Good morning. This is Mark Staples with the Gallatin National Forest Avalanche Advisory issued on, Thursday, March 1 at 7:30 a.m. A **Montana FWP Recreation Trails Grant** sponsors today's advisory. This advisory does not apply to operating ski areas.

Mountain Weather

Since yesterday afternoon the Lionhead area received 6-8 inches of new snow, the mountains near Cooke City and the Taylor Fork received 6 inches, and the mountains near Big Sky and Bozeman received 3-4 inches. Yesterday strong westerly winds averaged 20 mph with gusts of 40 mph. This morning temperatures dropped into the single digits F and will rise into the teens F today. More snow will fall with 2-4 inches accumulating by tomorrow morning. Winds will blow from the W and SW averaging 10 mph and gusting to 20 mph.

Snowpack and Avalanche Discussion

The Bridger, Madison, and Gallatin Ranges, the Lionhead area near West Yellowstone and mountains around Cooke City:

New snow and strong winds: Fresh drifts and wind slabs will fracture and produce avalanches throughout the advisory area. While climbing in Hyalite Canyon yesterday, Eric had several wind drifts collapse and he triggered a very small slab near the ice climb. Because he was well below treeline in relatively safe terrain, he said these signs were "nothing dangerous but a definite clue as to what's happening in other terrain." A skier near Cooke City also noted that "fresh drifts were becoming sensitive."

Near surface facets buried 1.5-3 feet deep: In addition to fresh wind slabs, a thin layer of near surface facets that formed in early to mid February will also fracture and produce larger avalanches. This layer exists throughout the advisory area (**photo**, **video**) and produced both natural and human triggered avalanches last weekend. Today with the stress of new snow and wind-blown snow, this layer will remain near its breaking point. Although this layer exists on most slopes, its strength varies.

I have analyzed this layer in many snowpits during the last two weeks. In some cases it has given stable results in stability tests yet produced an avalanche on a nearby slope. In general do not trust it. Even if you make a very thorough stability evaluation and decide to ski or ride a slope, stack the odds of survival in your favor by selecting a slope with a clean run out zone and slope angles under 35 degrees.

For today, new snow, recent wind loading, widespread and persistent weak layers, and recent avalanche activity (**photo**) indicate dangerous avalanche conditions. Some natural avalanches will occur but most slopes will need a skier or rider to trigger an avalanche and today the avalanche danger is **CONSIDERABLE**.

I will issue the next advisory tomorrow morning at 7:30 a.m. If you have any snowpack or avalanche observations, drop us a line at <u>mtavalanche@gmail.com</u> or call us at 587-6984.

Accident Reports

<u>The accident reports</u> for the avalanche fatality near Cooke City on February 22 and Friday's avalanche on Saddle Peak are available on our website.

Events/Education

FREE 1-hr Avalanche Awareness Lecture, Friday, March 2, 7-8 p.m. at the West Yellowstone Holiday Inn in the room next to the bar.

31st Annual Pinhead Classic

Come to Bridger Bowl on Saturday, March 17th (St. Patrick's Day) with telemark skis, AT skis, alpine skis, snowboards, split boards, or even snow blades. The theme is Snowpocalypse based on the wildly popular Mayan 2012 apocalypse. \$30 gets you into the races, a pint glass, t-shirt, a good time, a raffle ticket, and food by Cafe Fresco. Pre-register at Mystery Ranch or Grizzly Ridge March 11-16. Visit <u>http://pinheadclassic.com/</u> or the Pinhead <u>Facebook</u> page for more info.