

## 6 OPERATIONS PLAN

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### 6.1 FACILITY OPERATIONS

Table 6-1 displays information concerning the operation of the Heavenly Mountain Resort facilities. The table breaks down the facilities into the following categories: gondola operations, lodge buildings, ski patrol buildings, maintenance buildings, snowmaking buildings, summer uses, parking lots, employee housing, and offsite facilities. Information including operation times, hours of operation in winter and summer use, and floor area square footage is displayed for each facility.

### 6.2 TRANSPORTATION, TRANSIT SERVICES, AND PARKING

Transportation of guests, employees and goods and services is a key component of Heavenly's operations. Safe, reliable and effective transportation systems are necessary for Heavenly to be successful. Heavenly maintains a dedicated staff of seasonal employees at all three base lodges who operate and manage base area parking, snow removal, transit and traffic operations. Additionally, guest service staff are located at the Heavenly Village Transit Center where the shuttle buses arrive and depart to assist guests and employees with the shuttle system. At the other lodges, guest service and security employees are available to help guests and employees with individual problems.

Heavenly's on-mountain road system is an important component of the Resort. It provides the primary transportation system for summer operations, project implementation and watershed restoration and protection activities. The MP (96) Cumulative Watershed Effects Soil Erosion Reduction Program (CWE Program) contains a comprehensive plan and schedule to address the road system. Under the plan, system roads that will remain in use are retrofitted with water quality protection measures (BMPs). Those roads deemed no longer necessary or not desirable to maintain are decommissioned and no longer used. Annual maintenance of the roads occurs on a regular basis following BMP installation. Following adoption of the MPA (07), a comprehensive road use and maintenance plan will be prepared to update and maintain the road system needs, identify additional restoration opportunities and water quality protection measures.

Heavenly maintains winter seasonal employees for parking lot and shuttle bus guest services. There are twenty-one employees for parking control at the California Base Lodge and the Base of the Gondola. There are also twenty-one employees for parking control at the Nevada Base lodges. Traffic entering and exiting the ski resort base areas and parking lots are controlled and monitored daily. The monitoring consists of assisting guests into designated parking areas and maintaining traffic flow.

During peak times (weekends and holiday periods) employees park off-site on at the Ski Run and the Kingsbury satellite parking areas lots located along Ski Run Boulevard and Kingsbury. Employees are shuttled to the base areas using transit vehicles. At the Base of the Gondola, employees park at the rear of the Town Center site. Offsite parking at the California Base Area shall be removed prior to operation of the gondola. Overflow parking for the Nevada Base areas is located on South Benjamin and Quaking Aspen road. Local law enforcement agencies are retained by Heavenly Mountain Resort during peak holidays and certain snow days to provide traffic control at key local intersections.

