of great advanced and expert skiing and riding, but these areas often choke into narrow chutes or cliffs that at times make accessing the terrain very difficult. Developed traverses will include benched trails, built elevated traverses, and/or synthetic skiing surfaces in areas that are rocky and don't hold snow.

A description of each follows:

- Gold Hill 1 Entryway: Establish an ingress to Gold Hill Chute from the top of Revelation Bowl crossing in front of the patrol shack. The path would be created using cut and fill techniques to create a flat traverse approximately 10 feet wide and 100 feet long, and potentially utilizing a

synthetic surface for skier traffic. The current entry is narrow and rocky, allowing limited entry points into the Gold Hill 1 bowl.

- Gold Hill 1 to Andy's Gold/Little Rose Traverse: Create a skier path accessing Andy's Gold and Little Rose from the skier's right of Gold Hill 1. The path would require removal of some vegetation and cut and fill to establish a flat path traversing out of Gold Hill 1. Path would be approximately ten feet wide and 150 feet long, and may have sections synthetic material. There is currently no established path exiting Gold Hill 1 to the skier's right into Andy's Gold or further into Little Rose. This path would provide skiers with an exit if they do not wish to continue through the Gold Hill 1 to Gold Hill 1 1/2 Goat Path.
- Gold Hill 1 to Gold Hill 1 1/2 Goat Path: The proposed path would link the bottom of Gold Hill 1 to Gold Hill 1 1/2 to avoid some rocky cliffs. The path would utilize cut and fill techniques to establish a path and possibly an elevated skier bridge allowing skiers to access Gold Hill 1 1/2. The path would be approximately 75 feet long and 10 feet wide. Synthetic surfaces may be utilized. This would improve upon the current narrow and rocky path, which utilizes a section of rope to help skiers down climb into Gold Hill 1 1/2. The goal is to provide a pathway where a skier can continue to ski from top to bottom from Gold Hill 1 to Gold Hill 1 1/2 without any climbing and avoiding damaging rocks.
- Gold Hill 2 to Gold Hill 3 Traverse: Create a user-friendly traverse exiting Gold Hill 2 toward lower Gold Hill 3 using cut and fill techniques. The path would be approximately 10 feet wide and about 75 feet in length. The path would establish a route that would hold snow and allow skiers to access the large bowl at the bottom of Gold Hill 3.
- Gold Hill 9 Entry: Establish a wider path from the end of the existing staircase into a skiable section of Gold Hill 9 Chute. The path would be approximately 10 feet wide and 75 feet in length connecting to a wider section of the chute allowing skiers easier entry into the chute in a section that holds better snow and avoid large rockier sections above. The path would be built using primarily cut and fill techniques with the possibility of some synthetic surfaces for rockier sections of high traffic flow.
- Mineshaft Egress: Establish a new egress from the bottom of the Mineshaft ski run, which coincides with the Oak Street Lift lift line. The new egress would be higher in elevation than the existing egress shedding skiers to the skier's left and above the new pump station near the base of Oak Street Lift. The new egress would be built by removing vegetation and a cut and fill technique to create a path approximately 10 feet wide and 200 feet long.

These areas are identified on Figure VI-1.

Table VI-2. Terrain Specifications – Upgrade Plan

Trail Area/Name	Top Elevation (ft)	Bottom Elevation (ft)	Vertical Rise (ft)	Slope Length (ft)	Average Width (ft)	Slope Area (acres)	Average Grade (%)	Max Grade (%)	Ability Level
Adverse Traverse	10,441	10,326	116	784	147	3	15	24	Novice
Allais Alley	11,834	10,929	905	2,235	85	4	45	67	Expert
Alliekit	12,435	12,074	361	543	80	1	91	107	Hike to
Alta	10,953	10,773	180	551	301	4	35	44	Intermediate
Andy's Gold	12,193	10,930	1,262	2,983	633	43	48	78	Expert
Apex	11,736	11,143	593	1,177	1,039	28	58	67	Expert
Bail Out	9,763	9,464	299	884	54	1	36	55	Expert
Bail Out 2	9,456	9,320	136	1,217	28	1	11	20	Novice
Bees Run	12,475	11,726	749	1,742	362	14	48	71	Expert
Beginner Park	11,137	10,900	237	2,264	132	7	11	17	Novice
Boomerang Lower	9,828	9,566	262	1,718	111	4	15	26	Low Intermediate
Boomerang Upper	10,758	9,854	904	6,033	108	15	15	35	Intermediate
Bottom 4 Detail	9,530	9,528	1	168	362	1	1	1	Beginner
Bridges	9,901	9,479	421	3,495	79	6	12	27	Low Intermediate
Bushwacker	11,799	9,778	2,021	6,376	210	31	34	60	Expert
Butterfly	10,571	10,099	473	2,285	246	13	21	34	Low Intermediate
Buzz's Glade	12,019	11,034	985	2,350	837	45	47	91	Glade
Cakewalk	10,252	10,078	174	2,716	71	4	6	12	Beginner
Camels Garden	9,854	9,812	42	426	130	1	10	13	Novice
Capitol	12,459	12,142	317	487	72	1	88	104	Hike to
Captain Jack	11,013	10,503	511	1,527	1,122	39	36	51	Advanced
Cats Paw	9,454	9,013	441	992	153	3	50	61	Expert

Table VI-2. Terrain Specifications – Upgrade Plan

Trail Area/Name	Top Elevation (ft)	Bottom Elevation (ft)	Vertical Rise (ft)	Slope Length (ft)	Average Width (ft)	Slope Area (acres)	Average Grade (%)	Max Grade (%)	Ability Level
Chongos	11,401	11,024	376	879	185	4	48	83	Glade
Confidence	11,811	11,418	394	925	107	2	48	64	Expert
Coonskin Lower	9,221	8,740	481	1,087	155	4	50	69	Expert
Coonskin Middle	9,575	9,407	168	562	120	2	32	44	Intermediate
Coonskin Upper	10,527	9,740	786	1,961	236	11	44	65	Expert
Couloir Bouvier	12,461	11,984	477	699	52	1	95	108	Hike to
Craig's Couloir	12,416	12,194	222	327	44	0	94	99	Hike to
Crystal	11,780	11,506	274	536	53	1	60	73	Hike to
Dew Drop	11,128	10,511	617	2,762	230	15	23	40	Intermediate
Dihedral Chute	12,192	11,773	419	719	66	1	72	76	Hike to
Dihedral Face	12,207	11,542	665	1,202	424	12	67	77	Hike to
Double Cabin	11,100	9,245	1,855	15,071	145	50	12	30	Low Intermediate
Dynamo Upper	12,228	11,720	508	980	555	12	61	79	Expert
Dynamo Middle	11,581	10,924	657	2,291	200	11	31	76	Expert
Dynamo Lower	10,904	10,769	135	773	121	2	18	52	Advanced
Dynamo 2 Upper	11,328	10,872	457	1,493	133	5	32	59	Expert
Dynamo 2 Lower	10,851	10,803	47	165	138	1	30	30	Low Intermediate
East Drain	10,687	10,064	623	2,021	41	2	32	47	Glade
Easy Out	9,848	9,582	266	1,357	29	1	20	33	Low Intermediate
Electra	12,193	10,986	1,207	2,800	118	8	49	92	Expert
Electric Shock	12,622	12,293	329	564	205	3	73	85	Hike to
Enchanted Forest	10,637	10,387	250	647	38	1	42	58	Glade

Table VI-2. Terrain Specifications – Upgrade Plan

Trail Area/Name	Top Elevation (ft)	Bottom Elevation (ft)	Vertical Rise (ft)	Slope Length (ft)	Average Width (ft)	Slope Area (acres)	Average Grade (%)	Max Grade (%)	Ability Level
Enchanted Forest 1	10,885	10,501	384	2,785	78	5	14	26	Low Intermediate
Galloping Goose Upper	11,808	10,533	1,275	11,463	67	18	11	26	Low Intermediate
Galloping Goose Lower	10,233	9,209	1,024	10,458	90	21	10	26	Low Intermediate
Genevieve	11,808	11,398	410	1,474	198	7	30	86	Hike to
Giant Steps	11,728	11,364	364	862	167	3	47	57	Expert
Goat Path	12,538	12,374	163	572	2,432	32	30	44	Intermediate
Gold Hill 1	12,501	10,985	1,516	3,614	6	1	47	77	Hike to
Gold Hill 10	12,873	12,510	363	507	1,510	18	111	157	Hike to
Gold Hill 2	12,665	11,406	1,259	2,229	166	9	69	95	Hike to
Gold Hill 3	12,727	11,729	997	1,784	170	7	68	91	Hike to
Gold Hill 4	12,740	11,760	980	1,752	136	5	69	85	Hike to
Gold Hill 5	12,708	11,839	869	1,721	44	2	61	84	Hike to
Gold Hill 6	12,616	12,146	470	827	75	1	70	82	Hike to
Gold Hill 7	12,722	12,291	431	756	35	1	70	81	Hike to
Gold Hill 8	12,755	12,438	317	534	51	1	78	100	Hike to
Gold Hill 9	12,870	12,509	361	545	55	1	91	113	Hike to
Gold Hill Stairs	12,734	12,543	190	1,643	73	3	12	27	Low Intermediate
Gold Rush	10,751	10,513	238	568	110	1	46	54	Advanced
Happy Thought Lower	11,304	10,849	455	2,401	146	8	19	34	Low Intermediate
Happy Thought Upper	11,929	11,386	544	1,092	181	5	58	79	Expert
Happy Thought Middle	11,349	11,088	261	726	144	2	39	67	Expert
Hermit	10,536	10,224	311	932	134	3	36	47	Advanced

