

# CRH Avalanche Report December 2010

## Summary

The CRH avalanche season began December 3<sup>rd</sup>. The hazard was rated LOW for 21 days and MODERATE for 8 days. No avalanche activity affected the highway.

## Weather

December had below average precipitation, cold temperatures, and lots of North wind. Snow fell to sea level a couple times and rain reached the peaks at other times.

At Mt. Eyak Snotel, the average high temperature was 0.5°C (32.9°F), with 6.0°C (42.8°F) recorded on the 7<sup>th</sup>. The average low temperature was -3.1°C (26.4°F), with -6.8°C (19.8°F) recorded on the 20<sup>th</sup>.

Precipitation totaled 188 mm (7.4 in) for the month. 84 mm (3.3 in) of this fell from the 3<sup>rd</sup> through the 7<sup>th</sup>. The largest 24 hour accumulation of 56 mm (2.2 in) occurred on December 4<sup>th</sup>.

The wind blew mostly moderate to strong from the North, though typical East wind also occurred during precipitation events. At Snotel, the strongest gusts of 41 mph and 40 mph were recorded on the 3<sup>rd</sup> and 4<sup>th</sup> respectfully.

## Snow Pack

In general, the December snow pack was shallow. Above tree line, there was a highly variable 1 – 3 m (3 – 10 ft) of snow. Micro features have filled in, though strong winds have heavily sculpted the snow. Below tree line, a shallow base layer was established. At Snotel, December began with 38 cm (15 in) of snow, but decreased to 30 cm (12 in) December 3<sup>rd</sup>. The snow pack reached its highest of 91 cm (36 in) on December 11<sup>th</sup>, and ended the month at 84 cm (33 in).

Three snow profiles and ten field observations were recorded during December. Most instability noted was at the new snow interface to wind scoured surfaces and either released or was erased by more North wind. Cold temperatures promoted faceting throughout the snow pack, but did not promote any weakness. A shallow snow pack allowed micro features to increase stability and limit the size of avalanche activity.

## Avalanche Observations

Widespread medium sized avalanches occurred on December 4<sup>th</sup>, due to heavy new snow on wind scoured surfaces. The shallow snow pack kept most of these confined to the mid to upper mountains, though a few traveled further on larger paths. A small pile of debris reached the 5 mile run out. Another avalanche cycle began at the end of the month, with a little more debris reaching both the 5 mile and 5.5 mile run outs.

Steve "Hoots" Witsoe  
January 4<sup>th</sup>, 2011