



Winter Sports Program Review

USDA Forest Service Pacific Southwest Region

&

California Ski Industry
Association

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USDA Forest Service Pacific Southwest Region and California Ski Industry Association 2007 Winter Sports Program Review

Executive Summary

With resorts having averaged 7.3 million visits per winter over the last decade, ski areas offer the single most popular primary activity for which people visit the National Forests in California. For many, winter sports provide their initial introduction to the National Forests and an opportunity to build appreciation for California's unique environment. As partners, the Forest Service and ski industry share responsibility for the stewardship of our forest resources and we look forward to continuing to build a relationship based on cooperation, collaboration and mutual benefit in achieving our goals.

In an effort to cultivate this partnership, Regional Forester Bernie Weingardt requested that Region 5 (R5) and the California Ski Industry Association (CSIA) conduct a joint programmatic review of the region's winter sports program. The purpose of the review was to spotlight innovations, create plans for action, provide quality visitor experiences and settings, and spark new energy in the partnership. An interdisciplinary review team of Forest Service and industry personnel was established in October 2006. The team developed a thorough list of questions to analyze the current winter sports program. To gain first hand information, the team met with forest and ski industry personnel at ski areas that represented a cross-section of the region, varying in geographic location and size of operation. Three field reviews were conducted and included visits to the Stanislaus NF, San Bernardino NF, Angeles NF, Eldorado NF and the Lake Tahoe Basin Management Unit.

The site visits began with a meeting of team members, all available host forest line and staff personnel, key members of resort management, and staff from other forests and/or resorts who were interested in participating in the review. After a group vote, the four or five discussion topics that were shown to be of top priority were discussed by the group with a focus on openness, honesty and trust. Following the morning meeting, the group relocated to the resort for the on-site portion of the review including a tour of both on-mountain and base-area facilities, and concluded with a wrap-up discussion of the day.

Following the last site visit, the team determined the top five review areas for action: accident investigation/review; staffing, skills and training; advertising and sponsorship; boundary management; and four season activities and operations. The following collaborative report details the team's findings.

On August 3, 2007, the review team, CSIA members and Forest Service leadership met at Heavenly Mountain Resort. The purpose of the meeting was to discuss the results of the review and to create timelines for action plans and deliverables.

The Forest Service and the California ski industry have been partners ever since the advent of rope tows on Federal land in the Sierra Nevada. Ski areas represent the single most popular primary activity for which people visit the National Forests in California. They also represent the largest private investment in infrastructure, cumulatively the highest fees paid for commercial use, and the highest potential risk and exposure. Most importantly, ski areas represent a unique outdoor opportunity for people to enjoy their public lands through high quality facilities and services in spectacular mountain settings. For many people, winter sports provide an initial introduction to their National Forests and an opportunity to build appreciation for the environment while enjoying the thrill of the sport.

Many of the visions and goals of the Forest Service and ski industry work in harmony; we thrive on sharing the beauty of our setting with visitors and we understand that the forests are a shared resource, which requires cooperative stewardship. Through a strong partnership, the Forest Service and ski industry can accomplish much on behalf of visitors to the National Forests. Both the Forest Service and the CSIA look forward to continuing to build a relationship based on cooperation, collaboration and mutual benefit in achieving our goals.

Background

In February of 2006, Regional Forester Bernie Weingardt met with members of the CSIA to discuss the state of R5's winter sports program. At a follow-up meeting in July of 2006, regional and forest staff met with the CSIA and its members to reaffirm the region's commitment to its partnership with the ski industry, build relationships and look at ways to enhance recreation settings and services. At that meeting, Regional Forester Weingardt requested that R5 and the CSIA conduct a joint programmatic review of the region's winter sports program. The purpose of the review was to spotlight innovations, create plans for action, provide quality visitor experiences and settings, and spark new energy in the partnership.

Methodology

An interdisciplinary review team of Forest Service and industry personnel was assembled in October 2006, and a charter was developed to guide the team's review (Appendix I). The team developed a thorough list of subject areas and questions to analyze the current winter sports program (Appendix II).

The team identified specific ski areas to visit and meet with forest and ski industry personnel to gain first hand information. The ski areas selected represented a cross section of ski areas in the region based on geography and size of operation. Three field reviews were conducted. In Central California the team visited the Dodge Ridge Winter Sports Area and the Bear Valley Mountain Resort on the Stanislaus NF. In Southern California the team visited the Bear Mountain and Snow Summit Mountain Resorts on the San Bernardino NF and the Mountain High Resort on the Angeles NF. The team finished its field reviews in Northern California with a visit to the Kirkwood Mountain Resort on the Eldorado NF and the Heavenly Mountain Resort on the Lake Tahoe Basin Management Unit (Appendix III).

Each site visit followed a similar format. The day began with a group meeting either at a Forest Service office or at the host resort. Present at this meeting were all team members, all available host forest line and staff personnel, key members of resort management, and staff from other forests and/or resorts who were interested in participating in the review (Appendix IV). After introductions and an overview of the review and its goals, team members went over the list of topics open for discussion. All participants except for team members voted for the three topics they thought were most critical to their forest. The four or five discussion topics that were shown to be top priority were then discussed by the group with a focus on openness, honesty and trust.

Following the morning group meeting, the team, resort management and available forest staff relocated to the resort for the on-site portion of the review. After touring both on-mountain and base-area facilities, the team met for more discussion and to wrap up thoughts from the day.

Top 5 Review Areas for Action

- · Accident investigation/review
- · Staffing, skills and training
- Advertising and sponsorship
- Boundary Management
- Four season activities and operations

Accident Investigation/Review

Issue

In some cases accidents such as fatalities, life threatening injuries, or serious potential for claims are investigated by the Forest Service; in other cases permit holders take the lead while the Forest Service reviews the investigation reports. There is inconsistent application of policy with respect to accident investigations and reviews. This has resulted in unintended consequences for the Forest Service and permit holders.

Findings

The Forest Service and ski industry agree that the Forest Service has a legal obligation to review serious incidents. This is consistent with current policy and is a requirement for the upward reporting process. Any review can be turned into an investigation at the discretion of the line officer if circumstances warrant.

- R5 Regional Forester sends letter to the Chief of the Forest Service asking for help in assembling a small, interdisciplinary team with expertise in safety/investigations, ski area special use permits and possibly fire and aviation management to develop appropriate national guidance with the goal of improving accident investigation and review guidance for third party situations.
- 2. Specific areas for the team to review include: determining the proper protocols and procedures to conduct accident investigations and reviews; defining trigger points to determine when the Forest Service does an investigation and/or review; identifying legal requirements for release of documents arising out of accident investigations/reviews; and drafting appropriate clarifications to current Forest Service Policy for these issues. The team should also develop sample language to address these issues in special use authorization operating plans.
- 3. The Forest Service ensures that teams performing investigations and/or reviews contain team members who have the requisite knowledge, experience and training with winter sports facilities and are at the skill level of a "journey" winter sports administrator. Likewise, ski areas have qualified individuals to call upon when an incident occurs. Technical expertise in tramways and avalanches should be required for tramway-related incidents and avalanche-related incidents, respectively.

Winter Sports Staffing, Skills and Training

Issue

To ensure the future success of the partnership, it is essential for Forest Service and ski industry employees to have the requisite skills, knowledge and training.

Findings

Key observations made by the review team that will impact the necessary staffing, skills and training included: changes in the business structure of resorts toward an increasingly corporate culture; necessity of commensurate business acumen on the part of the agency; and momentum toward resort expansion to four season operations.

