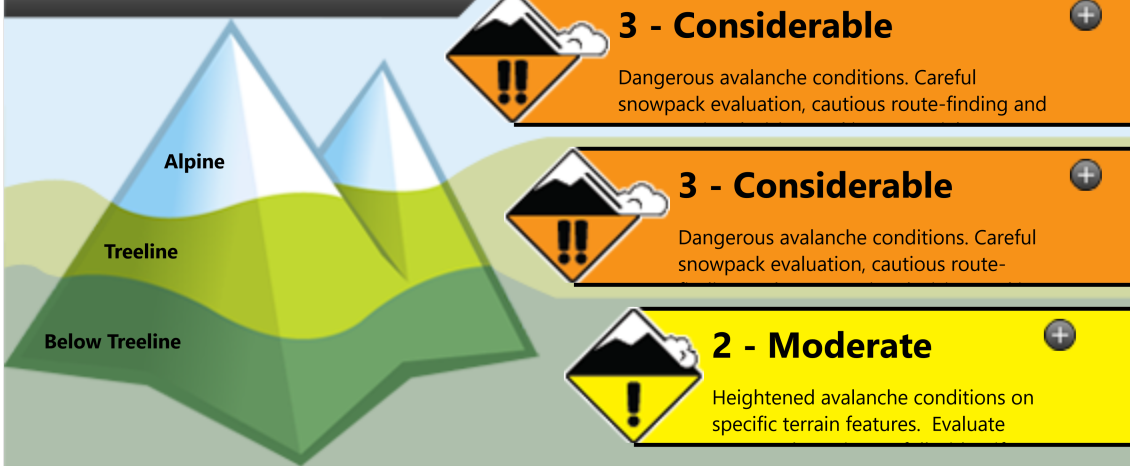


Avalanche Bulletin - North Columbia

Publish at: Thursday, December 29, 2016 16:49 Valid Until: December 30, 2016 14:00 [CG]

With great snowfall comes great responsibility. Be on the lookout for signs of slab formation in the new snow on Friday and expect areas exposed to our recent strong winds to be especially touchy.

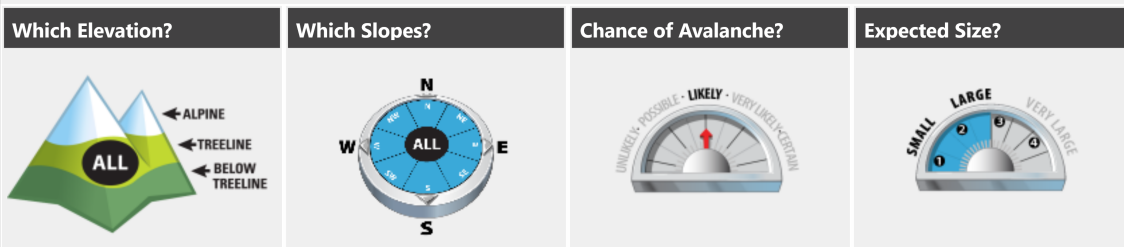
Danger Ratings: Friday



	Saturday	Sunday
Alpine	3 - Considerable	3 - Considerable
Treeline	2 - Moderate	2 - Moderate
Below Treeline	2 - Moderate	1 - Low

Confidence: High

Problem 1: Storm Slabs


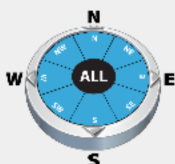




Lots of new snow has piled up over the past week and avalanche danger will increase as it consolidates into a slab. Watch for signs like shooting cracks to alert you to slab formation and be especially wary in -and below- areas exposed to the wind.

Terrain and Travel Advice

- Choose conservative lines and watch for clues of instability.
- Shooting cracks and recent avalanches are both strong indicators of unstable snowpack.
- Avoid areas with overhead hazard.

Problem 2: Loose Dry


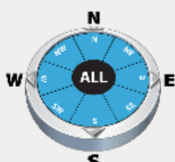


Which Elevation?	Which Slopes?	Chance of Avalanche?	Expected Size?
			

Slab avalanches aren't the only danger out there. Expect loose dry avalanches to trigger easily and entrain lots of snow in gullies and other steep features that are sheltered from the wind.

Terrain and Travel Advice

- Be cautious of sluffing in steep terrain.
- Use safe ski cutting techniques before entering ski run.