Table 6-1

## Heavenly Operations Inventory - 2003/2004

Ski Facilities	Time of Year	Winter		Summer		Use
		Hours of Day	Hours of Day	Hours of Day	Hours of Day	
<b>Lodge Buildings</b>						
<i>California Base Lodge</i>						
Rental Shop	Ski Season	8:00	6:00	N/A		Accessory
Retail Shop	Ski Season	8:00	6:00	N/A		Accessory
Locker	Ski Season	8:00	6:00	N/A		Accessory
Ticket Sales	Ski Season	8:00	3:30	N/A		Accessory
Restrooms	Ski Season	8:00	6:00	N/A		Accessory
California Bar	Ski Season	10:00	6:00	N/A		Accessory
Training Room	Ski Season	7:30	6:00	N/A		Accessory
Cafeteria	Ski Season	8:00	4:00	N/A		Accessory
Employee Locker-room	Ski Season	7:30	6:00	N/A		Accessory
Day Care Center	Ski Season	8:30	4:00	N/A		Accessory
Guest Services	Ski Season	8:00	6:00	N/A		Accessory
Human Resources Office	Year Round	7:30	5:00	8:00	5:00	Accessory
Mountain Operations	Year Round	7:00	6:00	7:00	4:00	Accessory
Ski School Operations	Ski Season	7:00	6:00	N/A		Accessory
Lift Maintenance Operations	Year Round	7:00	6:00	7:30	4:00	Accessory
Food & Beverage Operations	Ski Season	7:00	6:00	N/A		Accessory
Burton Demo Center	Ski Season	8:00	6:00	N/A		Accessory
<i>Top of the Tram</i>						
Restaurant	Year Round	9:00	5:00	10:00	11:00	Commercial
Cafeteria	Ski Season	9:00	5:00	10:00	11:00	Accessory
Bar	Year Round	10:00	5:00	10:00	11:00	Accessory
Restrooms	Year Round	9:00	5:00	10:00	11:00	Accessory
<i>Base of Tram</i>						
Tram Drive Machinery	Year Round	7:00	10:00	8:00	2:00	Accessory
First Aid/Ski Patrol	Ski Season	7:30	6:00	N/A		Accessory
Tram Tickets	Ski Season	8:00	4:00	9:00	11:00	Accessory
<i>Sky Meadows Lodge</i>						
Food Service/Preparation	Ski Season	9:00	4:00	N/A		Accessory
Deck	Ski Season	9:00	4:00	N/A		Accessory
<i>Sky Meadows Restrooms</i>	Ski Season	8:00	4:00	N/A		Accessory
<i>Stagecoach Base Lodge</i>						
Slice of Heaven	Ski Season	8:00	6:00	N/A		Accessory
Bar	Ski Season	10:00	6:00	N/A		Accessory
Restrooms	Ski Season	7:30	6:00	N/A		Accessory
Retail	Ski Season	8:00	6:00	N/A		Accessory
Ski Rental	Ski Season	8:00	6:00	N/A		Accessory
Skier Lockers	Ski Season	7:30	6:00	N/A		Accessory
Central Reservations	Year Round	8:00	5:00	8:00	5:00	Accessory
Food Storage	Ski Season	6:00	6:00	N/A		Accessory
Ticket Sales	Ski Season	8:00	3:30	N/A		Accessory
<i>Boulder Base Lodge</i>						
Black Diamond Cantina	Ski Season	8:00	6:00	N/A		Accessory
Bar	Ski Season	10:00	6:00	N/A		Accessory
Restrooms	Ski Season	7:30	6:00	N/A		Accessory
Skier Lockers	Ski Season	7:30	6:00	N/A		Accessory
Retail	Ski Season	8:00	6:00	N/A		Accessory
Ski Rental	Ski Season	8:00	6:00	N/A		Accessory
Guest Services	Ski Season	8:00	6:00	N/A		Accessory
<i>Boulder Lift Tickets</i>	Ski Season	8:00	3:00	N/A		Accessory
<i>Boulder Ski School</i>	Ski Season	8:00	4:00	N/A		Accessory
Ski School Tickets	Ski Season	8:00	4:00	N/A		Accessory
<i>Boulder Employee Locker Room</i>	Ski Season	7:30	6:00	N/A		Accessory
<i>Boulder Employee Locker Room</i>	Ski Season	7:30	6:00	N/A		Accessory
<i>East Peak Lodge</i>						
Cafeteria	Ski Season	8:30	4:00	N/A		Accessory
Bar	Ski Season	9:00	5:00	N/A		Accessory
Restrooms	Ski Season	9:00	5:00	N/A		Accessory
	Ski Season	10:30	4:00	N/A		Accessory
Asian Station	Ski Season	10:30	4:00	N/A		Accessory
Snow Beach	Ski Season	10:00	4:00	N/A		Accessory

Table 6-1 (cont'd)