Many concerns are common amongst a number of resorts. Ski areas sometimes find a lack of communication/understanding with their local Forest Service representatives, slow responses to requests, delays and lack of attention, much of which stems from understaffing. Lack of job knowledge/expertise and vacant positions that remain unfilled for months are also of concern. As businesses, ski areas need timely replies to requests in order to stay competitive, especially in a seasonal business where oftentimes action needs to be taken when the funds are available.

The concerns among Forest Service representatives were also fairly consistent. Forest personnel acknowledge that they are understaffed and have difficulty filling vacant positions. The upcoming retirement of the most experienced staff will leave vacancies unable to be covered by the smaller number of less experienced staff. According to one Forest Supervisor, because ski area management is not in the Forest Service job description, it often receives only minimal focus. Another Forest Service representative noted, "We're at a tipping point, and the current effort put into the ski industry is not sustainable".

- 1. **Staffing -** Staffing is best organized to manage clusters of ski area permits based on geographic location. The Team recommends the following minimum staff to manage the winter sports program in California:
 - Regional Winter Sports Program Leader (full time): With 23 ski areas in the region, the second largest winter sports program in the nation considering both the number of permits and the number of ski area visits per year, the region needs a winter sports expert to provide guidance, training and direction to ski area permit administrators throughout the region. This model has been successful in Regions 9, 2 and 4. This position could potentially be shared with one or more regions.
 - Avalanche Control and Military Weapons Program: Three ski areas in California have a military
 weapons program to aid in the control of avalanche prone areas. With the imminent retirement
 of Bob Moore, Truckee Ranger District, who has served this regional role, there is a need to
 have either a regional winter sports program leader or one of the ski area permit administrators
 oversee this program.
 - Ski Area Permit Administration: R5 should have a minimum of 5 full time ski area permit administrators: Southern California (Angeles and San Bernadino NFs), Central Sierra (Stanislaus and Sierra NFs), Tahoe NF, Lake Tahoe (Eldorado NF and Lake Tahoe Basin Management Unit) and Inyo NF. It is critical that these positions are full time, full performance ski area permit administrators to fully understand and keep current on the following: master development planning, calculating fees, coordinating billing and audits, working with ski areas on annual operating plans, reviewing project proposals, administering cost recovery agreements for projects, coordinating with tramway engineers and others with inspection responsibilities, maintaining effective relationships with permit holders (ski area operators/owners), inspecting for permit compliance, serving on interdisciplinary teams for NEPA analysis, reviewing accident

reports, coordinating with other resource specialists and other agencies, and maintaining knowledge and experience on ski area and four season resort operations.

- 2. Continue to share regional tramway engineer with Region 4.
- 3. Establish a Regional technical assistance IDT or "center of excellence" for master development planning.
- 4. Maintain entry-level positions for special use permit administration, including ski area permit administrators. Also, develop future ski area permit administrators by providing entry-level positions under the supervision of journey level administrators.
- 5. Train both forest and ski area staff in order to maintain consistency and knowledge, especially in the midst of staff changes.
- 6. **Training -** Within Appendix VI is a paper titled "Ski Area Permit Administration Skills" (April 2003), which details the skills, knowledge, experience and abilities needed to fulfill the role of journey level ski area permit administrator. This paper was presented as a working document through the Forest Service National Winter Sports working group (aka Snow Rangers). In addition, the team presents the following recommendations:
 - Provide national training on resort master development planning. This could be provided through a partnership with ski and marina industries and consultants. A California State University or community college could host the training for continuing education credit.
 - Provide winter sports NEPA training for both industry and agency personnel. This should be a
 joint partnership project with the Forest Service and ski industry. This model was very
 successful in building understanding of NEPA several years ago.
 - Provide training and on-the-ground assistance on the military weapons program.
 - Encourage broader winter sports training for line officers and permit administrators.

Advertising and Sponsorship

Issue

Most ski resorts operating on private lands obtain significant revenue from advertising and sponsorship deals with independent companies. This revenue allows resorts to fund special programs, maintain facilities and promote their areas. Compared to private resorts, ski areas located on Forest Service lands are at a disadvantage due to advertising restrictions that limit their potential revenue.

Findings

Many of the team's recommendations are already under review as part of a proposed rule in the Federal Register (70 FR 71081). The proposed revision of Forest Service Manual (FSM) 2343.03, which was published in November 2005, will govern advertising and sponsorship in connection with concessions operated under special use permits. Analysis and response to public comment is in progress, and the final policy is expected soon. An interim directive currently allows limited advertising and identifies sponsorship as a viable alternative.

- 1. Establish a joint working group to develop a zoning plan that would enable permit holders to identify different zones within ski areas and present what types of experiences would be expected in each zone.
- 2. Consider an R5 pilot project for sponsorships and zoning.

- 3. Create an R5 guidebook on appropriate indoor advertising, outdoor signing, sponsorship recognition and ski area/resort zoning.
- 4. Incorporate zone definitions (i.e. base area vs. on-mountain) and mapping into master development plans.
- 5. Share the review team's recommendations before new national policy is finalized (Beth LeClair will bring forward).

Ski Area Boundary Management

Issue

Visitors are demanding access to National Forest lands outside the ski area. These skiers are drawn to the thrill of skiing the back-country, but like the ease of access afforded by the resorts.

Findings

Forest Service and industry personnel raised concerns about public safety, employee safety and resort liability. Despite the fact that accidents occurring outside of the ski area permit boundary are not the responsibility of ski patrol, patrollers often feel a duty to help those in trouble regardless of location. Resorts are looking for clear direction on how to manage boundaries. Because each resort has unique geography and circumstances, there is no "one size fits all" standard. Generally, the management approach that seems to be most successful is an open boundary policy with gated or designated exit points to control where guests leave the ski area and allow for return to that ski area (example in Appendix VII).

In answer to questions at the field reviews, the team reinforced the following tenants of boundary management planning:

- Special use permits allow ski areas to manage National Forest lands within the permit area by opening and closing areas for appropriate safety reasons or for unique events. Examples of such hazards include limited snow cover, limited visibility, icy snow conditions, avalanche conditions, grooming and snowmaking equipment, and races or special events. The extent and duration of these closures are determined by resort management.
- National Forest Lands outside the ski area permitted boundary may be closed only under the authority of the Forest Supervisor. Resorts may not close access.
- > Ski area boundaries must be clearly marked on the ground.
- ➤ The National Ski Areas Association (NSAA) endorses The Skier Responsibility Code, which specifically sites "Observe all posted signs and warnings. Keep off closed trails and out of closed areas." It is the responsibility of the skier/boarder to make themselves aware of the locations of all closures and observe them.
- The Forest Service and area operators have the responsibility to establish a ski area closure/boundary program that should be addressed in the ski area's operating plan. Boundary management plans may include a buffer zone approach between the developed ski runs and the actual permit boundary, an approach that reduces breeching of the ski area boundary by closing off the buffer area. Other resorts may choose to employ a combination of different types of closures, from internal to boundary closures.
- > Ski area boundaries may consist of natural terrain features, posted warning signs, installed fence or rope barriers and snow berms, all of which must be maintained with "reasonable care" by the ski area.



Typical ski area boundary signs. Sign on right specific to boundary against wilderness area.



Typical Boundary Gate found in R-5

Sugar Bowl

- 1. Establish gates or exit areas in locations where skier control is necessary. One resort uses counters on their gates to keep track of how many people leave the area each day. (Examples in Appendix VII.)
- 2. Address boundary management in the operating plan.
- 3. Establish ski area boundaries where they can be managed.

