

## Decision Memo

TSG Ski & Golf, LLC

Snow Study Permit

USDA Forest Service  
Norwood Ranger District  
Grand Mesa, Uncompahgre and Gunnison National Forests  
T.41N, R.9W Sec. 24

### **Background**

The US Forest Service proposes to issue a temporary special use permit to TSG Ski & Golf, LLC (Telski) for snow study activities on the Uncompahgre National Forest. The permit will authorize Telski to conduct a scientific snow study analysis on National Forest System lands in the Upper Bear Creek drainage for a term of one year. The special use permit could be renewed for an additional term upon request by Telski. The study would start February 1, 2009 and conclude on March 30, 2009.

The proposed study area is adjacent to the existing ski area permit boundary on the east side of Gold Hill. The authorized area will encompass about 1500 acres that would include Nellie Mine, Delta Bowl, Lena Basin, San Joaquin Ridge and the East Fork of Bear Creek. As part of the study, Telski would set up and maintain a remote weather station near the top of Waterfall Chute that would collect local weather data.

The goal of the study is to develop an Avalanche Atlas and associated maps that identify avalanche paths and their individual characteristics. The Avalanche Atlas would be submitted to the Forest Service at the end of the study for review. Telluride Ski Patrol (TSP) snow study teams would analyze the terrain, weather, and snowpack in Upper Bear Creek to identify and document potential avalanche hazards that may exist in the study area. TSP will use a combination of snowpack observation techniques such as ski testing, snow pit profiles, and explosive testing to gather data.

The use of explosives will be limited to those placed by hand and would not exceed 50 lbs per detonation. The use of explosives would be on a limited basis to help determine snow stability. Explosives testing in the study area would not be mitigating or reducing any of the potential avalanche hazard in Upper Bear Creek. Backcountry users traveling in the study area would still need to proceed with caution due to the inherent risks of backcountry travel.

TSP would conduct snow studies activities seven days a week and the area would remain closed to the public from 6:00 am until 10:00 am on a daily basis to protect snow study teams. The permitted area would open at 10:00 am unless there were extraordinary circumstances such as an avalanche accident or explosive misfire that would require the area to remain temporarily closed. TSP would post signs at the Ophir to Telluride trailhead, at the top of T-12 and at the Bear Creek trailhead explaining that TSP is conducting a snow study and may be using explosives. TSP will

be required to educate the public about the snow study program through local avalanche forums, local radio, internet and local newspapers.

## **Public Involvement**

The proposal for public comment was scoped for a total of three weeks or 23 days. The public notice was published in the Telluride Daily Planet (Grand Mesa, Uncompahgre and Gunnison National Forests newspaper of record) on November 27, 2008. The comment period was open from November 27, 2008 through December 19, 2008. Scoping letters were sent to the following interested parties: Dave Alexander, Biological Diversity, Boot Doctors/Further Adventures, Colorado Division Of Wildlife, Colorado Wild, Energy Resources Investment Corp, George Greenburg, Fern M. Honstein, Phil & Linda Miller, Lloyd Nordstrom, San Miguel County Commissioners, San Miguel Conservation Foundation, San Miguel County Sheriff, San Miguel Valley Corp, Brian F. O'Neil, San Juan Outdoor School Adventures, Sheep Mountain Alliance, Telluride Helitrax, Telluride Mountain Club, Telluride Mountain Guides, ToHellURide Adventures & Tours, LLC, Town of Mountain Village, Town of Telluride, Benny and Irene West, Glen Winfrey.

The public notice was posted on the Grand Mesa, Uncompahgre and Gunnison National Forest website. A formal news release was sent to The Telluride Daily Planet, The Telluride Watch and KOTO Radio Station on November 26, 2008.

Representatives from the Norwood Ranger District attended a number of formal and informal meetings to discuss the proposal. On November 24, 2008 and December 4, 2008 Kathy Peckham, Scott Spielman and Telski CEO Dave Riley attended an informal meeting with a group of local backcountry skiing advocates to provide information and answer questions. On December 8, 2008 Judy Schutza, Kathy Peckham, Scott Spielman and Telski CEO Dave Riley attended the inter-governmental meeting in Telluride and presented the proposal to representatives from San Miguel County, Town of Mountain Village, Town of Telluride and the San Miguel Conservation Foundation. On December 9, 2008 Judy Schutza and Scott Spielman attended a San Miguel County Commissioners work session to discuss the proposal.

## **Issues and Response**

The following issues and concerns were identified during the scoping process:

**Issues #1:** Concern that closing the permit area from 6:00 am -10:00 am on a daily basis throughout the winter would negatively impact backcountry users recreating in the authorized area.