Table VI-2. Terrain Specifications – Upgrade Plan

Trail Area/Name	Top Elevation (ft)	Bottom Elevation (ft)	Vertical Rise (ft)	Slope Length (ft)	Average Width (ft)	Slope Area (acres)	Average Grade (%)	Max Grade (%)	Ability Level
Holy Cow!	10,900	10,329	571	2,322	40	2	26	63	Expert
Hoot Brown Expert Terrain Park	10,394	9,559	835	3,452	163	13	25	38	Intermediate
Humbolt Draw	10,714	10,087	627	2,570	157	9	25	42	Intermediate
Jackpot	11,840	11,340	500	1,008	271	6	58	73	Hike to
Jaws Lower	9,419	9,196	223	427	60	1	61	67	Expert
Jaws Upper	9,774	9,451	323	910	63	1	39	64	Expert
Jello's Bowl	12,130	11,700	431	957	351	8	51	72	Hike to
Joint Point	11,614	11,362	252	509	141	2	57	62	Expert
Kant-Mak-M Lower	10,294	9,824	469	1,318	63	2	39	87	Expert
Kant-Mak-M Middle	10,931	10,612	319	1,361	47	1	25	85	Expert
Kant-Mak-M Upper	11,891	11,073	818	1,733	117	5	54	70	Expert
La Rosa	11,790	11,491	299	695	183	3	49	86	Hike to
Lakeview	12,084	11,403	681	1,355	123	4	59	80	Hike to
Last Chance	11,444	11,368	76	618	36	1	12	17	Novice
Liberty Bell	12,190	11,742	448	1,097	560	14	45	53	Advanced
Little Maude	11,145	11,012	132	1,402	122	4	9	25	Low Intermediate
Little Rose	12,188	11,011	1,177	2,982	273	19	43	75	Expert
Log Pile	11,375	11,041	333	1,094	963	24	32	44	Intermediate
Log Pile Trees	11,310	10,845	465	1,027	296	7	51	66	Glade
Lookout Lower	10,366	9,783	583	2,147	147	7	28	43	Intermediate
Lookout Upper	10,985	10,380	605	1,930	129	6	33	49	Advanced
Madison	11,400	10,776	624	4,692	279	30	13	36	Intermediate

Table VI-2. Terrain Specifications – Upgrade Plan

Trail Area/Name	Top Elevation (ft)	Bottom Elevation (ft)	Vertical Rise (ft)	Slope Length (ft)	Average Width (ft)	Slope Area (acres)	Average Grade (%)	Max Grade (%)	Ability Level
Magnolia	11,801	10,775	1,026	5,803	268	36	18	50	Advanced
Majestic	12,286	11,741	545	1,431	92	3	42	63	Expert
Mammoth	11,862	10,844	1,018	2,544	214	13	44	67	Expert
Mammoth Ridge	11,850	11,734	116	1,527	70	2	8	29	Low Intermediate
Marmot	10,522	9,822	700	4,870	74	8	15	29	Low Intermediate
May Girl	11,251	11,042	209	1,471	334	11	14	26	Low Intermediate
Meadows	9,540	9,170	370	2,810	380	25	13	21	Novice
Milk Run Lower	9,464	8,739	724	1,614	334	12	51	70	Expert
Milk Run Upper	10,505	9,778	728	1,734	287	11	47	57	Expert
Milk Run Race Finish Lower	9,544	9,479	65	281	176	1	24	30	Low Intermediate
Milk Run Race Finish Upper	9,767	9,555	212	814	128	2	27	43	Intermediate
Millions	12,238	10,895	1,343	3,312	208	16	45	79	Expert
Misty Maiden	10,480	9,530	950	4,764	280	31	20	44	Intermediate
Misty Maiden Intermediate Park	10,030	9,936	94	470	186	2	21	26	Low Intermediate
Mountain Quail	12,218	11,406	812	2,061	167	8	43	72	Hike to
Nastar	10,235	9,947	288	1,077	218	5	28	34	Low Intermediate
Nellie	11,148	10,866	282	3,674	36	3	8	14	Novice
Nice Chute	11,933	11,567	367	671	65	1	66	88	Hike to
North Chute Lower	10,027	9,874	153	423	133	1	39	43	Intermediate
North Chute Middle	10,474	10,058	416	857	112	2	56	73	Expert
North Chute Upper	10,862	10,492	370	609	171	2	77	87	Expert
North Henry's	10,808	10,300	508	1,853	175	7	29	47	Advanced

Table VI-2. Terrain Specifications – Upgrade Plan

Trail Area/Name	Top Elevation (ft)	Bottom Elevation (ft)	Vertical Rise (ft)	Slope Length (ft)	Average Width (ft)	Slope Area (acres)	Average Grade (%)	Max Grade (%)	Ability Level
Ophir Loop	11,190	10,316	874	4,740	106	12	19	44	Intermediate
Palmyra Basin	12,466	11,412	1,054	3,169	807	59	36	73	Expert
Pandora	10,500	10,111	388	864	48	1	51	69	Expert
Peak-A-Boo	10,722	9,985	737	3,815	116	10	20	38	Intermediate
Peaks Trail	9,511	9,410	101	1,487	147	5	7	12	Beginner
Pick 'N' Gad	10,379	10,226	153	681	218	3	23	29	Low Intermediate
Plunge Lower	10,459	9,797	661	1,978	268	12	36	65	Expert
Plunge Upper	11,668	10,383	1,285	4,041	204	19	34	60	Expert
Polar Queen	11,190	10,290	900	5,031	154	18	18	35	Intermediate
Power Line	11,036	10,607	429	867	39	1	57	69	Expert
Prospect Woods	11,668	11,326	342	985	420	9	37	58	Glade
Review	11,974	11,491	483	912	416	9	64	84	Hike to
Roy Boy	13,067	12,489	578	974	81	2	77	101	Hike to
Sandia	11,504	10,759	746	4,952	223	25	15	36	Intermediate
Sandia 1	11,790	11,613	177	514	215	3	37	61	Expert
See Forever_14 to 15	12,474	12,247	227	1,252	61	2	19	41	Intermediate
See Forever_Happy Thought to Joint Point	11,969	11,723	246	2,108	75	4	12	26	Low Intermediate
See Forever_Lookout to Top of Coonskin	11,005	10,589	416	1,562	148	5	28	33	Low Intermediate
See Forever_Top of 14 to Top of 6	12,260	11,924	336	2,878	49	3	12	28	Low Intermediate
See Forever_Top of 9 to Lookout	11,722	11,008	714	4,015	108	10	18	37	Intermediate
Seniors	13,208	12,418	790	1,317	111	3	76	104	Hike to

Table VI-2. Terrain Specifications – Upgrade Plan

Trail Area/Name	Top Elevation (ft)	Bottom Elevation (ft)	Vertical Rise (ft)	Slope Length (ft)	Average Width (ft)	Slope Area (acres)	Average Grade (%)	Max Grade (%)	Ability Level
Sheridan Headwall	10,427	10,260	166	607	194	3	29	47	Advanced
Silver Glade	11,502	11,188	315	633	110	2	57	67	Glade
Silver Tip	10,840	10,685	155	472	288	3	35	43	Intermediate
Silver Tip Trees	10,789	10,636	153	463	290	3	35	38	Glade
Silvercloud	12,458	11,753	705	1,677	248	10	47	60	Expert
Smuggler	10,528	10,148	381	1,180	483	13	34	45	Intermediate
South Henry's	10,697	10,390	307	811	315	6	41	46	Advanced
Spiral Stairs	11,215	10,553	662	1,346	92	3	57	72	Expert
Stella	11,469	11,181	288	1,496	151	5	20	58	Expert
Sully's	11,681	10,830	852	2,045	160	8	46	75	Expert
Sundance	10,060	9,635	425	3,407	76	6	13	24	Novice
Sundance 1	10,900	10,067	833	4,782	95	10	18	35	Low Intermediate
Sunrise	12,792	12,348	444	692	1,247	20	84	92	Hike to
Sweet Martha	11,638	11,516	122	585	256	3	22	47	Hike to
Teddy's Way	10,374	10,065	310	3,072	15	1	10	27	Low Intermediate
Telluride Terrain Park	9,933	9,692	241	918	205	4	27	34	Low Intermediate
Telluride Trail	10,557	8,740	1,817	14,137	4	1	13	33	Low Intermediate
Terrain Park Access	9,946	9,595	351	1,399	351	11	26	38	Intermediate
The Fans	11,719	11,063	655	1,863	119	5	38	74	Hike to
Tram Shot	12,910	12,472	438	723	2,038	34	78	88	Hike to
UTE Park	11,144	10,876	267	2,525	25	1	11	15	Novice
West Drain Lower	10,758	9,336	1,422	10,393	20	5	14	29	Low Intermediate