- 4. Post signs at points of access to the closed areas as well as at the chairlifts to inform skiers/boarders of closures.
- 5. Provide language on ski area trail maps and other such materials to inform the public about the dangers of skiing/riding beyond the permit area or in canyons inside the area boundary.
- 6. Enforce penalties for those who breach area boundaries. Determine respective Forest Service and ski area responsibilities for enforcement. Currently, penalties vary by ski area and include loss of lift privileges, administration of a written test on the consequences of breeching a boundary or even arrest.
- 7. Provide regional guidance with photos on how to mark and manage boundaries.
- 8. Include all boundary management in resort operating plans.



Physical gate with counter and appropriate warning signs

Heavenly Mountain Resort



Typical Gate System found in R-2

Aspen Mountain

Four Season Activities

Issue

Public demand for four season recreational activities on Forest System Lands is increasing. Ski areas are interested in providing these experiences not only to meet public need, but to make full use of their large investment in resort infrastructure. Communities also derive significant financial benefit from the trend toward four season activities as the businesses provide year-round employment for those serving the public at these resorts.

Findings

Resorts located on Forest System Lands are at a disadvantage compared to those on private land when proposing ideas such as zip lines, mountain bike parks, alpine slides or similar activities. Responses to proposals are often based on subjective determinations by the line officer rather than on objective criteria.

Recommendations

1. Establish working group to develop regional guidance on four season activities.

Other Review Areas and Recommendations

Alternative Structures

Issue

Alternative building materials structures made by companies such as Sprung, Tenta, Pacific Yurt and European manufactures are becoming increasingly popular and practical at ski areas. These structures feature such elements as earth toned color schemes, wainscoting, trim packages and entry treatments made of timber and stone materials.

Findings

Forest Service and industry personnel both stated the need to be open to looking at ways to provide economic solutions to indoor space while respecting the natural setting and leaving a light footprint. Opinions varied on how the aesthetics of alternative structures affects the ski area setting. Each resort visited had either already installed at least one structure or had plans to do so in the next 5 years. (Details in Appendix VIII.)

Resorts are looking for a way to be able to utilize these facilities for a longer term, but there has not been clear direction on how to approve these types of structures under the existing Built Environmental Image Guidelines (BEIG). To date, all have been approved as "temporary structures" with inconsistent terms of approval ranging from 1 year to 12 years. At each site, there is an agreement to extend the temporary approval pending available resources to replace the temporary facilities with permanent ones. Most counties initially had problems with how to approve permits for these structures. In the case of Mountain High, the Angeles NF approved it, but the county did not, while at Sierra Summit, the county deferred to the Forest Service.

In a letter dated July 3, 2006 to Michael Berry, President of the National Ski Areas Association, Forest Service Director of Recreation James Bedwell provided direction regarding approval of temporary structures within the BEIG. His letter was interpreted to give the authority to approve structures made of alternative building materials, as long as it fits the ecological, cultural/social, and economic context of the area. That has been interpreted in a number of ways, but all agreed it did not prohibit longer approvals.

- 1. Continue to apply the direction outlined in James Bedwell's 2006 letter.
- CSIA should discuss temporary vs. permanent structure approvals with the California Association of Rural Counties.



Example of alternative structure design



This alternative structure at Dodge Ridge Wintersports Area temporarily replaced the area's fire-damaged lodge.



Alternative structure at Sierra Summit Mountain Resort

Climate Change and Sustainability - The Greening of our Slopes

Issue

Climate change is real. Human activity is accelerating the change and carbon emissions are at the root.

Findings

Twenty-five years ago snowmaking was unnecessary at high sierra resorts. Today, the majority of resorts are deeply invested in snowmaking systems, and they are using them with increasing regularity. Studies by Scripps Institute, the U.S. Geological Survey and the National Academy of Sciences have demonstrated that spring temperatures in the Sierra Nevada have increased 2-3% since 1950. Peak snowmelt now occurs two to three weeks sooner. These studies estimate that by the end of the century, absent reduction and mitigation of carbon emissions, the Sierra Nevada snowpack could be reduced by 89%.

California, with the world's sixth largest economy, is prepared to take the lead in regulating carbon emissions. The response from private and public leaders as well as the media worldwide has been profuse and overwhelmingly positive.

- 1. Continue to share best management practices. Examples highlighted during the review include:
 - Green Tags. Most of the state's resorts purchase renewable energy credits to compensate for greenhouse gases generated by their energy use.
 - Biodiesel. Mammoth Mountain has developed critical storage and handling procedures to run 20% biodiesel in all their snowcats.

- Recycling. At every ski area visited, recycling programs were central in both base and mountain operations. Innovative trash receptacles, such as chairlift "Trash Targets" and biodegradable food service supplies are other examples of green practices.
- Transportation. Resorts are providing or subsidizing public transportation for guests within and beyond resort facilities. They also encourage and provide incentives for carpooling.
- Construction. Insure that all new buildings meet or exceed the latest green construction standards. Undertake an energy audit of existing facilities using an infrared camera to locate heat leaks in roofs, ceilings and windows.
- Diesel Upgrades. Upgrade stationery diesel engines to meet future Air Resources Board standards. Snow Summit's new 12.5-megawatt facility, which powers its extensive snowmaking system, has reduced emissions by 85%.
- 2. Promote sustainability awareness and best practices to all visitors.
- 3. Explore alternative energy sources such as solar, wind turbines and geo-thermal generation.
- 4. CSIA should continue to support legislation that promotes responsible care of the environment.
- 5. Forest Service and industry should work more closely together to provide greater visibility for sustainability (signage, taglines etc.).



"Trash Target" at Snow Summit

Master Development Planning

Issue

Frustration with delays in the master development planning process exist amongst both Forest Service and industry personnel.

Findings

The most common frustrations result from inconsistent interpretations by ski areas and the Forest Service, delays in communication and action, unclear expectations and lack of understanding of the master development process. Delays in the process can result from inadequate availability of personnel, turnover in key Forest Service or ski area personnel, or a change in the business direction of ski area management.

A master development plan (MDP) is a conceptual plan of a ski area's proposed development. The plan is submitted to the Forest Service for *acceptance*, not approval. Accepted MDPs cannot be implemented on the ground until the appropriate environmental analysis is completed. Environmental analysis may be done all at once or, more logically, in phases over the length of the accepted MDP. Each project within the MDP must then be *approved* by the Forest Service as detailed location and construction plans are readied for development. Modifications to the MDP can be submitted as amendments.

Recommendations

- MDPs should show the relationship of the development to both public and private lands. They should show the rationale for the proposal and provide assurances that the land will be developed in the public interest. While ski areas are responsible for the preparation of plans, cooperation and coordination with the Forest Service, appropriate Federal agencies and local government is essential throughout the process.
- 2. The Forest Service and ski industry should develop and implement joint training on MDP development. Costs should be shared between the Forest Service and ski industry.
- 3. While the MDP process may change over time, the most important constant is frequent communication between the ski area, the Forest and the public throughout the planning process.

Project Proposal Review

Issue

Aside from the formal procedures provided by NEPA guidance and regulation, there is no consistent Forest Service defined process for project proposal review. This void has been a constant challenge in achieving success for complex, multi-component projects such as master development planning and base lodge/ portal development.

Findings

Project proposal review and the decision-making process under NEPA could be streamlined and more efficient. Project proposal reviews, even for relatively routine undertakings such as lift replacement, must compete with other forest priorities for time and resources.