## Heavenly Operations Inventory - 2003/2004

Ski Facilities	Time of Year	Winter		Summer		Use
		Hours of Day	Hours of Day	Hours of Day	Hours of Day	
<b>Gondola Facilities</b>						
Adventure Peak Grill	Year Round	8:30	5:00	10:00	6:00	Commercial
Café Blue	Year Round	9:00	4:00	9:00	8:00	Commercial
Base Station	Year Round	8:00	8:00	8:00	6:00	Commercial
Ski School	Ski Season	8:00	8:00	N/A		Commercial
Mid-Station	Year Round	10:00	8:30	8:30	4:30	Commercial
Top Station	Year Round	10:00	8:30	8:30	4:30	Commercial
Ski School	Ski Season	8:00	4:30	N/A		Accessory
<b>Ski Patrol Buildings</b>						
Sky Ski Patrol Building	Ski Season	7:30	6:00	N/A		Accessory
Face Ski Patrol Building	Ski Season	7:30	6:00	N/A		Accessory
East Peak Ski Patrol Building	Ski Season	7:30	6:00	N/A		Accessory
Boulder Ski Patrol Building	Ski Season	7:30	6:00	N/A		Accessory
Dipper Ski Patrol Building	Ski Season	7:30	6:00	N/A		Accessory
<b>Maintenance Buildings</b>						
<i>Lower California Maintenance Shop</i>						
Vehicle Maintenance	Year Round	7:00	5:00	7:00	3:30	Accessory
Lift Maintenance	Year Round	7:00	5:00	7:00	3:30	Accessory
Electrical Maintenance	Year Round	7:00	5:00	7:00	3:30	Accessory
Fuel Storage	Year Round	7:00	5:00	7:00	3:30	Accessory
Shipping & Receiving	Year Round	7:00	5:00	7:00	3:30	Accessory
<i>Upper California Maintenance Shop</i>						
Vehicle Maintenance	Year Round	24/hrs/day		7:00	4:40	Accessory
Fuel Storage	Year Round	24/hrs/day		7:00	4:40	Accessory
East Peak Fuel Storage	Year Round	24/hrs/day		7:00	4:40	Accessory
Lift Repair - West Bowl	Year Round	7:00	6:00	7:00	4:40	Accessory
<b>Snowmaking Buildings</b>						
California Base Snowmaking Building	Year Round	24/hrs/day		7:00	3:30	Accessory
California Dam Snowmaking	Year Round	24/hrs/day		7:00	3:30	Accessory
Stagecoach Pumphouse	Year Round	24/hrs/day		7:00	3:30	Accessory
East Peak Compressor Building & Pumphouse	Year Round	24/hrs/day		7:00	3:30	Accessory
<b>Summer Uses</b>						
Hiking Trails	Summer Season	N/A		10:00	6:00	Accessory
<b>Employee Housing</b>						
Keller & Pioneer (24 units)	Year Round	24/hrs/day		24/hrs/day		Residential (SLT)
<b>Offsite Facilities</b>						
Food & Beverage Warehouse	Year Round	7:00	12:00	8:00	4:00	Commercial
Building Maintenance	Year Round	7:00	3:30	7:00	3:30	Commercial
Sign Shop	Year Round	7:00	3:30	7:00	3:30	Commercial
Retail Warehouse	Year Round	7:00	5:00	8:00	5:00	Commercial
<b>Parking Lots</b>						
California Parking Lot	Year Round	7:00	6:00	6:00	6:00	Accessory
Boulder Parking Lot	Year Round	7:00	6:00	8:00	5:00	Accessory
Stagecoach Parking Lot	Year Round	7:00	6:00	8:00	5:00	Accessory
Kingsbury Grade Parking Lot	Year Round	7:00	6:00	8:00	5:00	Accessory
Heavenly Village	Year Round	7:00	10:00	8:00	5:00	Commercial
California Offsite Parking Lot	Ski Season	7:00	10:00	N/A		Special Use Permit (City)
Stagecoach Offsite Parking Lot	Ski Season	7:00	10:00	N/A		S.U.P. (Tahoe Village)
Boulder Offsite Parking Lot	Ski Season	7:00	10:00	N/A		S.U.P. (KGID)

Heavenly's skier shuttle bus service provides free transit service for all guests and employees between all lodges and key lodging properties in South Lake Tahoe and Stateline. Heavenly's system is a key element of Blue Go, South Shore's coordinated transit system. Heavenly operates the system throughout the entire ski season. Levels of service (i.e. headways and routes) are established to respond to demand. Heavenly contracts the operation and maintenance of the transit fleet to Area Transit Management (ATM). Heavenly has developed a transit vehicle replacement plan in order to maintain the reliability of the transit vehicle fleet and take advantage of changes in technology where possible. Additionally, Heavenly implements TRPA's Employer Trip Reduction Ordinance. This includes dedicated employee shuttles and subsidized transit rides for employees.