Table VI-2. Terrain Specifications – Upgrade Plan

Trail Area/Name	Top Elevation (ft)	Bottom Elevation (ft)	Vertical Rise (ft)	Slope Length (ft)	Average Width (ft)	Slope Area (acres)	Average Grade (%)	Max Grade (%)	Ability Level
West Drain Upper	10,482	9,908	574	2,631	43	3	22	30	Low Intermediate
Village Bypass	11,139	10,659	481	2,593	377	22	19	25	Novice
Wildcat	11,754	11,202	552	1,204	242	7	53	86	Expert
Westlake	12,034	11,627	407	729	239	4	68	86	Hike to
Woozley's Way Lower	11,880	11,290	590	1,802	188	8	35	50	Advanced
Woozley's Way Upper	11,286	10,789	497	3,254	97	7	15	38	Intermediate
Zulu Queen	11,688	11,316	372	778	210	4	55	66	Expert
North Meadows	9,390	9,360	30	461	426	5	7	8	Beginner
Jaws Cat Track	9,750	9,450	300	2,022	26	1	15	16	Low Intermediate
Prospect Glades							18		Glade
Gold Hill Glades							33		Glade
Sunshine Glades							110		Glade
Polar Queen Glades							14		Glade
Plunge Glades							172		Glade
Coonskin Glades							40		Glade
Narnia Glades							60		Glade
Apex Glades							24		Glade
Total				331,132			1,844		

i. Terrain Distribution by Ability Level

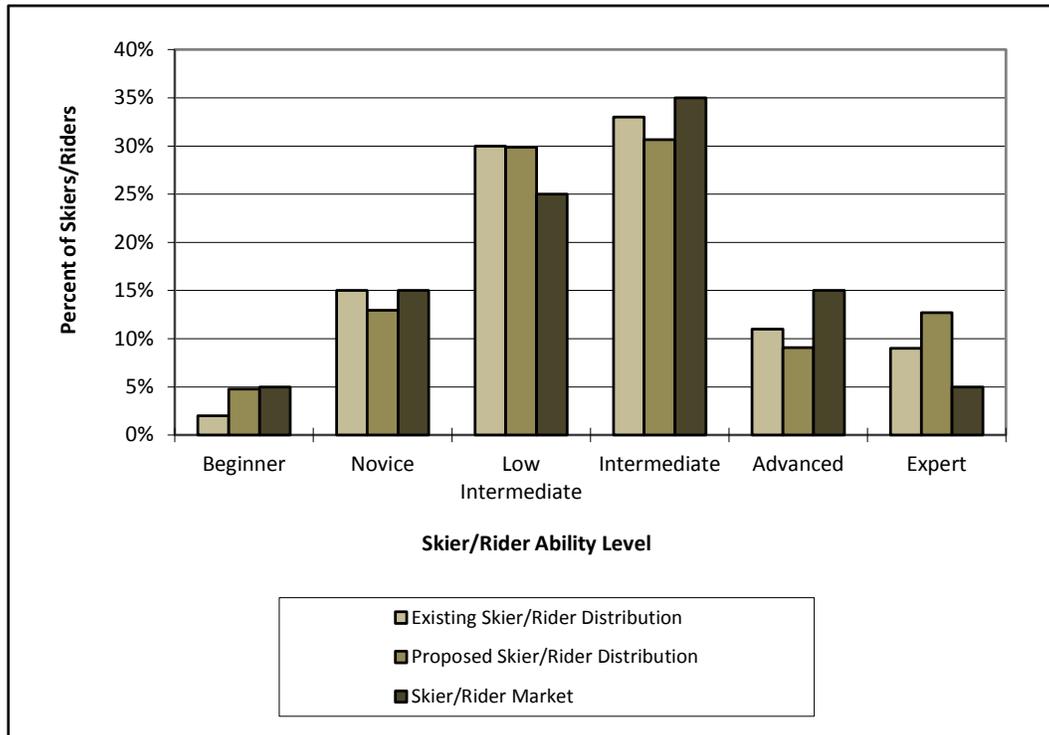
This terrain distribution analysis considers the 1,122 acres within the developed terrain network at TSR and does not change significantly from existing conditions. The ideal breakdown of trail capacity by ability level should align with percentages of skiers by ability level, based on the regional destination skier market. The terrain classification breakdown of the Upgrade Plan is set forth in Table VI-3 and Chart VI-1. The last column in this table represents what can be considered the ideal skill level distribution in the relevant market and provides a comparison with the planned conditions.

Table VI-3. Terrain Distribution by Ability Level – Upgrade Plan

Skier/Rider Ability Level	Trail Area (acres)	Skier/Rider Capacity (guests)	Actual Skier/Rider Distribution (%)	Relevant Skier/Rider Market (%)
Beginner	15	461	5	5
Novice	70	1,251	13	15
Low intermediate	206	2,885	30	25
Intermediate	296	2,960	31	35
Advanced	125	875	9	15
Expert	410	1,229	13	5
Total	1,122	9,661	100	100

Source: SE Group

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



Source: SE Group

Because this MDP does not contemplate significant additions to the developed network of skiing terrain, the overall terrain distribution would not change appreciably. A notable improvement is that the proportion of beginner terrain rises from 2% to 5%, which is the targeted percentage for the beginner market segment.

3. Undeveloped and Gladed Expert Terrain

The wide variety of undeveloped terrain at TSR is an important component of the mountain experience. The topography within the SUP area includes steeps, chutes, bowls, and glades intermingled within, and outside of, the developed and maintained terrain network.

Undeveloped and gladed terrain will continue to be offered extensively at TSR. With the addition of the Gold Hill Summit surface lift, a significant amount of existing hike-to terrain will become lift-served.

Under this Upgrade Plan, TSR will increase the extent of lift-served gladed terrain by approximately 470 acres. The areas proposed are associated with the Prospect, Gold Hill, Sunshine, Polar Queen, Plunge, Coonskin, and Apex lifts. These are areas that have been recommended in discussions with ski area employees and locals who have provided input as part of the process of developing the MDP. The majority of the gladed areas face north and provide the best opportunity to have good natural snow conditions. The gladed areas are shown on Figure VI-1.

Table VI-4 summarizes the terrain at TSR, by category, under the Upgrade Plan.

Table VI-4. Terrain Summary – Upgrade Plan

Terrain Type	Existing Conditions (acres)	Upgrade Plan (acres)
Developed	1,023	1,121
Lift Accessed Undeveloped (but maintained)	73	543
Hike To	270	180
Total	1,366	1,844

Source: SE Group

D. PLANNED CAPACITY ANALYSIS

1. Comfortable Carrying Capacity

As detailed in Chapter IV, the existing CCC for TSR is calculated at 6,550. Under the Upgrade Plan, the CCC would increase, as detailed in the following table, and has been calculated at 8,240 guests per day.

Table VI-5. Comfortable Carrying Capacity – Upgrade Plan

Map Ref.	Lift Name, Lift Type	Slope Length (ft)	Vertical Rise (ft)	Actual Design Capacity (guests/hr)	Oper. Hours (hrs)	Up-Mtn. Access Role (%)	Misload/Lift Stop (%)	Adjusted Hourly Cap. (guests/hr)	VTF/Day (000)	Vertical Demand (ft/day)	CCC (guests)
1	Chondola/4DG	2,916	385	2,000	7.00	25	5	1,400	3,773	4,778	790
2	Terrain Park Poma	1,425	355	195	7.00	0	10	176	436	5,960	70
4	Village Express/4D	6,227	1,244	2,800	7.00	25	20	1,540	13,410	10,906	1,230
5	Polar Queen Express/4D	4,899	936	2,400	6.50	25	5	1,680	10,221	15,542	660
6	Apex Lift/3C	2,957	1,144	1,500	6.50	15	10	1,125	8,366	23,387	360
7	Coonskin Lift/3C	4,725	1,845	1,200	7.00	75	10	180	2,325	23,417	100
8	Oak Street Lift/2C	2,686	1,055	900	6.50	85	10	45	309	23,400	10
9	Plunge Lift/4DG	6,233	2,125	2,400	6.50	20	5	1,800	24,863	28,658	870
10	Sunshine Express/8G	10,544	1,735	2,400	7.00	50	15	840	10,202	10,255	990
11	Ute Park/4D	2,493	274	1,500	5.75	20	5	1,125	1,772	3,953	450
12	Prospect Bowl Express/4D	5,097	1,042	2,400	5.75	0	5	2,280	13,661	14,502	940
13	Lynx/P	701	32	585	5.75	0	10	527	97	1,089	90
14	Gold Hill Express/4D	3,645	1,475	2,200	5.75	25	5	1,540	13,061	31,292	420
15	Revelation Lift/4C	1,841	785	1,240	5.75	0	10	1,116	5,037	22,349	230
G1	Gondola/8G	6,019	1,780	1,070	7.00	75	5	214	2,666	15,494	170
G2	Gondola/8G	4,044	995	1,070	7.00	95	5	-	0	11,842	-
G3	Gondola/8G	2,770	5	1,200	7.00	95	5	-	0	78	-
	Palmyra Basin	3,594	1,165	1,200	7.00	0	10	1,080	8,807	16,810	520
	Gold Hill Summit	1,509	165	600	7.00	0	5	570	658	3,770	170
	North Meadow Conveyor	461	30	600	7.00	0	5	570	120	712	170
Total		74,786		29,460				17,807	119,784		8,240