Ski area business decisions occur in an increasingly dynamic and fluid setting. High capital outlays required for replacement of aging infrastructure necessitate an ability to change course, shift resources, and build for the future when and where capital becomes available. Oftentimes, this means moving from plan to implemented project across timeframes as short as three to six months – a timeframe that is difficult for forest staff to meet. Where staffing was identified as adequate, meeting timeframes for review and successfully guiding contractors through agency NEPA processes was accomplished. Where staffing was identified as inadequate, projects were unsuccessful for two main reasons: insufficient front-loading of the process, and a high degree of project

complexity. Oftentimes initial proposals are not sufficiently vetted both inside the agency and within the resort management setting to arrive at clear, agreed upon goals and objectives.

Forest Service decisions on project proposals sometimes differ from ski area to ski area. Discretion has led to very context specific decisions at ski resorts. Corporations often own multiple ski areas, not necessarily within the same forest or even the same region. Tension exists as this multiple ownership has created an expectation of consistency in Forest Service decision-making on project proposals.

Ski areas sometimes cancel projects after the forests have rushed to meet deadlines foregoing other important priorities.

Overall, the review demonstrated a clear shift in how the Forest Service reviews, analyzes and approves ski area projects. As third party contracting and consultants become more common, the role of the Forest Service has changed from hands on, in-house analysis to project management and review of contractor work.

Recommendations

- Front-load the project proposal process. Where projects were successful, effective communication during proposal development and analysis was critical to efficient analysis and decision-making. Ensuring that both the ski areas and the forests have a clear understanding of the purpose of new projects and agree that proposals are ripe for implementation is critical. Additionally, it is important that contractors and consultants are provided with clear direction early in the process.
- 2. Develop a ski area planning and project review guidebook for ski area specific NEPA with a specific emphasis on helping consultants understand agency processes.
- 3. Ensure that forest and industry representatives and consultants meet when necessary to communicate and coordinate project specifics.
- 4. Develop Forest Service guidelines for project development.
- 5. Provide forest examples of 'acceptable' projects and proposals to aid in finding more consistency in projects approved at different ski areas in forests across the country.

Collection Agreements

Issue

Ski area projects requiring a high Forest Service commitment of time and staffing have traditionally been accomplished through transfer of funds from the permit holder to the Forest Service to cover costs associated with project management, analysis, and document production. One issue is the ability of the Forest Service to efficiently collect funds and consistently account for how funds are expended under collection agreements. Another issue is that forests sometimes have differing views on what kinds of activities should be charged to collection agreements.

Findings

Tracking Costs

Given the high costs associated with project planning, analysis and decision-making processes, ski areas need the forests to provide clear reporting on how fees collected are expended. Forest personnel identified their accounting tools and procedures as insufficient to allow for detailed tracking. Oftentimes multiple projects or multi-phase proposals are reviewed under one collection agreement, making tracking each phase or project more challenging. Those forests that successfully addressed this issue, provide ski area partners with stand alone reporting based on a combination of Forest Service transaction registers, good daily notes, and careful day to day tracking. Although a workable solution for the interim, tracking expenditures outside traditional Forest Service accounting systems and the Albuquerque Service Center (ASC) adds an extra layer to project management many found cumbersome and time consuming.

Additionally, the ability to acquire job codes for collection agreement projects in a timely manner is hindering the ability of the forests to respond to rapidly evolving proposals. Delaying the start of field work or analysis while waiting for a Forest Service job code can result in long project delays.

Activities Charged to Collection Agreement

The range of activities charged to collection agreements varied from ski area to ski area. In some instances general administrative functions such as routine monitoring of operations were charged to collection agreements, whereas in other instances only direct project related costs were recovered.

Recommendations

- 1. Improve coordination with ASC to develop appropriate accounting tools for tracking collection agreement expenditures.
- 2. Provide clear Forest Service guidance on appropriate use of collection agreements in conjunction with targeted training in cost recovery for large projects.
- 3. Share fund tracking tools between those forests accomplishing effective tracking and reporting and those who would benefit from help.

Lift Guidance (ANSI)

Issue

There is a discrepancy between ANSI lift standards and California state standards, and the MOU between the Forest Service and the State of California is rather ambiguous. Additionally, there seems to be inconsistency in the definition of a reportable lift incident.

Findings

Ski Area Permits require that all ropeways operated on National Forest Lands comply with the current edition of the ANSI B77 Standard for Passenger Ropeways. According to ski area permits, areas are also subject to California OSHA regulations and inspections. The standard to which the State of California inspects is based on an older ANSI B77 Standard. An MOU between the Forest Service and the California Department of Industrial Relations was created to address the differing compliance standards and to coordinate inspections to minimize duplication. The Forest Service no longer "inspects" but monitors ropeways.

The MOU states that the Forest Service will accept lift inspections conducted by the state of California. If the state finds a deficiency, the Forest Service receives a copy of the document certifying that the resort has corrected the problem. The CalOSHA inspector puts the most weight on the latest recommendations from the lift manufacturers under the assumption that they know the products the best. The Forest Service sees the state standard as a minimum requirement and would like to see consistency between state standards and the most current ANSI standards.

- 1. Forest Service regional management, permit holders and the State of California coordinate a resolution of compliance discrepancies.
- 2. Address compliance with the current ANSI B77 Standard through additional language in the certification of inspection compliance statement and/or in signed operating plans to ensure that current requirements are followed.
- 3. Provide regional direction in operating plans and MOU to address the different levels of regulations to which ski areas are subject.

- 4. In the interim, the Forest Service should continue to follow the MOU and accept the inspections performed by the California OSHA Tramway Unit.
- 5. Ski areas, if not doing so, should submit the required Certification of Inspection.
- 6. Use the State of California incident definition as a minimum and develop protocols for notification in operating plans. The operating plan should address actions that should be taken after an incident, including what constitutes a reportable incident, which officer should be contacted and how much time can elapse before contacting that person.

Snowmobiles

Issue

The public use of snowmobiles within ski area boundaries is common at several resorts.

Findings

Ski area managers do not want to be held liable for injuries or death resulting from snowmobile use, nor do they want their areas vandalized, grooming torn up or terrain park features damaged. Examples of conflict include large unauthorized gatherings and snowmobiles jumping off terrain park features on full moon nights.

Recommendations

- 1. Forest Supervisors use the following material interference criteria to restrict snowmobile access through closure orders:
 - Public safety concerns with snowmobiles traveling in close proximity to lift towers and other structures
 - The potential liability exposure of the ski area for injuries or deaths of snowmobilers when the ski area has no control over the activity
 - Potential for increasing avalanche risks and resulting damage
 - Potential for collisions with skiers/back country skiers who may visit the area even after closure
 - Interference with ski area summer maintenance activities
 - Damage to assets of the resort such as lift towers, snowmaking equipment, buildings and signage
 - Damage to surface by ATVs leading to erosion control problems (ski area is currently charged with addressing this is operating plans)
- 2. The Forest Service should continue to work with Bear Valley Mountain Resort and the Stanislaus NF to resolve issues concerning an unauthorized post-season snowmobile event.

Fuels Management

Issue

Fuel loading and unhealthy forests exist in many of our ski areas. In this intensively used setting, vegetation management is important to maintain a healthy forest, and ski areas are very interested in maintaining and enhancing the health and vigor of the forest. Ski areas typically have a large investment in infrastructure on the permitted lands that needs to be protected from wild land fire. Reducing fuels loading within a ski area is key to fire prevention. As part of the special use permit, a vegetation management plan is required.

Findings

Several resorts have worked with the Forest Service under the auspice of the Healthy Forest Initiative to help reduce dead and dying trees and other fuels located near resort facilities. Some areas have taken advantage of forest service wide initiatives to improve forest health within the ski area boundary.