Problem 3: Persistent Slabs

Which Elevation?	Which Slopes?	Chance of Avalanche?	Expected Size?
			

A weak layer buried in mid-December has generated some reports of large avalanches. Spotty patches of surface hoar have made it difficult to pinpoint where this layer might react but thin snowpack areas in the eastern Selkirks are the most likely.

Terrain and Travel Advice

- Dig down to find and test weak layers before committing to a line.
- Be aware of the potential for large avalanches due to the presence of buried persistent weak layers

English Tweet:

Avalanche Danger is Considerable for from 17:49 Dec 29 to 17:49 Dec 30 <http://avalanche.pc.gc.ca/bulletin-eng.aspx?r=18&d=2016-12-30>

French Tweet:

Le danger d'avalanche est Considérable pour de 17:49 29 déc. au 17:49 30 déc. <http://avalanche.pc.gc.ca/bulletin-fra.aspx?r=18&d=2016-12-30>

Weather Forecast

Thursday night: Flurries delivering around 5cm of new snow with winds moderate

Thursday night: Flurries delivering around 5cm of new snow with winds moderate to strong from the west.

Friday: Mainly cloudy with isolated flurries and up a trace of new snow. Winds light from the west. Alpine temperatures near -10.

Saturday: Mainly cloudy with isolated flurries and a trace of new snow. Winds light to moderate from the northeast. Alpine temperatures around -15.

Sunday: A mix of sun and cloud with no new snow. Winds light from the northeast. Alpine temperatures to -18.

Snowpack Discussion

Between 35 and 75 cm of new snow has fallen over the region since Monday. The highest accumulations have occurred in the Monashees. Low density snow has allowed for quick settlement of new snow in sheltered areas, where new snow has begun to take on soft slab character. Other areas exposed to moderate to strong winds have experienced wind slab development. 80-120cm below the surface you'll find the mid-December interface, which consists of wind affected snow, faceted (sugary) crystals, and/or surface hoar crystals. Recent tests suggest the the new snow is well bonded to the interface in most areas. However, this layer is still reactive in some snowpack tests and should be investigated before pushing into steeper terrain. Limited observations suggest this layer has been especially touchy on the eastern side of the Selkirks. The thick mid-November crust layer typically sits 1-2 m down in the snowpack. This layer is considered dormant at this time but remains an isolated concern that we will likely be tracking through much of the season.

Avalanche Activity Discussion

Natural avalanche observations continue to be reported - mostly from the Roger's Pass area - with numerous size 1-2.5 observations and four reports of size 3 avalanches in the past 24 hours. Storm slab, wind slab, and loose dry avalanches were all featured in today's reports and all are attributed to our recent storm snow layer. Avalanche debris has been noted for entraining lots of the loose new snow and running surprisingly far. Expect continued moderate to strong ridgetop winds along with new snow on Thursday to promote ongoing slab development. For the short term, watch also for loose dry avalanches to be triggered easily in steep sheltered terrain.

Avalanche Hazard Analysis at 16:49 on Dec 29, 2016

Weather Observations

50 mile 650m @1000h: Tpres: -1.5; 24h precip: 2.8mm

Clanwilliam 610m @0900h: Tpres: -1.2; 24h precip: 0.8mm

Mustang: Tpres: -8; HN: 6; HS: 266

Albert Canyon 870m @0900h: Tpres: -3.4; Precip: 0.2; 24h precip: 1.9mm

Fidelity 1905m @1000h: Tpres: -8; HN: 7

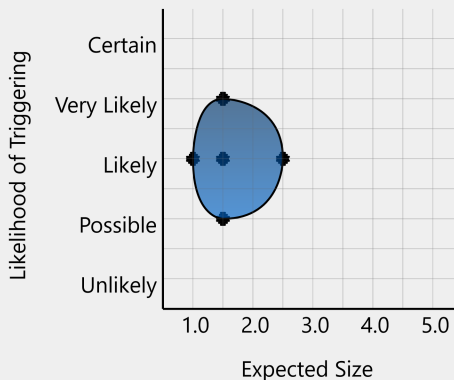
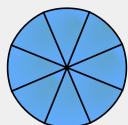
Nowcast Avalanche Problems

Problem 1: Storm Slabs

Character: Storm Slabs
Weak Layer: Non-persistent

Distribution: Widespread
Sensitivity: Touchy

Aspect:
Elevation:



Discussion (for forecasters; not public)