Source: SE Group

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

1. Guest Services

Upgrading the existing food and beverage facilities includes both previously approved expansion of existing restaurants and development of previously approved new restaurants. The expansion and addition of food and beverage facilities are planned to maintain the balance of facilities with the existing skier population and anticipated growth of skier visits. Although TSR does not intend to increase the overall approved capacity of the ski area, expansion of facilities are essential for maintaining high level of guest service for the increased numbers that have been experienced over the last five years. The new food and beverage facilities will include additional restrooms as part of the facility. The expansion of these facilities will include expansion of utility infrastructure to support the facility. New and upgraded restaurants are shown on Figure VI-1.

TSR is currently operating the Bon Vivant, at the top of the Polar Queen Express, a small-scale restaurant with outdoor seating for 60 people. There are also public restrooms included at the restaurant. Both the restaurant and the bathrooms operate on a septic system that was designed and built with expansion in mind. TRS has a previously approved seating capacity for this location of 700 with an assumption of four turns for a total daily capacity of 2,800 persons. The first phase of this upgrade would include a restaurant facility including full kitchen and bar with seating capacity for up to 100 people. This restaurant will also service the existing deck and additional outdoor/tent seating of up to 100 people for summer events.

A previously approved 100-seat restaurant at the top of Sunshine Express with four assumed turns would have a daily capacity of 400. TSR is proposing to build a 200-seat restaurant in this location with two assumed turns for a capacity of 400. This restaurant would primarily serve the ski school and families with young children, as well as other guest utilizing the terrain in the Sunshine Express and Ute Park pods. The long lift ride to the top of Sunshine Express makes it an ideal location for a restaurant with restroom facilities. The existing restrooms are vault toilets and would be upgraded.

A Nordic center was anticipated and previously approved in this location. With the development of a Nordic center in the valley floor and Nordic trails in the region, this location is no longer considered necessary for that use.

Giuseppe's, the Plunge restaurant, has been previously approved for expansion to 200 seats with a daily capacity of 800 persons. The future restaurant will include expanded indoor and outdoor seating with improved kitchen and restroom facilities.

High Camp Warming Hut currently provides limited hot food and beverages. TSR plans on working with the County, the Forest Service, and the community to seek approval to upgrade the food services currently offered.

2. Space Use Analysis

A distribution of CCC is utilized to determine guest service capacities and space requirements for guest services at base area portals and on-mountain facilities. The CCC should be distributed between each guest service facility location according to the number of guests that would be utilizing the lifts and terrain associated with each facility. Sufficient guest service space should be provided to accommodate the planned CCC of 8,240 guests per day.

The following table addresses the Upgrade Plan’s space use needs at the base area and on-mountain facilities, under the upgraded CCC. The space recommendations are directly related to the distribution of the resort’s capacity to the various guest service facilities located in the base area and on-mountain. The tables show recommended size ranges for the facilities, based on industry averages for space use by service function.

Table VI-6 shows recommended ranges for the facilities.

Table VI-6. Industry Average Space Use – Upgrade Plan

Service Function	Existing Total	Recommended Range	
		Low	High
Ticket Sales/Guest Services	2,250	1,850	2,270
Public Lockers	3,166	5,560	6,800
Rentals/Repair	14,588	13,180	14,830
Retail Sales	4,205	3,890	4,760
Bar/lounge		5,840	7,140
Adult Ski School	2,000	2,970	3,630
Kid’s Ski School	4,000	5,930	7,250
Restaurant Seating	10,418	19,990	24,430
Kitchen/Scramble		15,990	19,540
Rest rooms	4,300	4,000	4,890
Ski Patrol	3,300	1,600	1,950
Administration	10,762	3,890	4,760
Employee Lockers/Lounge	5,540	1,560	1,900
Storage		3,880	5,730
Circulation/Mechanical/Walls		15,530	22,910
Total Square Feet	64,529	105,660	132,790

As discussed in Chapter IV, some of the base area recommended space is accounted for with third-party facilities in the Town of Telluride and Town of Mountain Village—the private restaurants, ski rental shops, retail stores, and others. It is reasonable to assume that these third-party restaurants and stores will continue to provide skier services.

3. Food Service Seating

Seating and restaurant space recommendations are directly related to the lunchtime capacity. The lunchtime capacity is determined by the distribution of each lift pod’s CCC. It is assumed that guests would prefer to dine at the facility closest to the area they are using. To allow for this convenience, it is important to provide restaurant seating to accommodate the lunchtime capacity requirement of the area. Restaurant seating should be supplied per the recommendations in Table VI-7.

Table VI-7 shows a deficiency related to the base area seats. However, as with the total guest use space analysis, it is important to note that TSR does not own or operate the majority of the food and beverage facilities in the base area; thus, not all of the seats are not taken into account as part of this analysis. While the existing TSR base area restaurants seat a total 500, the total number of base area seats increases to 1,093 when non-TSR seats are included. Therefore, the number of seats provided by the private restaurants compensates for any deficiency that may be shown in Table VI-7.

Table VI-7. Recommended Restaurant Seats – Upgrade Plan

	Base Area	On-Mountain	Total Resort
Lunchtime Capacity (CCC)	4,442	4,211	8,652
Average Seat Turnover	4	3	
Existing Seats	500	760	1,260
Upgrade Seats		500	500
<i>Total Seats</i>	500	1,260	1,760
Required Seats	1,110	1,404	2,514
Difference	-610	-144	-754
Proposed Seating Capacity	2,000	3,780	5,780

F. PLANNED PARKING CAPACITY

The existing parking capacity of 7,152 guests, plus the existing public and private transit options, and guest arriving by air and not renting a car are anticipated to meet the increase in demand. TSR will monitor parking demand in the future to ensure that it is adequate. Additionally, the Mountain Village parking garage was originally designed to accommodate an additional deck of parking when demand warrants it.

G. PLANNED RESORT OPERATIONS

1. Ski Patrol/First Aid

The patrol station at the top of Coonskin would be expanded by consolidating lift operations and ski patrol into one building. Restrooms would be included in the building. This building would be located on private land. The existing patrol station would be eliminated along with the existing lift operation’s building.

Additionally, a ski patrol facility has been previously approved as part of the Plunge restaurant (aka Giuseppe’s) expansion. As part of this MDP, it is proposed that the future patrol facility would be in a

separate structure from the Plunge restaurant, but in the same vicinity. The final location of the building would be determined through an overall site planning exercise that would include the top of the Plunge Lift, the Plunge restaurant, the existing restrooms, and the new patrol headquarters.

2. Snowmaking Coverage

TSR plans to expand snowmaking facilities and coverage on trails throughout the mountain as depicted on Figure VI-2. This will increase the snowmaking coverage by approximately 251 acres. Diversion points for snowmaking water are included on Figure VI-2. TSR is currently working on an expansion of its water rights to allow for the additional snowmaking. Depletions will not exceed maximum depletions at full build-out pursuant to prior approvals.

On-mountain storage ponds are vital to snowmaking efficiency as they allow the snowmaking system to take advantage of favorable weather windows. An additional pond (Prospect Creek Reservoir alternate number 2) will be constructed as previously approved by the Forest Service. The pond is located between the two existing ponds and will add approximately 10 acre-feet of water storage. This water storage has an existing court decreed water right.

TSR will also construct a new compressor house facility to be located near the top of Village Express. This building will provide an indoor environment for the compressors and for the snowmaking crew to work on snowmaking equipment, etc.

The existing snowmaking system at TSR has the ability to make snow on 300 acres of terrain. Previously approved snowmaking coverage expansion will add 27.6 acre-feet of water consumption. Additional proposed snowmaking coverage of 222 acres would bring the total to 551 acres. TSR plans to add the 251 acres of snowmaking coverage over the next ten to fifteen years. Currently, TSR processes the adequate water rights available for upgrades proposed in this MDP. Existing, proposed and previously approved snowmaking coverage is shown on Figure VI-2.

3. Grooming

No changes are anticipated to the existing grooming program.