Recommendations & Best Practices

Some of the best management practices that the team witnessed are:

- 1. Work cooperatively to identify areas of the resorts that are most at risk and where fuels treatments could be most effective.
- Consider working out a cost share/collection agreement to address fuels reduction by creating more defensible space to protect resort infrastructure, the forest, and nearby towns. Seek grants for fuel/healthy forest programs.
- 3. Maintain legal fire clearance around structures, including construction. Each year, have all summer personnel participate in a fire fighter refresher or training session. Train all personnel on how to use the snowmaking systems as effective fire suppression tools. Ski runs and snowmaking/water lines can be a great non-natural way of reducing fire damage.
- 4. Coordinate with the local battalion chief ahead of time to allow the Forest Service to lease portions of the base area as an incident command post or helibase as needed in an emergency.
- 5. Have resort personnel participate in Forest Service fire management educational programs. Be better prepared by developing a good relationship with fire management personnel in the Forest Service.
- 6. Purchase appropriate initial attack fire fighting equipment such as shovels, pulaskis, water back packs, 1st aid kits, etc. and have them in a dedicated cache ready for use by resort employees. Ensure each vehicle working on the mountain is equipped with minimum fire fighting equipment (shovel, Pulaski, back-pack pump and communications).
- 7. Certain trucks can be used as "engines" as long as they are properly outfitted. Ensure this equipment is compatible with Forest Service engines.
- 8. Install sprinklers on critical buildings or lift terminals to add extra protection. Resorts will work with the Forest Service to provide fire clearance of 100 feet around all structures is fire prone areas. This meets the current Public Resource Code requirements.

Appendix I

Initiation Memo



Forest Pacific
Service Southwest
Region

Regional Office, R5 1323 Club Drive Vallejo, CA 94592 (707) 562-8737 Voice (707) 562-9130 Text (TDD)

File Code: 2700 Date: October 19, 2006

Route To:

Subject: Activity Review, Region 5 Winter Sports Program

To: Forest Supervisors

REPLY DUE NOVEMBER 20, 2006

In July regional and forest staff met with the California Ski Industry Association (CSIA) and its members to reaffirm our commitment to our partnership with the ski industry and to look at ways to enhance recreation settings and services through these special use permits. At that meeting I requested that we conduct a programmatic review with the CSIA of Region 5's winter sports program. The purpose of this review is to create plans for action, provide quality visitor experiences and settings, and spark new energy in the partnership to meet this goal.

The attached charter identifies the review team and also describes the review objectives, process, and field review dates. If your forest is identified for a site visit in the attached charter, please forward the name of a forest liaison to work with team leader, Marlene Finley by November 20.

I look forward to receiving the team's final report. Please take advantage of this historic opportunity to be a part of enhancing our winter sports program.

/s/ Thomas L. Tidwell (for) BERNARD WEINGARDT Regional Forester

Enclosures

cc: Marlene Finley Thomas A Contreras Robert Kates Beth LeClair Robert H Moore Mike Schlafmann Curt Panter Bob Roberts John Rice Brent Tregaskis

Charter

Charter Region 5/California Ski Industry Association Activity Review Region 5 Winter Sports Program

Purpose: Conduct a joint review of the Region 5 Winter Sports Program with the California Ski Industry Association (CSIA) to spark new energy in the partnership and create plans for action to provide enhanced quality visitor experiences and settings.

Objective: Elevate the visibility and communicate the importance of the Region 5 Winter Sports Program. The Team will also identify ways to expand the experience and learning beyond this review with the intent to share experiences, grow participation, and open other opportunities.

Review Team:

Marlene Finley, R5 Director of Recreation, Wilderness, and Heritage Resources Activity Review Team Leader

Tom Contreras, Forest Supervisor, Mendocino NF

Bob Kates, R5 Concession Program Manager

Beth LeClair, R9 Winter Sports Team Leader

Bob Moore, Winter Sports Specialist, Tahoe NF, Truckee Ranger District

Curt Panter, R3 and R5 Tramway Engineer

John Rice, General Manager, Sierra @ Tahoe Ski Resort

Bob Roberts, Executive Director, CSIA

Mike Schlafmann, Winter Sports Specialist, Inyo NF, Mammoth Ranger District

Brent Tregaskis, General Manager, Bear Mountain Resort

Kathy Hubbard, Director of Administration, CSIA

Alex Fabbro, Government Relations Manager, Mammoth Mountain Ski Area

Review Focus Areas:

• Policies and guidelines – Are current Forest Service policies, guidelines, and special use permit language meeting the needs of Region 5 and the ski industry to provide quality visitor experiences and settings? The team will review Forest Service Manual and Handbook direction and special use permit clauses. Specific areas include advertising/sponsorship, avalanche control, alternative structures design, lift guidance, and compliance with Federal, state, and local laws and regulations.

- Processes Are current processes working effectively to get the work done in the most efficient manner? The team will examine current processes for accident investigations, collection agreement accountability, master development plan reviews, lift incident submittals, and project proposal review.
- Practices Are current agency and ski industry practices effective in providing quality visitor experiences and settings. The team will review current practices related to boundary management and sustainability.
- Communication Is there effective communication between the regional office, forests, districts, and the ski industry to meet winter sports program goals and objectives? The team will examine the communication between these groups to improve working relationships if necessary.
- Staffing, Skills & Training Does Region 5 and the ski industry have adequate staffing to assure quality program delivery? The team will review current staffing, skills, and training for both to determine if we are meeting current needs and in the future.

Field Review Locations and Dates:

- Central California (Stanislaus NF, December 13-15, 2006)
 - Dodge Ridge Winter Sports Area, December 14
 - Bear Valley Mountain Resort, December 15
- Southern California (Angeles and San Bernardino NFs, January 24-26, 2007)
 - Mountain High Resort, January 25
 - Bear Mountain Resort and Snow Summit Mountain Resort January 26
- Northern California (Lake Tahoe Basin Management Unit and El Dorado NF, February 27-29, 2007)
 - Heavenly Mountain Resort, February 27
 - Kirkwood Mountain Resort, February 28

Work Product: The Activity Review Team will produce a final report for the Regional Forester and the CSIA Board of Directors outlining its findings and recommendations.

Appendix II

R5 Winter Sports Activity Review Questions

Big Picture

- What's working well in the winter sports program?
- What concerns do you have with the winter sports program?

Relationship/communication between ski area and the Forest Service

- How would you describe the relationship with your business partnership counterparts? What words best describe it?
- How often do you meet with your business partnership counterparts (Forest Service line and staff/ski area personnel)? Under what circumstances?
- Describe how the relationship is effective and any recommendations for improvements, if necessary.

Sustainability practices

- What practices, building design and materials and products are being used to reduce the footprint of energy use and improve the environmental sustainability of the ski area?
- Are you familiar with LEEDS (Leadership in Energy and Environmental Design)?

Staffing, skills, and training

- What is your present staffing for winter sports? How are you organized to develop proposals/ administer permits and respond to proposals?
- What key staffing and skill sets contribute to your success, or would improve your capacity/ effectiveness in administering ski area permits?
- What are you doing to help maintain or develop the skills you will need in the future? Are there any areas of training you think are needed? If so, what are they?

Special use permit clauses and administration

- Are you familiar with ski area business principles?
- What would you do to change and streamline the special uses permit process that would be beneficial to the Forest Service and the permit holder?
- What percentage of time do you expend on your job administering the special use permit?
- Are there any terms and conditions of the special use permit that you do not understand? Do you have any questions regarding the terms and conditions of the SUP?

Master Development Plan (MDP) Reviews

- What is your experience with the development of a new or expanded MDP for a ski area/four season resort?
- Do you have suggestions to improve MDP reviews?