### 6.3 CUMULATIVE WATERSHED EFFECTS SOIL EROSION REDUCTION PROGRAM

#### **Regulatory Authority**

The 1997 Heavenly CWE Mitigation Restoration Program is the mechanism which implements the Soil Erosion Reduction measure contained in the adopted Master Plan. Implementation of the program is a condition of both Master Plan adoption and implementation which is required by the Tahoe Regional Planning Agency for all in-region lands, and by the USDA Forest Service for all national forest lands. Implementation of the CWE program is further defined in the Forest Service Special Use Term permit for the resort. In addition, the State of California Water Resources Control Board, Lahontan Region, requires the implementation of the CWE Restoration Program through its 2003 updated Waster Discharge Requirements (WDRs) for the California portion of the resort.

Underlying the program is a mutual understanding among all parties that the role of the Forest Service and other agencies is to allow planned development to proceed under the terms of the Special Use Term Permit and Master Plan while providing for environmental protection and public safety, and that Heavenly, as the Permittee, in the execution of its business plan, will comply with all applicable laws, the Special Use Term Permit, WDRs, and USDA Forest Service policies spelled out in plans and permits. The Forest Service provides ongoing oversight both in the field and with the agreements and reports in terms of monitoring and reporting.

Heavenly Ski Area is a bi-state resort, which drains into two different watersheds: the Lake Tahoe Basin/Truckee River drainage and the Carson Valley River watershed. Prevention of water quality degradation through careful planning, design, use, and maintenance of Best Management Practices will receive equal emphasis in both drainages, on private as well as public lands. However, due to the heightened sensitivity concerning water quality issues in the Lake Tahoe Basin, priorities for restoration and revegetation will usually be directed to the Tahoe Basin watershed first.

#### **Program Implementation**

The 1997 CWE Restoration Program followed the adoption of the Master Plan. It identified road and ski run restoration needs by year and by watershed. The program priorities were coordinated with the Master Plan implementation phasing schedule in order to arrive at an optimal sequence of construction and restoration. The Program resulted in attaining the Threshold of Concern (TOC) for each watershed through the application of water quality Best Management Practices by the year 2000 for ski runs and by 2003 for summer maintenance and other roads. This program achieved compliance with the Master Plan mitigation measure which addressed soil erosion reduction (mitigation measure 7.5-1). Beyond achieving the TOC for each watershed (where the ERA values were greater than the TOC), Heavenly committed to applying water quality BMPs for all ski runs, roads and developed sites such as lodges and lift stations terminals.

Early each year, Heavenly staff and Forest Service watershed specialists meet to develop the annual CWE project work list. This exercise has been based on the 1997 Programs Schedule discussed above. Specific restoration projects from the schedule are identified and a program of work is drafted. The list is then transmitted to the Forest Service Winter Sports Permit Administrator and Lahontan Board staff for concurrence. Heavenly crews undertake the projects and prepare mid-season and end of season project accomplishment reports. The entire list of projects on the 1997 list is nearly complete. Now that the list of remedial projects is nearly complete, future annual work programs will focus on maintenance and construction related BMPs. Forest Service specialists monitor the status of the projects in the field and provide technical assistance as needed.

### **Monitoring & Reporting**

Beginning in 1995, Heavenly contracted with the Forest Service through a Collection Agreement to perform annual monitoring and reporting tasks as outlined in the Section 7.6 of the 1996 Master Plan (Heavenly Monitoring Program). These reports have been prepared in accordance with the Monitoring & Reporting Requirements contained in the 1996 Master Plan Mitigation and Monitoring element measure 7.5-2, and with the Lahontan Waste Discharge Requirements. As of February 15, 2005, a revised Collection Agreement became effective wherein the Forest Service will provide oversight of the data collection and reporting. At that time, Heavenly will contract with an independent, third-party to prepare the monitoring reports on an ongoing basis.

On January 30, 2004, the Forest Service issued a Comprehensive Monitoring Report for Water Years 1991-2003. The report represents thirteen years of monitoring data collection and interpretation at Heavenly Mountain Resort (hereafter Heavenly). It is composed of six chapters: this introduction and five chapters addressing the major components of the Monitoring Program Plan, i.e., water quality monitoring, effective soil cover monitoring, BMP effectiveness monitoring, riparian (channel) condition monitoring, and a comprehensive condition and trend evaluation of the four previous components.