4. Maintenance Facilities

The existing lift operations facility at Coonskin will be replaced with one building that will include both ski patrol and lift operations. Restrooms would be included in the building. The building is location is on private land (refer to Figure VI-1).

One bay will be added to the existing vehicle maintenance facility. The building is located on private land.

5. Utilities

Power will be added as needed to support new lifts, restaurants, and operations facilities. Locations for power lines are depicted on Figure VI-3.

6. Communications

On mountain communications and Wi-Fi service is important to operations and service facilities. Fiber will be run to on-mountain locations as depicted on Figure VI-3.

7. Culinary Water and Sewer

A water line has been previously approved from the well 6/8 A11 and will provide water to Giuseppe’s, Alpino Vino, patrol headquarters and restrooms at the top of Apex Lift, and the Tempter House. These facilities currently use water, and while this is not a new use, it will eliminate the need for hauling water to these sites. Water lines will be run to planned facilities as depicted on Figure VI-3.

An upgraded water line is proposed to run to the previously approved restaurant at the top of Sunshine Express. The sewer system and leach field at the top of Sunshine Express would be expanded concurrently with the construction of the previously approved restaurant. An alternative to expanding the leach field may be to install a sewer line from the approved restaurant down to the Town of Mountain Village’s sanitary sewer system.

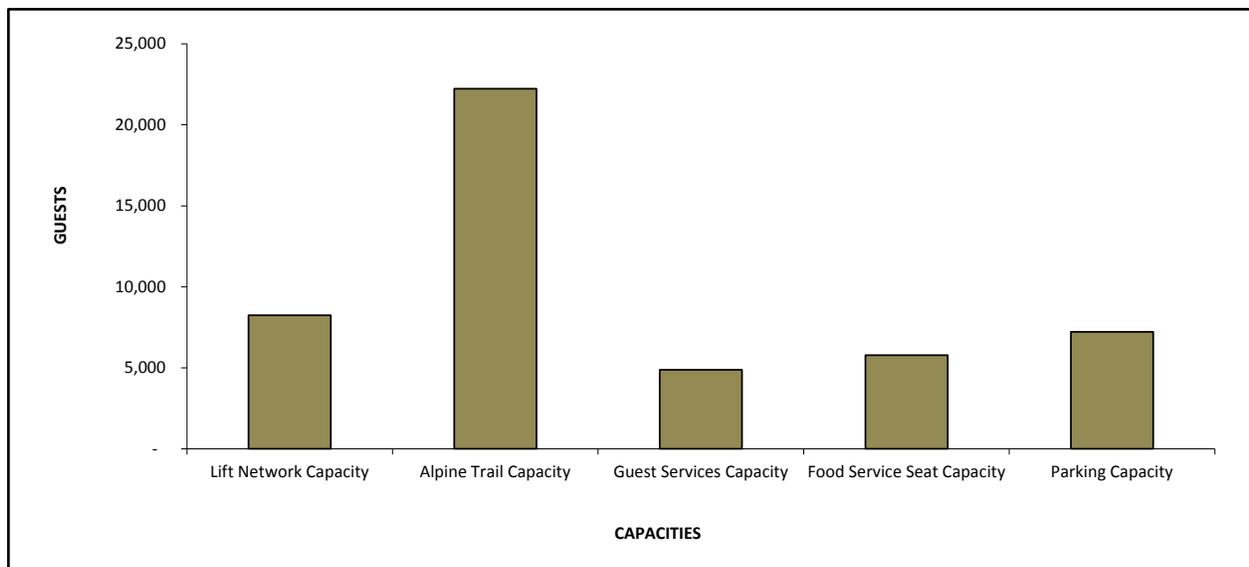
TSR is proposing to install a septic system to replace the vault toilets at the bottom of Ute Park. The existing toilets do not have adequate capacity for the current or increased use.

A septic system and leach field is being proposed at High Camp.

H. RESORT CAPACITY BALANCE AND LIMITING FACTORS

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

Chart VI-2. Resort Balance – Upgrade Plan



Source: SE Group

Chart VI-2 indicates that most of TSR’s capacities will remain fairly well balanced. The surplus of terrain network capacity will maintain low skier densities at TSR and a high level of terrain variety, which is a very positive situation. The guest services capacity and food service seating capacity are low, since they do not account for the third-party guest service space and the 1,000 restaurant seats that are available in the Town of Mountain Village.

I. SUMMER OPERATIONS

1. Recreation Zone Designations

As discussed in Chapter II, TSR identified four characteristics (access, remoteness, naturalness, and infrastructure) to define the summer and multi-season setting and guest experience within different landscapes across the SUP area. The first step in the zone designation process was a careful consideration of the setting and the proximity to infrastructure supporting snow sports. Features such as watersheds, topography, vegetation structure, level of existing disturbance, and existing infrastructure were considered in establishing zone boundaries across the entire SUP area. The exercise resulted in the creation of 16 areas unique in their location and/or features. The second step of the zone designation process was to apply a score for each characteristic on a scale of 1 to 3, with 1 being the most disturbed and 3 being the least disturbed. Figure VI-5 illustrates the recreation zone designations within the TSR SUP area.

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 difficult to foresee exactly which new activities will be developed over this time. TSR will continue to work with the Forest Service to ensure that proposed summer and multi-season activities are suitable for the setting and desired experience within each zone.

a. Zone 1

Setting

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

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

One area—the upper third of the Village Express Lift—has been designated as Zone 1.

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. Most guests visiting Zone 1 will initially access it from private land by utilizing the existing and planned trails from the Free Gondola's mid-station, near Allred's Restaurant, and recreation trails from the Town of Telluride or the Mountain Village. Within Zone 1, the concepts in the BEIG will be followed to ensure appropriate design guidelines for both landscape architecture and built architecture are followed. Zone 1 abuts Zone 2 on the fringes of developed on-mountain areas. This allows guests to experience a gradual transition between the built environment (Zone 1) and more-natural areas that still contain activities and facilities blending with the area's natural setting (Zone 2). Zone 1 abuts Zone 3 in one area, along the southeast side of Area 1. The distinct change in topography and minimal amount of trail access in this area creates a natural buffer between these two zones. 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.

Compatible Activities and Facilities

Services and activities within a Zone 1 include food and beverage operations, special event venues shelter and emergency services, restroom facilities, landscaped areas, and other activities. At TSR, Zone 1 serves as the on-mountain hub and activity center, from which guests will access surrounding activities and refuel between activities. Typically, guests will first access this area after riding the Free Gondola; however, guests could also access Zone 1 under their own power from the surrounding trails network. This area already hosts several multi-season recreational activities, including hiking, mountain biking, and special events.

Activities on NFS lands within a Zone 1 may include an alpine coaster, challenge courses, canopy tours, singletrack, flow, and gravity/enduro mountain biking trails, a mountain biking skills park, hiking trails, special events and access pathways to zip lines, challenge courses, fishing and other water-based activities, temporary activities (such as outdoor concerts and kid's playground), and other natural resource-based recreation activities. The activities will not compromise the existing skiing, which occurs in Zone 1 during winter months.

b. Zone 2

Setting

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

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

Four areas within the TSR SUP area were designated as Zone 2: along the eastern area of the Free Gondola, which connects the Town of Telluride to Station St. Sophia; the top and bottom terminals of Polar Queen Express; and the top terminal of Sunshine Express.

Desired Experiences

Most guests will access Zone 2 from Zone 1 or private lands, in areas such as the bottom terminal of Polar Queen and the eastern area of the Free Gondola. 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 one that still offers a more natural feel. For many guests of TSR, 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 plan. Zone 2 provides the initial opportunity for guests to learn about and engage in their natural surroundings through hands-on recreational, interpretive, and educational offerings. In addition to hosting activities such as guided hikes, a zip line/canopy tour, and various trails, Zone 2 serves as a buffer between higher levels of development within Zone 1 and private lands, and the more natural settings of Zones 3 and 4.

Compatible 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. Activity offerings include access to zip lines and canopy tours, guided hikes and interpretative opportunities, extended hiking trails, singletrack, flow, and gravity/enduro mountain biking trails, challenge courses, climbing walls, fishing and other water-based activities, and other natural resource-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 and on private lands. Thus, areas within Zone 2 serve as transitional zones, encouraging guest exploration into more natural portions of the National Forest in a setting that still feels comfortable for less-experienced Forest users. The setting of Zone 2 and the activities that occur in this area will offer sufficient challenge for first-time guests, and will prepare others to venture into the less developed areas of Zones 3 and 4.

c. Zone 3

Setting

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

- Road access and roads are present, but limited to certain areas;
- Human activity (people recreating) can be seen at a distance or is unseen 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
- There is presence of resort infrastructure, including chairlifts and buildings.

Three areas within the SUP area were designated as Zone 3: areas around Plunge Lift; upper mountain trail networks present in the middle of TSR's SUP area; and the forested recreation area directly north of Sunshine Express's top terminal.