**Response:** The large majority of backcountry skiers and snowboarders who access Upper Bear Creek exit the ski area from the legal access point located on Gold Hill. As an authorized permittee, Telski sets operational hours and lift openings that inadvertently determine when the public can reach designated backcountry access points. The Gold Hill Express lift and the Revelation lift open at 9:30 am daily, which by default restricts skiers from reaching the Gold Hill access point until just prior to 10:00 am.

Consequently, the 6:00 am to 10:00 am closure would not adversely impact those skiers and snowboarders accessing Upper Bear Creek from the ski area.

The daily closure of the permit area may impact a very small minority of backcountry travelers who access Upper Bear Creek from the Ophir Valley. Backcountry skiers and snowboarders accessing the study area from Ophir would be required to follow the 6:00 am to 10:00 am closure. The Forest Service closure is necessary to protect the safety of Telski employees conducting the study and members of the general public who recreate in Upper Bear Creek.

**Issue #2:** Ensure that all avalanche runout zones are clear before detonating explosives.

**Response:** As licensed blasters by the State of Colorado, Telski ski patrollers will be required to follow general procedures for explosives application required in The Colorado Department of Labor Explosives Regulations and comply with Federal Law and Regulations set forth by the Department of the Treasury, Bureau of Alcohol, Tobacco and Firearms.

As a requirement of the permit, Telski will develop and submit for approval an operating plan that will adequately address the protocols associated with the use of explosives for stability testing. The operating plan will outline the steps that will be taken to ensure that all runout zones are clear before any explosive is detonated.

**Issue #3:** Possibility of postponing the start of the snow study until next winter to allow for a complete season of data collection.

**Response:** The application submitted by Telski requested that the study be authorized for up to two years. Although the 2008/09 winter would not provide a complete data set, it would allow Telski to start mapping known avalanche paths in the study area. In addition, snow study teams could start collecting important data about the weather, terrain and snowpack in Upper Bear Creek. If Telski requests the permit be reissued for the 2009/2010 winter, it would allow the ski patrol to collect a complete season of data and allow for additional analysis.

**Issue #4:** Concern that private landowners could be exposed to added liability if Telski employees conducting the study are hurt on their private land. Telski should be required to provide liability insurance to all private landowners in the study area.

**Response:** The US Forest Service does not have jurisdiction over private lands that are located within the snow study permit area. The Norwood Ranger District sent scoping letters to all of the private land owners located in the permit area. Although the Forest Service does not have the ability to require Telski to provide indemnification to private land owners, TSG Ski & Golf, LLC has said that they would be willing to indemnify private land owners in the study area upon request.

**Issue #5:** Safety concern that Telski ski patrollers could be put in potentially dangerous situations while collecting data for the snow study.

**Response:** The Telluride Ski Patrol has a reputation in the ski industry as one of the top ski patrols in the country. The Telluride Ski Area has one of the most advanced snow safety programs in North America and are considered to be experts in snow avalanche mitigation. As part of their daily job, ski patrollers travel, work and perform their duties in avalanche terrain. The Ski Patrol is highly qualified and well suited to conduct the snow study in a safe professional manner. All data collected as part of the study will adhere to the American Avalanche Association & the USDA Forest Service publication: Snow, Weather and Avalanches: Observational Guidelines for Avalanches Programs in the United States, 2004.

The snow study teams assigned to collect information in the study area will be required to follow strict backcountry travel procedures at all times to reduce exposure to avalanche hazards. Backcountry travel protocols will be outlined in detail in the operating plan attached to the permit.

**Issue #6:** Concern that the noise caused by the use of explosives could have negative impacts on pikas and hibernating black bears. Concern that disturbance to black bear denning sites caused by human triggered avalanches could disrupt the animal's normal winter behavior.

**Response:**

The pika is not a species of management concern. The species is not federally listed as Threatened or Endangered nor is it on the US Forest Service Sensitive Species list. The International Union for the Conservation of Nature has ranked this species as "globally secure" (G5) which is defined as "demonstrably secure, though it may be quite rare in parts of its range, especially at the periphery". Within the State of Colorado, the pika is also ranked as "secure" (S5).

Pikas occupy the talus slopes within the permit area. They are active throughout the winter, tunneling between burrow sites underneath the snowpack. The detonation of a hand charge near an active pika colony would likely have one of two potential effects: 1) mortality or injury to pikas directly involved in an avalanche release, or, 2) possible noise disturbance to pikas due to the explosive blast.

Explosives would only be used within natural avalanche paths that have the potential to slide without human intervention. Pikas inhabiting these natural slide paths are already at risk of being impacted by an avalanche that is triggered by natural means. In other words, there is the potential for direct or indirect injury or death to a pika that is caught in an avalanche, whether the slide is triggered by human or natural means. This potential for impact to individual pikas is not considered significant given that pika populations, both globally and within the State, are not imperiled.