The Monitoring Program was developed by the US Forest Service as part of the Heavenly Master Plan Draft Environmental Impact Statement (USDA FS, 1996a) and later incorporated into the Heavenly Mountain Resort Master Plan as Chapter 7 (see Heavenly, 1996). The Forest Service is designated the lead, implementing, and monitoring agency at Heavenly and operates in this capacity through a special use permit.

The primary purpose of this report is to present a condition and trend status for all ski runs, creeks, roads, and structures at Heavenly. Secondly, the information in this report is intended to provide direction to Heavenly and Forest Service management on monitoring and restoration priorities at Heavenly. In addition, the report lists all watershed restoration projects completed from 1992-2003.

### **Conditions and Trend Summary**

Table 6-2 presents the condition and trend summaries for each of the ten subwatersheds, based on the five evaluation criteria outlined under the methods section. Trend statements are based on present condition compared to conditions assessed during the CWE fieldwork of 1991.

**CA-1 (Heavenly Valley Creek):** This is the largest of the ten subwatersheds and as a result, also has the most developed acreage. This watershed also receives the most intensive level of monitoring. The overall condition of the watershed is rated as “good” and the “trend” is much improved.

**CA-4 (Ephemeral Drainages off Roundabout Road):** A portion of Roundabout Road and all of Roundabout ski run (which was cut in 1992) are the only developed areas in this watershed. Both of these features have received BMP retrofits. Effective soil cover on Roundabout ski run is currently 61%. Until a BMP implementation and effectiveness evaluation is conducted, the result of installation of road BMPs is unknown. Based on the fact that CWE projects have been implemented on schedule, and the percent of effective soil cover, the overall condition of this watershed is rated as “good”, and the “trend” is improved.

**CA-6 (California Face; Bijou and Wildwood Creeks):** The ski run, road, and ski lifts in this watershed have all received BMP retrofits. There has also been installation of some BMPs in the California Parking Lot in 1992 and 1993. Water quality results indicate that attainment of water quality effluent standards, while somewhat improved, are still frequently exceeding state standards. Further implementation of parking lot BMPs, along with BMPs for associated structures, is still required. The overall condition of this watershed is currently rated “fair”, and the trend is “improved”.

**CA-7 (Gondola Line):** No developments existed in this watershed within the ski area boundary, until the Gondola system was installed in 2000. Total watershed acreage as reported in the Gondola EA is 284 acres. Estimated developed acreage, as calculated using acres reported in Appendix G of the Gondola EA, is 3.21 acres. Because BMPs are installed as part of project construction, the watershed condition is rated as “good” with a “stable” trend.

**NV-1 (Mott Creek):** All BMPs retrofits have been implemented in this watershed. Overall condition is rated as “good” and the trend is “improved.”

**NV-2+5, NV-5, NV-4 (Middle Fork, South Fork, and South Tributary of Daggett Creek):** All BMPs retrofits have been implemented in this watershed, except for structure BMPs. This watershed is rated as “good” and the trend is “improved”.

**Table 6-2**

## Overall Watershed Condition and Trend Summary

Watersheds	Water Quality Condition	Channel Condition	Soil Cover	BMP Effectiveness	CWE Implementation	Overall Watershed Condition	Overall Watershed Trend
Heavenly Valley Creek (CA-1)	Good	Good	Excellent	N/A	Good	Good	Much Improved
Upper Cold Creek (CA-4)	N/A	N/A	Good	N/A	Good	Good	Improved
Bijou Wildwood (CA-6)	Poor	N/A	Excellent	N/A	Good	Fair	Improved
Gondola Line (CA-7)	N/A	N/A	N/A	N/A	Good	Good	Stable
Mott Creek (NV-1)	N/A	Good	Excellent	N/A	Good	Good	Improved
Daggett Creek (NV-2+5,4,5)	N/A	Good	Excellent	N/A	Good	Good	Improved
Edgewood Creek (NV-3)	Poor	Fair/poor	Excellent	N/A	Good	Fair	Stable
Corser Creek (NV-4a)	N/A	Good	Excellent	N/A	Good	Good	Improved