Desired Experiences

The majority of guests will initially view a Zone 3 during scenic vista rides via the Free Gondola to Zone 1. In addition to beautiful views of the San Juan Mountains, this "fly over" exposure will allow guests to see diverse vegetation types and topographic features as they make their way up the mountain. On the ground, access to Zone 3 would typically occur after traveling through Zones 1 and 2 from the top lift/gondola terminals; however, guests could also access Zone 3 from private lands via the existing 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 will be achieved through the activities offered there. Guests will enjoy nature hikes with interpretive signage that will provide education on their biological, cultural, and historical surroundings. Guests will hike to locations that provide expansive views the San Juan Mountains. Opportunities for self-guided tours, or dispersed travel also exist. Guests will ride mountain biking trails through forested settings and learn the importance of forest health and stewardship. Mountain biking trails would be less developed cross-country trails and the trail network would be less dense compared to Zone 2. In Zone 3, guests will also ride zip lines and canopy tours over and through the canopy to experience amazing views of the TSR area and its natural surroundings.

Zone 3 offers a diverse set of experiences for guests, which will promote the GMUG as a recreationally-, biologically-, and geographically-diverse landscape.

Compatible Activities and Facilities

Activities include singletrack mountain biking trails, scenic chairlift rides, hiking trails, multiple-use trails, canopy tours, 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 chairlifts) 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.

d. Zone 4

Setting

The setting of Zone 4 is more remote and provides a high degree of naturalness. Ski area development is limited and, where ski trails are present, larger tree islands are present. Within the context of the overall SUP area, the following summarizes the setting in Zone 4:

- Little to no road access exists;

- Human activity (people recreating and/or resort operations) is distant or out of sight, providing a greater sense of remoteness;
- The area is completely natural or has limited disturbance; and
- There is presence of resort infrastructure, including chairlifts and buildings.

Six areas within the TSR SUP area were designated as Zone 4: the steep and densely forested area north of Apex Lift; the dense and secluded valley west of Polar Queen; the western boundary of the SUP area; the Palmyra Basin; the Revelation Bowl; and the small northern section of TSR's SUP area (Area 1). With the exception of the small northern section (Area 1) and Revelation Bowl (Area 5), these areas share characteristic themes such as dense/large tree islands, challenging/isolated topography, minimal trail access, negligible ski resort development, and the absence of notable infrastructure/facilities. While Area 1 does have many of the characteristics associated with a Zone 5 designation, this area is categorized as a Zone 4 due to its proximity and visibility to the Towns of Telluride and the Mountain Village. Similarly, Area 5 is located mostly in an undisturbed setting, it is designated as a Zone 4 area due to the presence of resort infrastructure (Revelation Lift). Overall, natural characteristics and features are dominant in these both of these areas.

Desired Experiences

The desired experiences in Zone 4 are closely tied to the natural and remote setting of the area itself. This relatively undisturbed area of the National Forest offers opportunities for quiet, solitude, and exploration. Additionally, because natural processes are more evident in these areas as compared with more developed zones, greater educational and experiential learning opportunities exist for guests. The setting in Zone 4 will directly affect the guest experience, and maintaining this more remote setting will meet the guests' expectations.

Compatible Activities and Facilities

Activities will promote the surroundings and inform guests of similar environments throughout the National Forest. 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 singletrack mountain biking and hiking trails with educational/interpretive signage. Activities within Zone 4 will require minimal site modification, which will maintain the current level of naturalness. In this zone, the low density of guests will promote a sense of remoteness.

e. Zone 5

Zone 5 is the least developed of all the zones. Only two areas were classified as Zone 5—Area 4 and Area 6 (see Table VI-8). These areas contain challenging topography, are difficult to access, and are located a significant distance from resort developments/infrastructure.

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
- Resort infrastructure is only visible at a distance.

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 should 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. Public motorized/mechanical use is not allowed currently nor anticipated as a future use in this zone.

Table VI-8 describes the characteristics of each zone.

Table VI-8. Zone Characteristics

Zone 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 Sight Ski Area Infrastructure	3
<i>Minimum Score Possible</i>	4
<i>Maximum Score Possible</i>	12
Zones	Score Range
1	4
2	5 to 6
3	7 to 9
4	10 to 11
5	12

Table VI-9 provides information about each zone at TSR.

Table VI-9. Summer Use Zones at TSR

Area Boundaries	Score	Appropriate Zone
Area 1		
Access	3	
Remoteness	1	
Naturalness	3	
Infrastructure	3	
Total Score	10	Zone 4
Area 2		
Access	2	
Remoteness	1	
Naturalness	1	
Infrastructure	2	
Total Score	6	Zone 2
Area 3		
Access	2	
Remoteness	2	
Naturalness	2	
Infrastructure	2	
Total Score	8	Zone 3
Area 4		
Access	3	
Remoteness	3	
Naturalness	3	
Infrastructure	3	
Total Score	12	Zone 5
Area 5		
Access	3	
Remoteness	3	
Naturalness	3	
Infrastructure	2	
Total Score	11	Zone 4
Area 6		
Access	3	
Remoteness	3	
Naturalness	3	
Infrastructure	3	
Total Score	12	Zone 5
Area 7		
Access	3	
Remoteness	2	
Naturalness	2	
Infrastructure	3	
Total Score	10	Zone 4
Area 8		
Access	2	
Remoteness	2	
Naturalness	2	
Infrastructure	2	
Total Score	8	Zone 3

Area Boundaries	Score	Appropriate Zone
Area 9		
Access	2	
Remoteness	2	
Naturalness	3	
Infrastructure	3	
Total Score	10	Zone 4
Area 10		
Access	1	
Remoteness	1	
Naturalness	2	
Infrastructure	2	
Total Score	6	Zone 2
Area 11		
Access	1	
Remoteness	1	
Naturalness	1	
Infrastructure	1	
Total Score	4	Zone 1
Area 12		
Access	3	
Remoteness	2	
Naturalness	3	
Infrastructure	2	
Total Score	10	Zone 4
Area 13		
Access	3	
Remoteness	2	
Naturalness	3	
Infrastructure	2	
Total Score	10	Zone 4
Area 14		
Access	2	
Remoteness	2	
Naturalness	2	
Infrastructure	2	
Total Score	8	Zone 3
Area 15		
Access	2	
Remoteness	2	
Naturalness	1	
Infrastructure	1	
Total Score	6	Zone 2
Area 16		
Access	1	
Remoteness	2	
Naturalness	2	
Infrastructure	1	
Total Score	6	Zone 2

2. Summer and Multi-Season Activities and Facilities

a. Upgraded Summer Activities

SAROECA has provided an opportunity for the Forest Service to authorize additional seasonal and year-round recreation activities and associated facilities at ski areas on NFS lands.

Summer uses at ski areas, both on private and NFS lands, have been increasing in recent years. The increase has been driven by both new technologies in summer recreation equipment, as well as the growing numbers of people seeking recreation activities in more managed settings.

With that guidance, TSR has identified additional multi-season and summer recreation opportunities to increase the available recreation activities to NFS guests.

These additional recreation opportunities include expanded lift-served downhill mountain biking “flow trails,” aerial canopy tours, an aerial adventure course, and improved cross-country mountain biking trails, shown on Figure VI-4.

Details on planned upgrades are presented below, but specific project locations and associated maps will be developed during site-specific analysis as part of the NEPA process. Phase 1 of multi-season and summer recreation projects are anticipated to be implemented, dependent upon NEPA analysis and approval, between 2016 and 2020. Additional summer and multi-season projects may be considered for implementation beyond 2020, in accordance with the setting and desired experience of each zone, as described above. Phase 1 projects include the following:

Mountain Biking Trails

In 2016 Gravity Logic developed a variety of mountain biking trails to complement the existing trail network. As seen on Figure VI-4, those trails will service beginner, intermediate, and expert mountain bikers and, in addition to existing trails, would total approximately 40 miles of mountain biking trails. Trails would be located mostly in Areas 10 and 11.

The decision to focus on the long-term development of terrain directly accessed via Village Express Lift (Lift 4) is based in large part on the fact that the lift departs from the center of the Mountain Village, allowing for easy access to the general public and the top of the lift is just below an obvious break in the mountains geology, topography, and hydrology. The terrain served by this lift is generally less steep and less rocky than much of the terrain elsewhere on the mountain. Consolidating the proposed trails will maintain the less-developed experience found in other portions of the SUP, in accordance with the summer zones described above. It is important to note that the planned trails identified in this figure are conceptual, and are subject to change during site-specific planning and layout.

Presently, the bike park is accessed for free on the Gondola with a vertical rise of 1,000 feet. While any extensive expansion of bike park trails accessed from the Gondola is not recommended, it remains nonetheless an important lift to access the bike park from the Town of Telluride. This lift operates daily for foot passengers as a connector between the Town and Mountain Village and could be used as an overflow lift to access a portion of the bike park. It may also be used by the guides teaching beginner riders due to its lower vertical rise.

