GNFAC Avalanche Forecast for Fri Feb 10, 2017

Good Morning. This is Eric Knoff with the Gallatin National Forest Avalanche Advisory issued on Friday, February 10th at 7:00 a.m. Today's advisory is sponsored by <u>Grizzly Outfitters</u> in partnership with the **Friends** of the Avalanche Center. This advisory does not apply to operating ski areas.

AVALANCHE WARNING

The Gallatin National Forest Avalanche Center is issuing a Backcountry Avalanche Warning for the mountains around Cooke City, the Lionhead area outside West Yellowstone along with the Southern Madison Range and Southern Gallatin Range. Seven days of snowfall and strong winds are creating an **EXTREME** avalanche danger outside Cooke City. The mountains near West Yellowstone received a mixture of snow and rain which has created a **Intern** avalanche danger. Natural and human triggered avalanches are very likely today. Avoid all avalanche terrain and avalanche runout zones.

Mountain Weather

Cooke City is in the crosshairs of an atmospheric river. Over the past 24 hours, this area received 2.6" of SWE resulting in heavy snow up high and rain in town. The mountains around West Yellowstone also received heavy precipitation. Madison Plateau Snotel site is recording 1.7" of SWE over the past 24 hours with a temperature of 35 degrees. Most of this precipitation fell as rain. The mountains around Big Sky picked up .5" of SWE resulting in 2-3" of dense snow up high and rain in the base area. The Bridger Range did not receive much moisture, but has above freezing temperatures up to the ridge. Today, precipitation will continue in the southern ranges with another .5" to 1" SWE possible by tomorrow morning. The northern ranges will see a few inches of snow up high and rain down low. Snow levels will fluctuate between 7-9,000 ft. Winds will remain moderate to strong out of the W-SW. Fortunately, cooler and drier air will move into the area tomorrow.

Snowpack and Avalanche Discussion



Avalanche Warning

Cooke City is in uncharted territory. Over the past seven days, this area has received over 8" of SWE (snow water equivalent<) totaling 5-7' feet of snow. This breaks the seven day record set back in 1986. Yesterday, Alex and his partner dug a snowpit on a NE facing slope around 9,500 ft. and found a snowpack 10' deep. He noted nearly 5' was new snow over the past week. The pure weight of this load will push any weakness in the snowpack past its breaking point. Today, continued precipitation in the form of snow and rain will make natural and human triggered avalanches certain. All avalanche terrain including avalanche runout zones should be avoided. Today, the avalanche danger is rated <u>EXTREME</u> !



In the mountains near West Yellowstone including the southern Madison Range, above freezing temperatures and heavy precipitation, mostly in the form of rain, is producing very dangerous avalanche conditions. Yesterday, a snowmobiler triggered a slide up Taylor Fork (**photo**) and I found unstable conditions on mid to low elevation slopes near Hegben Lake (**video**). Today, natural and human triggered wet snow avalanches are likely on all mid to low elevation slopes. These slides have the potential to be large and dangerous. All avalanche terrain and avalanche runout zones should be avoided.

Today, very dangerous avalanche conditions exist and the avalanche danger is rated <u>HIGH</u> on all slopes below 9,000 ft. On slopes above 9,000 ft., the dry snow avalanche danger is rated <u>HIGH</u> on wind loaded slopes and <u>CONSIDERABLE</u> in non-wind loaded terrain.



The northern ranges did not receive nearly as much rain and snow as the southern areas. However, lite rain and above freezing temperatures have produced unstable conditions on mid to low elevation slopes. Currently, freezing levels are around 8,000 ft. Today, continued precipitation in the form of rain and snow will create dangerous avalanche conditions. Manage terrain carefully and avoid being on or underneath steep slopes, especially in mid to low elevation terrain.

Today, a mix of rain and snow combined with above freezing temperatures will make natural avalanches possible and human triggered avalanches likely. For this reason the avalanche danger is rated **CONSIDERABLE** on all slopes.

Alex will issue the next advisory tomorrow morning by 7:30 a.m.

We rely on your field observations. Send us an email with simple weather and snowpack information along the lines of what you might share with your friends: How much new snow? Was the skiing/riding any good? Did you see any avalanches or signs of instability? Was snow blowing at the ridgelines? If you have <u>snowpit</u> or test data we'll take that too, but this core info is super helpful! Email us at <u>mtavalanche@gmail.com<</u> or leave a message at 406-587-6984.

Education and Events

Beacon Training Park at Beall: Open and free to the public for avalanche beacon practice seven days a week from 9 a.m. to 8 p.m., southeast corner of Beall Park in Bozeman.

COOKE CITY

Weekly rescue training and snowpack update, 6:30-7:30 p.m., Cooke City Super 8 on Friday, Lulu Pass Road for field location Saturday (Look for the **yellow sign**<).

BOZEMAN

February 10 and 11, Companion Rescue Clinic, REI and field day, more info and register here<.

WEST YELLOWSTONE

February 11, 1-hr Avalanche Awareness, 7-8 p.m., West Yellowstone Holiday Inn.

ENNIS

February 17, 1-hr Avalanche Awareness, 6-7 p.m., Madison Valley Rural Fire Department Station 1.