It is speculative to assume that explosive detonations would have a significant disturbance effect on pikas in the vicinity. It is reasonable to assume that the insulating effect of several feet of snow above a pika burrow might buffer the sound of most detonations.

The black bear is a common game species in Colorado. This species is currently not federally listed as Threatened or Endangered nor is it on the US Forest Service Sensitive Species list. The International Union for the Conservation of Nature has ranked this species as “globally secure” (G5) which is defined as “demonstrably secure, though it may be quite rare in parts of its range, especially at the periphery”. Within the State of Colorado, the black bear is also ranked as “secure” (S5).

Black bears potentially den within the proposed snow study permit area. Suitable den sites would typically be near forested areas where logs and other vegetation provide cover. Because it is unlikely that bears would den within the area’s natural avalanche paths, it is unlikely that they would be directly impacted by triggered releases.

Studies have shown that denning bears may respond to the noise from explosives; however, the effect on the bears may not be significant. Reynolds et al. (1986) monitored the response of grizzly bears in their dens during seismic surveys in northern Alaska. They measured grizzly bear movements within dens in response to the detonation of about 40 kilograms of dynamite at approximately 30 meters below the ground surface and at a distance of at least .8 kilometer from the den sites. During days when seismic exploration vehicles were operating, they observed a bear moving within its den and it had an elevated heart rate, possibly in response to the detonation noise. None of the radio-collared bears deserted their dens in response to seismic activities and all emerged in the spring with no observed deaths of accompanying offspring.

In conclusion, explosive detonations could disturb a denning black bear within the permit area however it is unlikely that the disturbance would be significant enough to cause it harm (direct or indirect mortality, abandonment of the den site, or harm to the bear or its offspring).

**Issue #7:** The Forest Service is required to do an Environmental Assessment since there is not a category for a Categorical Exclusion. The FS does not have the authority to categorically exclude the decision.

**Response:** This action is categorically excluded from documentation in an environmental impact statement or an environmental assessment under Category 31.12 .8 Approval, modification, or continuation of minor, short-term (one year or less) special uses of National Forest System Lands.

The categorical exclusion is appropriate in this situation because no extraordinary circumstances exist per Forest Service Handbook direction (FSH 1909.15, CH 30.3.2).

**Issue #8:** Reduce the size of the study area to terrain that is directly accessed by individuals leaving the ski area through the Gold Hill access point and the proposed access points.

**Response:** The purpose and need for this study is to allow Telski to develop an Avalanche Atlas for Upper Bear Creek. Reducing the study area to terrain and aspects directly adjacent to the ski area would not meet the need of gaining a greater

understanding of the potential avalanche hazards in Upper Bear Creek. Reducing the permit area would be counterproductive to the goal of the study.

### **Decision and Rationale**

It is my decision to approve the issuance of a temporary special use permit to TSG Ski & Golf, LLC to conduct the snow study in the authorized area shown in Appendix A.

This action is categorically excluded from documentation in an environmental impact statement or an environmental assessment under Category 31.12 .8 Approval, modification, or continuation of minor, short-term (one year or less) special uses of National Forest System Lands.

The categorical exclusion is appropriate in this situation because no extraordinary circumstances exist per Forest Service Handbook direction (FSH 1909.15, CH 30.3.2).

### **Findings Required by Other Laws**

This decision is consistent with the Grand Mesa, Uncomphgre and Gunnison National Forests Amended Land and Resource Management Plan (1991) as required by the National Forest Management Act. Following a review of the entire permit area by the Norwood District wildlife biologist and archaeologist, it has been determined that the decision is also consistent with the Endangered Species Act of 1973, as amended, the National Historic Preservation Act of 1966, as amended, the Archaeological Resources Protection Act of 1979, and the Native American Religious Freedom Act.

### **Implementation Date**

Implementation of this proposal may take place immediately upon issuance of this decision.

### **Administrative Review or Appeal Opportunities**

Our decision is not subject to appeal pursuant to 36 CFR 215.12 "The following decisions are not subject to appeal under this part: (f) Decisions for actions that have been categorically excluded from documentation in an EA or EIS pursuant to FSH 1909.15, Chapter 30, section 31."

### **Contact Person**

For additional information concerning this decision or the Forest Service appeal process, contact Scott Spielman, Recreation Manager, Norwood Ranger District, PO Box 388, Norwood, CO 81423; ph. 970-327-4261.

**Literature Cited**

Reynolds, Patricia E., Reynolds, H.V., and E.H. Follman. 1986. Responses of grizzly bears to seismic surveys in northern Alaska. International Conference on Bear Research and Management. 6:169 – 175.

*/s/ Judy Schutza*\_\_\_\_\_

\_\_January 27, 2009\_\_

JUDY SCHUTZA  
District Ranger,  
Norwood Ranger District  
Grand Mesa, Uncompahgre and Gunnison National Forests

Date

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