The majority of planned trails will cater to beginner, intermediate, and advanced riders. As discussed in Chapter IV, Section I, most of the existing trails at TSR are advanced intermediate and expert gravity/enduro trails, while a growing percentage of TSR guests are beginner and low intermediate cross-country and flow riders. As mentioned above, in order to address this deficiency, a primary goal of the proposed trails is to provide additional flow trails that will accommodate this growing segment of the market. The progression in mountain biking trail construction has become increasingly noticeable over the past several years. In order to continue to be a leader in the market, TSR desires to provide additional diversity and cutting-edge design in its mountain biking trails network.

Generally, Zones 1 and 2 will contain denser networks of trails, and will include cross-country singletrack, flow, and gravity/enduro trails. The higher levels of development and activity in these zones makes them suitable for this type of trail development. Zone 3 will contain singletrack trails, which are less visible, produce less impact, and provide the experience suitable for this zone. No mountain biking trails developments are currently planned in Zone 4.

Overall, these upgrades will increase opportunities for guests to explore NFS lands within the TSR's SUP area and will promote the development of new riders. Interpretive signage will be located along planned trails to promote stewardship of surrounding natural resources.

Canopy Tour

A canopy tour consists of multiple zip lines of varying lengths connected via platforms located and constructed on larger trees and/or on separate poles. Users would travel at various speeds, remaining below the top of the tree canopy the majority of the time. Several of the platforms are planned to be themed to educate participants about the surrounding environment. Along with the inherent adventure and scenery offered by the canopy tour, interpretation of the surrounding natural environment will play a significant role in attracting users to this activity.

A canopy tour is planned to start near the top terminal of Village Express and descend the forested mountainside into the eastern area of the Mountain Village base area. The location of the canopy tour is depicted on Figure VI-4. The decision to operate Village Express in the summer was driven by a need to provide a better bike park location/experience, as well as to gain access to the elevation and topography needed in order to offer a canopy tour.

The proposed canopy tour is a multi-span zip-line ride that allows users to safely explore terrain of the ski resort. Users would be clipped into gear—consisting of a harness, lanyards, carabineers, and zip pulleys on heavy-duty steel cables—and would glide from one elevated platform to the next. The tour will provide guests with an active opportunity to engage and learn about the ecosystems of the GMUG as they travel through the forest canopy. The canopy tour would be operated primarily during the summer months; however, TSR may expand operation into the spring skiing operating months.

Aerial Trekking Park

The aerial trekking park is planned in the lower tree island between Misty Maiden and the Competition Hill—a short walk from the base of the resort in the Mountain Village (refer to Figure VI-4). The structure would be supported by trees, wooden utility poles, or steel supports and would include with both high

and low elements.¹⁴ The aerial elements of this activity would provide a variety of unique challenges in an elevated forest environment. The aerial trekking park would provide physical recreation and engagement in a natural setting, offering a challenging personal development and team-building activity—which includes exploring the fundamentals of trust, coaching, group interaction, problem solving, and leadership.

Comfort Station at the Top of Village Express Lift (Lift 4)

Due to the increase in offered summer activities and proximity to adjacent guest services facilities, a comfort station would be proposed at the top of the Village Express Lift in order to provide basic guest services such as picnic tables, a water bottles fill station, and restrooms.

Activities that would take place within each zone are as follows:

Zone 1

- Canopy tour beginning near the top terminal of the Village Express Lift and concluding at the base area of Mountain Village
- Comfort station near the top terminal of Village Express Lift
- Aerial trekking park in the lower tree island between Misty Maiden and Competition Hill
- Singletrack, flow, and gravity/enduro mountain biking trails and hiking trails
- Special event/gathering sites

Zone 2

- Scenic gondola rides utilizing the Free Gondola
- Singletrack, flow, and gravity/enduro mountain biking trails and hiking trails

Zone 3

- Singletrack mountain biking and hiking trails

Zone 4

- Hiking trails

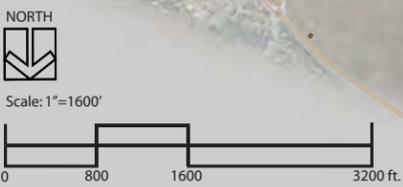
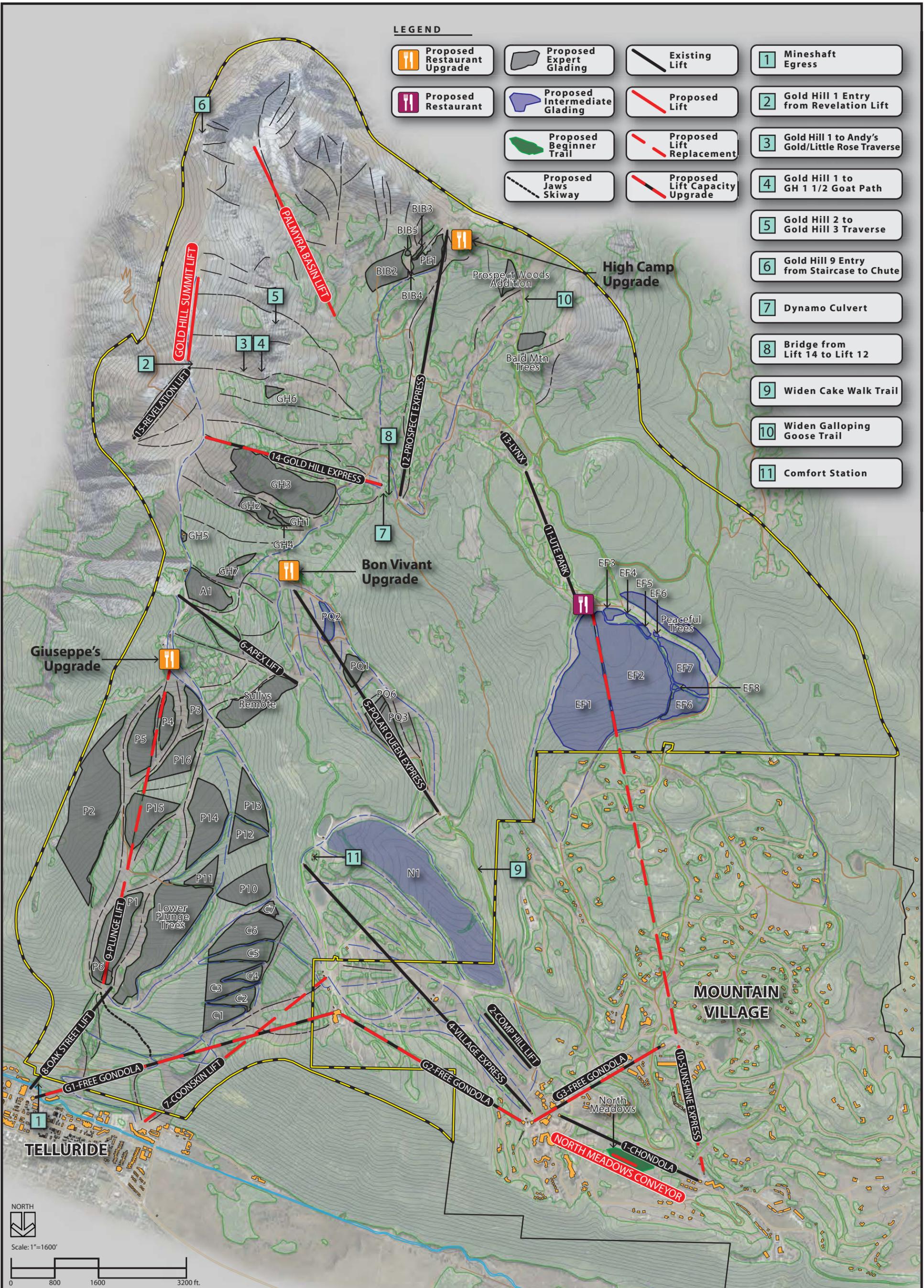
Zone 5