Project Proposal Review

- Describe the plan to project and decision-making process you utilize most often for ski area projects, including how decisions are made on the appropriate level of NEPA.
- What process is followed to determine when special use facilities project proposals are submitted to the engineering director, forest supervisor, forest engineer or district ranger or other specialist for technical review and approval? (see FSH 7309.11)
- What is most effective about your project proposal/ decision process and how would you improve it?

Collection agreement (CAs) accountability

- When is it appropriate to charge to a collection agreement? What types of tasks are appropriate under a collection agreement?
- How does your unit report accomplishments under collection agreements to agency partners, in particular co-signatories to CAs?
- Do you have any suggestions to improve the process?
- Review collection agreements, determine if there are associated PWPs and consider what kinds of work are or should have been completed under CAs.

Accident investigations

- What is the Forest Service policy w/ respect to accident investigations?
- Do you have a copy, or are you familiar with the Accident Investigation Guide, 2005 edition?
- Are accident investigations addressed in the winter operating plan?
- Have you discussed and agreed upon, with your management counterparts, reporting and investigation procedures?
- Do you have any recommendations to improve investigation policy?

Alternative structures design guidelines

- Does your resort currently have, or plan to install structures that are constructed of alternative building materials (stretched membrane/fabric from Sprung, Tenta, Pacific Yurt, or others)?
- What is the term of approval for these structures? (temp/permanent and # years)
- How do your structures meet the intent of the Built Environment Image Design Guide (BEIG) with respect to color, texture, theme, setting, or environmental context?
- What process is followed when there are no Forest Service professionally qualified architectural, engineering and other assistance to evaluate the technical adequacies of alternative structures?

Advertising/sponsorship

- What is the FS policy for advertising and sponsorship? Describe the interim directive issued within the last two years.
- Do you have any questions relating to advertising and sponsorship?
- Have you had sponsorship signing disapproved? What was the reason? Or as the authorized officer, have you disapproved a proposal for advertising or sponsorship?

Compliance with law, rules, and regulations

 How does your unit monitor/ ensure compliance with non-FS Federal, state and local rules and regulations (i.e. county health & safety, CalOSHA, building permits, regional water quality board orders)?

Lift incident submittal

- Is there an incident definition and reporting requirement listed in the operating plan outlining when ski areas are to notify the authorized officer?
- How are you implementing the MOU with the state of California?
- What process should be taken by the authorized officer after a serious accident involving a ropeway or failure of a critical ropeway component?

Lift (ANSII/B77) guidance

- Does the Forest or District, via the Permit Administrator, receive a Certification of Inspection or letter from the Permit Holder as required by Special Use Permit (SUP) and the ANSI General Inspection, and does it include the proper language outlined in SUP and FSM 7320? If so, when do you get the Certification/letter?
- Does the Permit Administrator require the Permit Holder, via Operating Plan, to notify District personnel when inspections by State of California or insurance engineer inspections are scheduled?
- Does the Permit Administrator receive copies of state inspections and if so, how are they used?
- How are you implementing the Memorandum of Understanding with the State of California Tramway Unit?
- How do you ensure that the current B77.1 Standard requirements are met?

Avalanche control

- How do you monitor snow safety procedures including avalanche control (where applicable) at your ski areas?
- How familiar are you with the avalanche guide checklist? If so, how helpful do you find it?
- Are the responsibilities for avalanche control adequately addressed in the winter operations plan?
- Do you have any recommendations to improve snow safety procedures and avalanche control?

Boundary/closure management

- Does the operations plan give ski area personnel the authority to mark and close the boundary and close off areas within and outside the permit boundary?
- Have you had recent discussions w/ your permit administrator/ski area personnel clarifying your individual procedures w/ respect to boundary management?
- Are your boundary/closure procedures consistent w/ other forests and ski areas?

Snowmobiles

- Do you have any snowmobile conflicts, perceived or otherwise?
- What are your recommendations for resolving conflicts?

Appendix III

Ski Areas Reviewed

December 13-14, 2006 - Stanislaus National Forest

Dodge Ridge Wintersports Area 1 Dodge Ridge Road Pinecrest, CA 95364

Bear Valley Mountain Resort Highway 207 at Highway 4 Bear Valley, CA 95223

January 24, 2007 - San Bernadino National Forest

Bear Mountain Resort 43101 Goldmine Drive Big Bear Lake, CA 92315

Snow Summit Mountain Resort 880 Summit Blvd. Big Bear Lake, CA 92315

January 25, 2007 - Angeles National Forest

Mountain High Resort 24510 Highway 2 Wrightwood, CA 92397

March 20, 2007 - Eldorado National Forest

Kirkwood Mountain Resort 1501 Kirkwood Meadows Drive Kirkwood, CA 95646

March 22, 2007 - Lake Tahoe Basin Management Unit

Heavenly Mountain Resort 224 Kingsbury Grade, Suite 202 Stateline, NV 89449

Appendix IV

Field Review Attendees

Stanislaus NF

CSIA:

Brent Tregaskis, Bear Mountain Resort Jim Gentling, Bear Valley Mountain Resort Andrea Young, Bear Valley Mountain Resort Bob Roberts, CSIA Kathy Hubbard, CSIA Frank Helm, Dodge Ridge Wintersports Area Sally Helm, Dodge Ridge Wintersports Area Alex Fabbro, Mammoth Mountain Ski Area John Rice, Sierra-at-Tahoe Snowsports Resort

USFS:

Marlene Finley, Director of Recreation Tom Contreras, Forest Supervisor, Mendocino N.F Bob Kates, R5 Concession Program Manager Beth LeClair, R9 Winter Sports Team Leader Bob Moore, Snow Ranger, Truckee Ranger District, Tahoe N.F. Curt Panter, R4 & R5 Tramway Engineer
Mike Schlafmann, Winter Sports Specialist, Inyo
N.F., Mammoth Ranger District
Tom Quinn, Forest Supervisor, Stanislaus National
Forest
Jim Beam, Permit Administrator
Dave Borac
Karen Caldwell, District Ranger
Patty Clary, Permit Administrator
Artie Colson, Permit Administrator
Kathy Hardy, Deputy Forest Supervisor
Rusty LeBlanc

Bill Lorenz Julie Martin, Permit Administrator Sue Warren, Recreation Staff Officer

Southern California

CSIA:

Brent Tregaskis, Bear Mountain Resort
Bob Roberts, CSIA
Kathy Hubbard, CSIA
Alex Fabbro, Mammoth Mountain Ski Area
John Rice, Sierra-at-Tahoe Snowsports Resort
Steve Hanft, Big Bear Mountain Resorts
Dick Kun, Snow Summit
Rick Redin, Snow Valley
Pete Olson, Mt. Baldy (non-member)
Ron Ellisson, Mt. Baldy (non-member)
Karl Kapuscinski, Mountain High
Paul Bauer, Mountain High

USFS:

Marlene Finley, Director of Recreation

Tom Contreras, Forest Supervisor, Mendocino N.F. Bob Kates., R5 Concession Program Manager Beth LeClair, R9 Winter Sports Team Leader Bob Moore, Snow Ranger, Truckee Ranger District, Tahoe N.F.