#### 6.4 SNOWMAKING OPERATIONS PLAN

Heavenly's snowmaking system is an extremely important aspect of the overall resort operations. The snowmaking system is large and complex. It includes several facilities, water from multiple sources, pipelines that are both above ground and below ground, remote valve stations, a mix of snowmaking gun types and a range of climatic conditions over the resort. Operations are conducted based on Heavenly's Snowmaking Manual which is updated from time to time. The Snowmaking Manual contains training and safety procedures, operating procedures, chain of command, communication and reporting requirements. Overall, the snowmaking operations focus on creating the greatest amount of the highest quality man-made snow possible for the least cost.

Snowmaking is conducted based on a Snowmaking Priorities Plan. This plan establishes the operational priorities for early season snowmaking and grooming under different natural snow conditions. It is intended to provide safe and reliable skiable snow surfaces for a variety of ability levels and underlying ground conditions. The Snowmaking and Grooming departments work together to implement the plan. The Snowmaking Priorities Plan generally begins with the opening of the season and can last until natural snow provides full trail coverage.

The Plan is adjusted on an ongoing basis as the season begins and conditions develop. In general, the Snow Plan calls for early season access through the gondola. Trails in the Von Schmidt's Flats area, Tamarack, Dipper and Comet Express pods are covered first. Following that, trails in the Sky and Canyon Express pods are covered following the execution of the initial opening plan. From that point, the snowmaking operations work down the hill on both sides on the resort, including Round-A-Bout trail. An important goal of the Snowmaking Priorities Plan is to provide Snowmaking operations focus on providing top to bottom skiing as the three consistent with the timing of the opening of the base lodges main lodges opening California and Nevada. As the trails are covered, snowmaking operations focus on creating terrain features and the half-pipe.

## 6.5 CONSERVATION & RECYCLING PROGRAM

Heavenly operates a conservation and recycling program the goals of which are to reduce the volume of solid waste produced and promote the purchase and use of recycled materials used at the resort. The program has the following elements:

### **Source Separation**

Heavenly provides source separation for all glass, aluminum, and plastics, which are generated onsite. At this time, recycling includes aluminum, glass and plastic beverage containers. Recycle receptacles are provided for guests and employees to maximize the opportunities for recycling. Office paper and cardboard used in packaging or and shipping is collected at several key sites around the resort and recycled at the South Tahoe Recycle Center. Collection and pick up of materials to be recycled is coordinated with South Tahoe Refuse.

In the near future, Heavenly intends to utilize recycled transmission oil and antifreeze in its rubber tire vehicle fleet as the products become available. Biodiesel fuel for all diesel-powered equipment will be used on a trial basis with the ultimate goal of converting the entire fleet.

### **Use of Recycled Products**

As a part of Vail Resorts, Heavenly purchases many products and materials which contain recycled components or materials. This includes such items as paper towels and napkins. In addition, several Food and Beverage materials have been switched from disposable to reusable. This includes such items as paper towels and napkins. Cooking oils are recycled and reused with the assistance of an outside contractor. Food baskets for many menu items are reused and washed. This replaces previous disposable foam plates. Glassware is replacing disposable cups in most of the indoor bars. Food and Beverage cups and mugs are reused.

## 6.6 NIGHT SKIING

Night skiing and riding will be offered on World Cup run using World Cup lift. The lighting will be the existing overhead lights that are used now for special events. Night skiing will be offered up to seven nights per week, conditions permitting, from mid-December through April. Hours of operation will be from 4:00 p.m. through 10:00 p.m. The existing services at the California Main Lodge will be used. Low-level lighting for the on-snow traverse between the Main Lodge and World Cup run will be needed in order for skiers to move back and forth safely between the two facilities. A specific area of the parking lot will may require new lighting for user safety and security. This area will be located nearest the existing retaining wall at the upper parking lot level next to the existing tram building. It is expected that lighting will be provided for up to three hundred cars. The entire lot will not be lit. All new lighting sources for the on-snow traffic and parking area will comply with the applicable provisions of Chapter 30 of the TRPA Code.