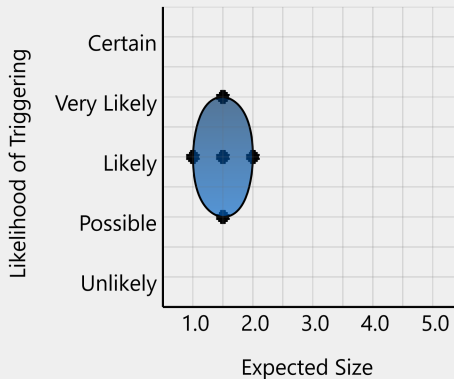
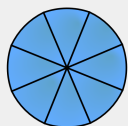
16/12/28 (CG) Up to 30cm HN24 added by Dec 28 AM. Evolved problem to storm slab and including BTL. Considering open areas, sufficient HST depths, and faster consolidation.

Problem 2: Loose Dry

Character: Loose Dry
Weak Layer: Non-persistent

Distribution: Specific
Sensitivity: Touchy

Aspect:
Elevation:



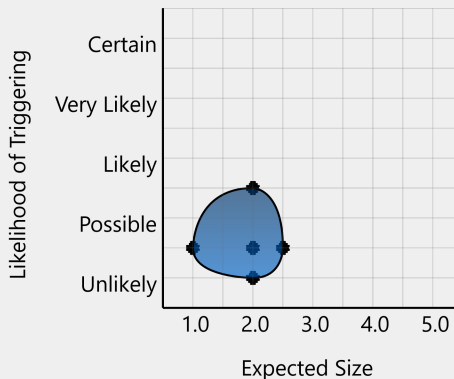
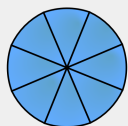
Discussion (for forecasters; not public)

Problem 3: Persistent Slabs

Character: Persistent Slabs
Weak Layer: Mid Dec SH/FC/CR

Distribution: Isolated
Sensitivity: Stubborn

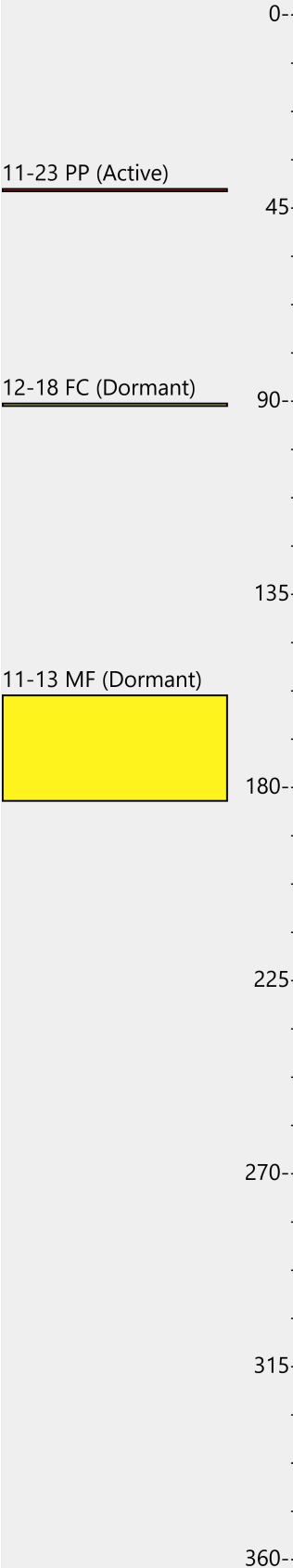
Aspect:
Elevation:



Discussion (for forecasters; not public)

161226(JL):? See MIN posts from Dec 25 at Fairy Meadows and Video Peak. Also, Sorcerer Lodge is expressing concern over this

Weak Layers (cm)



video peak. Also, Corcoran Edge is expressing concern over this layer.

16/12/29 (CG) Leaving problem public through the current loading period. Re-evaluate end of the week.

405-

Contribution of Problems

Alpine

Considerable

60% - Problem 1: Storm Slabs

20% - Problem 3: Persistent Slabs

20% - Problem 2: Loose Dry

Treeline

Considerable

50% - Problem 1: Storm Slabs

30% - Problem 2: Loose Dry

20% - Problem 3: Persistent Slabs

Below Treeline

Moderate

60% - Problem 2: Loose Dry

20% - Problem 3: Persistent Slabs

20% - Problem 1: Storm Slabs