Curt Panter, R4 & R5 Tramway Engineer
Mike Schlafmann, Winter Sports Specialist, Inyo
N.F., Mammoth Ranger District
Paul Bennett, Recreation Officer
Max Copenhagen, Deputy Forest Supervisor
Shawn Lawler, Permit Administrator
Ann Garland
Jody Noiron, Forest Supervisor

Lake Tahoe

CSIA:

Brent Tregaskis, Bear Mountain Resort
Bob Roberts, CSIA
Kathy Hubbard, CSIA
Alex Fabbro, Mammoth Mountain Ski Area
John Rice, Sierra-at-Tahoe Snowsports Resort
Dave Likins, CEO, Kirkwood Mountain Resort
Chip Seamans, GM, Kirkwood Mountain Resort
Dave Myers, Mountain Operations, Kirkwood
Mountain Resort
Jeff Walters, VP of Mountain Operations, Kirkwood
Mountain Resort

Cliff Wilson, Environmental Coordinator, Mt. Rose Ski Tahoe

Andrew Bray, Mountain Operations Director, Sierraat-Tahoe

Frank Helm, Chairman, Dodge Ridge Wintersports Area

Blaise Carrig, COO, Heavenly Mountain Resort Casey Blann, VP of Mountain Operations, Heavenly Mountain Resort

USFS:

Marlene Finley, Director of Recreation Tom Contreras, Forest Supervisor, Mendocino N.F. Bob Kates., R5 Concession Program Manager Bob Moore, Snow Ranger, Truckee Ranger District, Tahoe N.F.

Curt Panter, R4 & R5 Tramway Engineer
Mike Schlafmann, Winter Sports Specialist, Inyo
N.F., Mammoth Ranger District
Albert Borkowski, Special Uses Team
Ed DeCarlo, Special Uses Team, Carson
Lester Lubetkin, Recreation Officer
Roger Ross, Resources Officer, Amador
Anthony Scardina, Acting District Ranger, Amador
Duane Nelson, Recreation Officer
Ramiro Villalvazo, El Dorado
Vicki Jowise, El Dorado
Debbie Gaynor, El Dorado

Marilyn Meyer, El Dorado Colin West Terri Marceron, Forest Supervisor, LTBMU Michael Guarino, Permit Administrator, LTBMU John Maher, Special Uses, LTBMU Larry Gruver, Recreation Staff, Tahoe Joanne Roubique, District Ranger Sue Norman, Hydrologist Shane Romsos, Forest Biologist Raul Sanchez, Wildlife Biologist Matt Dickinson, NEPA Contract Coordinator Stu Osbrack, Botanist Cecilia Reed, Ecologist Jackie Faike, Interpretive Program Manager Steve Hale, Recreation Specialist - Partnerships Albert Borkowski, Special Uses Scott Parsons, Vegetation Program Manager Kim Ann Parsons, Resources Financial Specialist

Appendix V

What triggers a Review? Policy (FSM 6730.3): Investigate all accidents that involve the Forest Service and result in death, injury, illness, and/or property damage. This includes investigation and reporting of serious injury or death to visitors, contractors, cooperators and permittees or their employees.

<u>Purpose and Scope of Review:</u> Policy (FSM 6730.2): The objective or accident reporting and investigation are to prevent similar accidents by determining the cause of the accident.

Who is conducting the Review? Policy (Chief's Authority in FSM 6730.41): The Chief shall appoint an investigation team for any accident involving multiple employee fatalities, and for other accidents, as he deems necessary. FSM 6730.42: Regional Foresters, Station Directors, and Area Director shall appoint an investigation team for any accident with serious potential or serious consequences that are not investigated by a Chief's Office or Washington Office-appointed team. They shall also convene accident review boards as necessary.

Release of Report: Policy (FSM 6732.21): Accident reports are subject to both the Privacy Act and Freedom of Information Act (FOIA). Consult the local FOIA coordinator upon receipt of such a request. Opinions and recommendations expressed in letters of transmittal accompanying accident reports generally are not subject to FOIA as they are internal working documents used in the development of agency policy. The MER may only be released under subpoena.

Appendix VI

Ski Area Permit Administration Skills April 1, 2003

The following list of skills, experience, knowledge and abilities are what are needed to be an effective journey level ski area permit administrator. The training needed to attain the identified items is listed below the appropriate bullets.

Communication Skills

Writing

- Ability and experience in writing environmental analysis documents
 Training: On the job training and attend a FS 1900-1 Training Course
- Ability to write letters, messages, etc. to permittees, FS staff and the public that clearly explains the intended message.

Training: If the person is not able write effectively; attend a A"Fundamentals of Writing"** course.

Oral

- Ability to communicate effectively, either in groups or one on one with permittees, FS staff, other agencies staff and the public
- In some instances, administrator will need to be able to give presentations or conduct public meetings.

Training: If the person needs additional training, attend a "Speaking with Confidence Workshop." **

• Ability to be a good listener

Training: If the person needs additional training, attend "Listening and Memory Development Course." **

Interpersonal Skills

Interaction With Public, Coworkers and Permittees

- Ability to get along with people and develop a good working relationship
- Ability to be open and responsive to people

Training: If the person needs additional training, attend "Interpersonal Communications Course." **

Special Use Permit Knowledge

Basic Principles

Knowledge and experience of when, where and why special use permits are issued.
 Training: Attend a SU 101 Course that many Regions provide. Spend time as an apprentice Special Uses permit administrator.

Ski Area Permit

- The ski area permit is a complex document. The permit administrator needs to have a good understanding of the entire permit and be very familiar with the requirements of some parts of the permit.
- Knowledge and experience of the role the Forest Service has in administering/monitoring the permit.
- Ability and experience to recognize when operations are in or out of compliance with the permit, and identify what needs to be done correct operations when they are out of compliance.
- Ability and experience to work with the Permittee in correction of out of compliance items.

^{**} Course found in the Graduate School, USDA Training Book.

Training: Spend time with a journey level winter sports permit administrator. Attend winter sports workshops. On the job training through review of the special use permit, Forest Service Manual (FSM) 2340 & 2720, Forest Service Handbook (FSH) 2709.11) and the Winter Sports Guidebook. (This training item applies to the preceding 4 bullets.)

Business Management

• Knowledge and experience with the ski area fee system and how it works.

Training: On the job training through review of the special use permit, FSM 2720 and FSH 2709.11 Chapter 30.

Ability to develop and administer Collection Agreements.

Training: Attend Grants and Agreements training.

Knowledge of and ability to develop the various partnership agreements.

Training: Attend Grants and Agreements training.

NEPA Knowledge

NEPA Process

 Knowledge and experience with the various levels of NEPA (i.e. Categorical Exclusion, Environmental Assessment and Environmental Impact Statement) and when the various levels apply

Training: Attend a FS 1900-1 Training Course and review FSH 1909.11

• Knowledge and experience with the Ski NEPA process and how the NEPA process works (i.e. public involvement, alternative development, decision levels & appeal process)

Training: Review Ski Area NEPA notebook and attend session if offered again. Spend time with journey level winter sports administrator.

NEPA Development

- Ability and experience to review, if contracted out, or write the appropriate NEPA document that would cover the level of analysis for the proposed project or development plan.
- Ability and experience to coordinate/manage and/or participate as a member of an Interdisciplinary Team(s).

Training: On the job training with other NEPA projects. Spend time with journey level winter sports administrator. (This training applies to the 2 preceding bullets.)

Knowledge of Other Resource Areas

Coordination

Knowledge of which resource specialists should be involved on various projects *Training:* Spend time with journey level winter sports administrator.

Resource Area Knowledge

• Awareness of resource issues at the ski area (i.e. erosion hazards, archaeological sites, spawning areas, etc.).

Training: Spend time with various resource specialists that work in the area. Review records of previous projects at the area.

 Ability and experience to work with resource specialists in identifying developing the BMPs for projects.

Training: Spend time with various resource specialists that work in the area. Review records of previous projects at the area.

Ability and experience to monitor the BMPs being used on projects for compliance.

Training: Spend time with various resource specialists that work in the area. Review records of previous projects at the area.