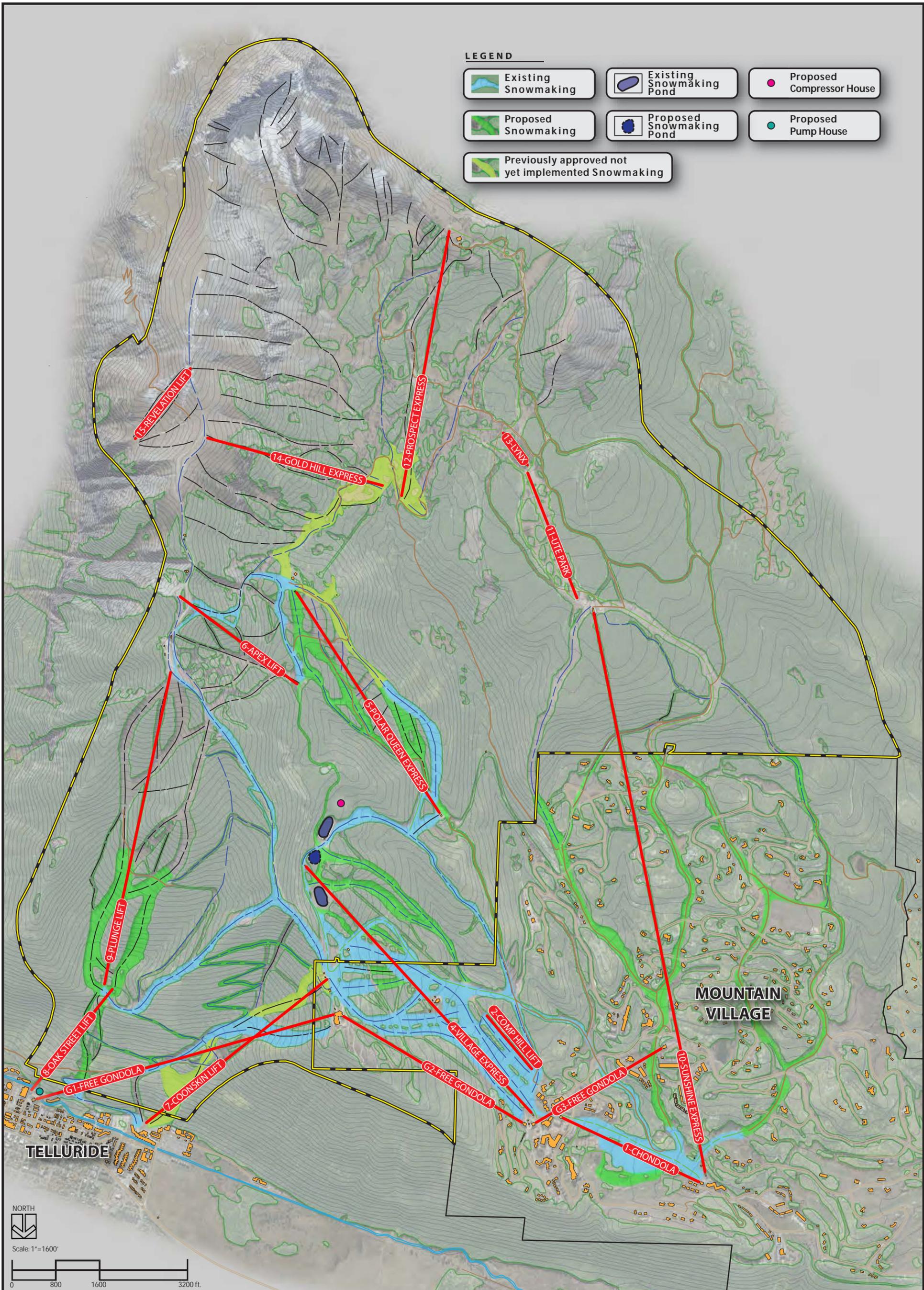
- No recreation activities are planned in Zone 5; dispersed hiking will continue to be available

¹⁴ Low elements take place on or near the ground. High elements take place higher above the ground—in the forest canopy or on structures supported by utility-type poles—and may require a belay for safety.

LEGEND

- | | | | | | | | |
|--|-----------------------------|--|-------------------------------|--|--------------------------------|--|---|
| | Proposed Restaurant Upgrade | | Proposed Expert Glading | | Existing Lift | | 1 Mineshaft Egress |
| | Proposed Restaurant | | Proposed Intermediate Glading | | Proposed Lift | | 2 Gold Hill 1 Entry from Revelation Lift |
| | Proposed Beginner Trail | | Proposed Lift Replacement | | Proposed Lift Capacity Upgrade | | 3 Gold Hill 1 to Andy's Gold/Little Rose Traverse |
| | Proposed Jaws Skiway | | | | | | 4 Gold Hill 1 to GH 1 1/2 Goat Path |
| | | | | | | | 5 Gold Hill 2 to Gold Hill 3 Traverse |
| | | | | | | | 6 Gold Hill 9 Entry from Staircase to Chute |
| | | | | | | | 7 Dynamo Culvert |
| | | | | | | | 8 Bridge from Lift 14 to Lift 12 |
| | | | | | | | 9 Widen Cake Walk Trail |
| | | | | | | | 10 Widen Galloping Goose Trail |
| | | | | | | | 11 Comfort Station |





LEGEND

- Existing Snowmaking
- Existing Snowmaking Pond
- Proposed Compressor House
- Proposed Snowmaking
- Proposed Snowmaking Pond
- Proposed Pump House
- Previously approved not yet implemented Snowmaking

NORTH
 Scale: 1" = 1600'
 0 800 1600 3200 ft.



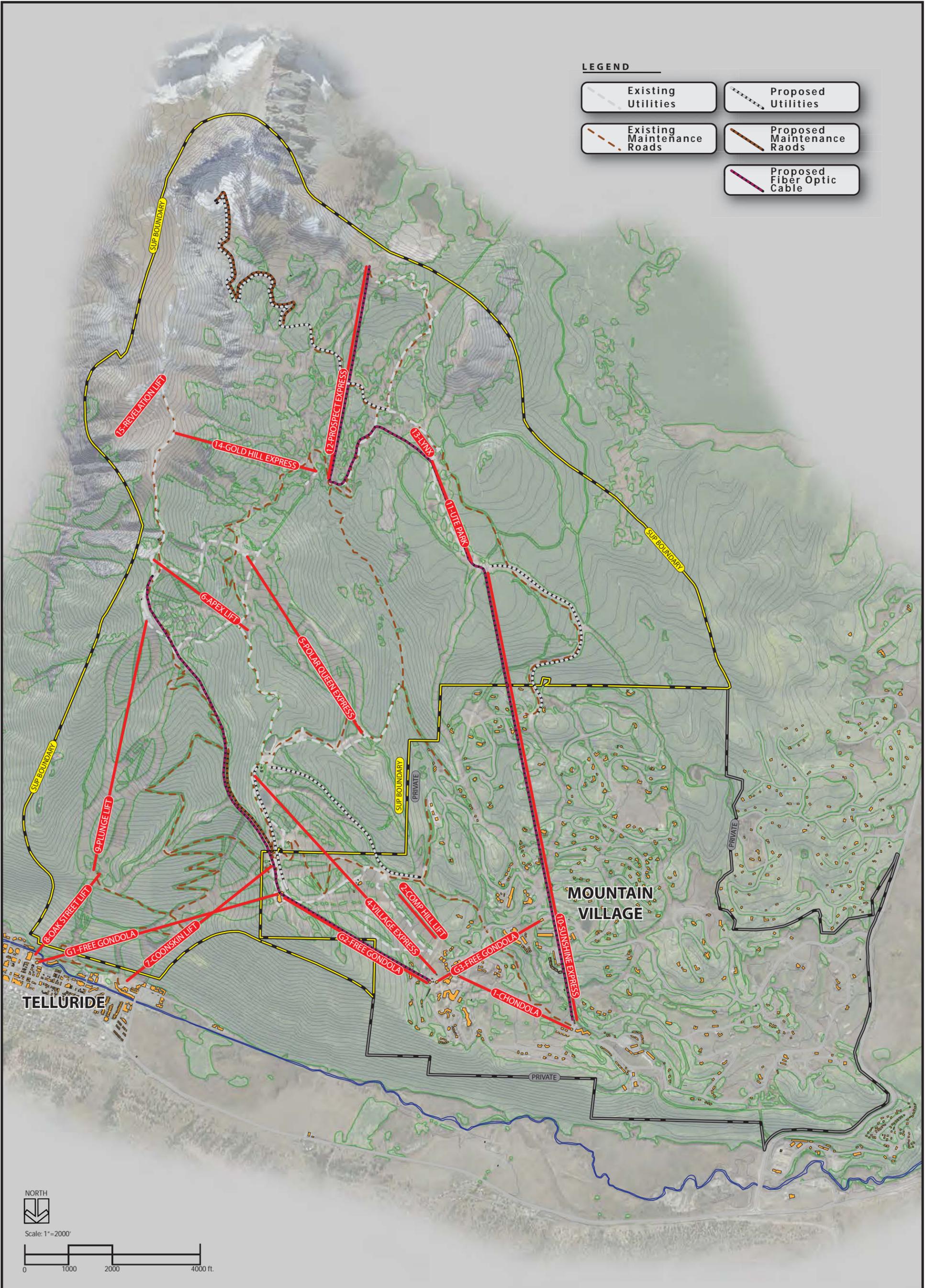
**FIGURE VI-2
 PROPOSED SNOWMAKING**

August 2016
 Contour Interval: 50 ft.

Prepared By:
SE GROUP

LEGEND

- Existing Utilities
- Proposed Utilities
- Existing Maintenance Roads
- Proposed Maintenance Roads
- Proposed Fiber Optic Cable



Scale: 1"=2000'

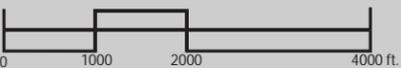


FIGURE VI-3
PROPOSED UTILITIES AND ROADS

August 2016
Contour Interval: 50 ft.

Prepared By:
SE GROUP