 Knowledge of construction techniques and the ability to monitor projects as they are developed.

Training: Spend time with various resource specialists that work in the area. Spend time with journey level winter sports administrator

Knowledge and experience in recreation management principles.

Training: Attend Recreation Management Short course. Spend time with recreation management staff.

Knowledge of visual quality (Scenery Management System).

Training: Spend time with Landscape Architect that work in the area and/or attend a Visual Management training course if offered (Such as "Landscape Aesthetics Overview"). Review the "National Forest Landscape Management book for Ski Areas, Volume 2 Chapter 7."

Field Going Abilities

Winter Season

- Ability to ski at the intermediate/advanced level.
 - Training: Take ski lessons to improve skills.
- Have the desire to want to be on skis/snowboard.
- Ability to operate a snowmobile.

Training: On the job training with experienced snowmobile operators at unit. Receive training and get certified to operate as needed.

Knowledge and experience with other over the snow vehicles.

Training: Spend time with journey level winter sports administrator and staff at the ski area.

Summer Season

Ability to negotiate steep rugged terrain.

Ski Area Operations Knowledge

Master Plan

- Knowledge and experience of the purpose of master plans and the process used in their development and acceptance by the Forest Service.
- Knowledge of the connection between master plans and NEPA.
- Knowledge and experience of working with and implementing a ski area's master plan.

Training: Review Winter Sports Guidebook. Attend Regional and National Winter sports workshops. Spend time with journey level winter sports administrator. (This training applies to the 3 preceding bullets.)

• Knowledge of the status of the approved projects in the master plan.

Training: Review ski area's current master plan. Review project/special use files for documentation of various master plan projects implementation and completion. Meet with ski area managers as needed to discuss with them.

On Hill Operations

- Knowledge and experience with chairlift operations and maintenance.
- Knowledge of lift evacuation techniques, equipment and area evacuation plans.
- Experience and working knowledge of ANSI B-77 for monitoring, ski lift planning, etc.

Training: Attend Regional Tramway sessions. Spend time with journey level winter sports administrator and tramway engineer. Spend time with the ski area's chairlift maintenance staff and ski patrol. (This training applies to 3 preceding bullets.)

Ability and experience to work with ski areas to develop operating plans.

Training: Spend time with journey level winter sports administrator. Review existing operating plans.

 Knowledge of snowmaking operations and equipment including applicable water use regulations that may exist.

Training: Review documentation for snowmaking equipment at the ski area. Spend time with ski area staff involved in snowmaking. Spend time with journey level winter sports administrator

Knowledge and experience with grooming equipment and operations

Training: Spend time with ski area staff involved in grooming. Spend time with journey level winter sports administrator.

 Knowledge of requirements for hazardous materials usage, storage and building safety standards.

Training: Review MSDS sheets for materials used at the ski area. Spend time with Hazardous Materials/Safety Coordinator for the person's unit.

Ability to understand skier flow patterns specific to the resort(s) where one works.

Training: Spend time with journey level winter sports administrator. Spend time on the hill observing operations.

Ski Patrol Operations

- Detailed knowledge and experience in ski patrol operations (rescue, skier safety, signing, closure procedures, etc.).
- Knowledge and experience of risk management and the risk management program at the ski area.
- Knowledge and experience of boundary management and boundary management programs at ski areas.

Training: Spend time with journey level winter sports administrator. Spend time on the hill and with the ski patrol observing operations. Attend Regional and Winter Sports Workshops. (This item applies to the 3 previous bullets.)

- Knowledge of explosives management and handling. *
- Detailed knowledge and experience with avalanches, avalanche forecasting, and avalanche
 potential at the ski area. *
- Knowledge of avalanche control techniques and control at the ski area. *
- Experience in the use of military ordnance if assigned to an area that uses military ordnance. *
 Training: Spend time with journey level winter sports administrator. Spend time on the hill
 and with the ski patrol observing operations. Attend National Avalanche School or other
 professional avalanche awareness sessions. Attend explosives handling training. Attend FS
 and ski area training on use of military artillery for avalanche control. (This item applies to
 the 4 previous bullets.)

Ski Industry

- Knowledge of skier/snowboarder trends and other winter sports resort related activities and trends.
- Knowledge of year round recreational opportunities that resorts are interested in offering which blend well with the natural landscape or forest setting.

Training: Attend National Winter Sports Workshops. Attend regional ski industry meetings. Visit other ski areas with winter sports administrators. Subscribe to ski industry magazines/journals. (This item applies to the 2 previous bullets.)

Other Winter Sports

 Knowledge and experience in other winter sports and resort activities associated at permitted ski areas. This can include cross country skiing, backcountry skiing, snowmobile operations, tubing, snowshoeing, huts, mountain biking, etc.

Training: Attend National Winter Sports Workshops. Attend regional ski industry meetings. Visit other ski areas with winter sports administrators.

^{*}This item applies if individual works in areas where avalanche potential and control is part of the operations at the area.

Appendix VII

EXAMPLE OF A BOUNDARY AND CLOSED AREA POLICY

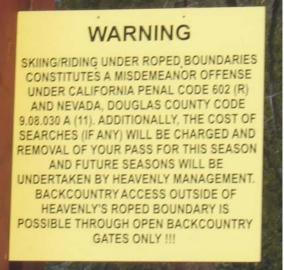
The ski area, located on both public and private land, maintains an open boundary policy. This policy allows skiers/boarders legally using the property within the ski area boundary, to access the adjacent out of bounds public and private land. To access the out of bounds area skiers/boarders may cross the ski area boundary. Skiers/boarders also may reenter the ski area property from out of bounds areas. The ski area boundary is delineated by signs placed along the boundary. This is accomplished by the placement of *Closed Area* signs along and within the ski area boundary buffer zone.

The out of bounds areas adjacent to the ski area are in a natural state. The ski area takes no measures to mitigate the hazards to which skiers/boarders might be exposed when entering and skiing these areas. Additionally, the ski area takes no measures within the out of bounds areas to warn or alert skiers/boarders to the hazards which they might encounter. The ski area is not responsible for the safety of those who enter out of bounds areas. At the loading area of the chair lifts which provide access to the out of bounds areas, the ski area posts signs warning of hazards out of bounds skiers/boarders may encounter. The sign also states "Skiers needing rescue (if available) may be charged the cost of the rescue". Examples of warning signs are shown below.

Suggested language for trail maps includes:

The ski area assumes no responsibility for going beyond the ski area boundary. Areas beyond the ski area boundary are not patrolled or maintained, and avalanches, un-marked obstacles and other natural hazards exist. Rescue, in the backcountry, will be costly and may take time. Death could result.





Bear Mountain

Heavenly Mountain Resort

Appendix VIII

These structures in some cases were installed to replace fire damage (Dodge Ridge) and in other cases to add employee lockers and ticket office space (Bear Valley). Bear Mountain and Mountain High both have plans to install them to add much needed indoor food and beverage seating. At Kirkwood, there are two structures on private land that are used for rentals, retail and food and beverage. At Sierra-at-Tahoe, there are three structures used for food and beverage and the ski school. At Sugar Bowl, there is a large structure with multiple uses, including food and beverage. At Heavenly, there are two structures for indoor seating and a European style umbrella bar. At Sierra Summit the structure is multi-use with food and beverage, retail and seating for special events and groups. Mammoth has 2 structures, one that serves as a day lodge of over 13,000 square feet, and a smaller 300 square foot ski school unit. It plans to eventually replace them, but intends to move them and reuse the structures for other purposes.

Moonlight Basin was cited as having the entire base area structures made of alternative structures.