



Northwest
Avalanche
Center



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Mt Hood

Issued: 6:00 PM PST Friday, January 6, 2017 by Kenny Kramer

NWAC avalanche forecasts apply to backcountry avalanche terrain in the Olympics, Washington Cascades and Mt Hood area. These forecasts do not apply to developed ski areas, avalanche terrain affecting highways and higher terrain on the volcanic peaks above the Cascade crest level.

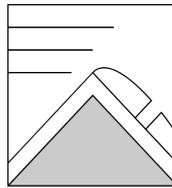
The Bottom Line: Lingering wind slabs are likely to persist, especially near and above treeline. Watch for wind deposited snow and avoid travel on or near likely trigger points such as areas with a shallower snowpack or above unsupported terrain features.

Elevation	Saturday		Outlook for Sunday
Above Treeline	Moderate	Heightened avalanche conditions on specific terrain features. Evaluate snow and terrain carefully; identify problem features.	Considerable
Near Treeline	Moderate	Heightened avalanche conditions on specific terrain features. Evaluate snow and terrain carefully; identify problem features.	Moderate
Below Treeline	Low	Generally safe, watch for unstable snow on isolated terrain features.	Moderate

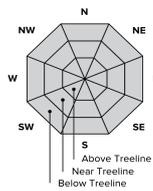
Avalanche Problems for Saturday

Wind Slab

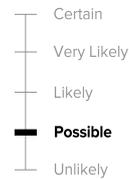
Wind slabs can take up to a week to stabilize. They are confined to lee and cross-loaded terrain features and can be avoided by sticking to sheltered or wind scoured areas.



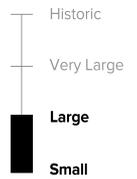
Avalanche Problem



Aspect/Elevation



Likelihood



Size

Snowpack Analysis

Weather and Snowpack

A low pressure system moved across western Washington on Saturday night, followed by cold Arctic air. NWAC stations in the Mt Hood area received about 5 inches of snowfall by Sunday morning with SW winds.

An unusual reverse orographic east flow caused snow mainly in the central to south Cascades Sunday afternoon and night. NWAC stations at Mt Hood had a shift to NE winds and another 10-12 inches of snow on Monday morning and further cooling as the Arctic air mass further moved into the Northwest.

Very strong E-NE winds changed the snowscape dramatically on Mt. Hood Tuesday night and Wednesday. Winds near treeline regularly gusted into the 50s and 60s, while the upper stations at Meadows and Timberline had multiple gusts to 100 mph. Winds were still strong, but starting to moderate Wednesday afternoon.

Sunny and relatively calm weather has been enjoyed Thursday and again Friday with moderating temperatures.

Recent Observations

The Mt Hood Meadows pro-patrol on Monday reported that the recent wind shift was moving snow to S-W slopes. On avalanche control on Monday morning sensitive 4-6 inch storm slabs were released by skis on most test slopes. Deeper storm slab to about 2 feet was expected in loaded areas which could release to the Solstice crust. The shift to NE winds as also building new local soft 8-24 inch wind slab on S-W slopes.

NWAC pro-observer Laura Green was on E-NE slopes on Elk Mountain on Monday and found minor wind transport in the above tree in the 4200-5400 foot range but no signs of instability.

No reports were received on Wednesday and fierce winds that kept the ski areas from running most of their lifts also likely prevented anyone from venturing into the near or above treeline on Mt. Hood.

Laura was at the Mt Hood Meadows Ski Area on Thursday and again Friday, following some of the strongest winds experienced on Mt Hood for a very, very long time. Similar observations were recorded both Thursday and Friday, indicating a mix of wind sculpted conditions, ranging from deep hard slabs, likely 1-2 meters or more in depth as well as scoured slopes to crust layers, sastrugi, and a thin melt-freeze sun crust on many south aspects. These deep slabs are unlikely to be triggered by a solo traveler, however, more shallow wind slabs may be a different story. Settled and stable powder was found on wind sheltered terrain, where skiing conditions remained very nice.

Detailed Avalanche Forecast for Saturday

Becoming cloudy Saturday with occasional light snow, mainly during the afternoon. Only light amounts of new snow are expected through the day Saturday. Winds should be mostly southerly and light to moderate.

Strong to locally very strong E-NE winds Tuesday night and Wednesday loaded unusual aspects and built wind slab in all elevation bands. These wind slabs continue to heal and bond, but the cold temperatures are slowing that process.

Watch for lingering wind slabs and avoid terrain where even a small slab avalanche could have unintended consequences. Remember to watch for firmer wind transported snow on all slope aspects or cross loaded slopes, especially in areas with varied terrain and modified wind directions.

By late Saturday afternoon, there may be shallow, fresh wind slabs forming on wind loaded terrain. A more rapid increase in danger can be expected if greater snowfall and stronger winds than expected occur.

Mountain Weather Synopsis for Saturday & Sunday

An upper and surface low pressure system will linger about 500 miles off the Northwest coast on Saturday and Sunday. This will cause slightly increasing south to southwest flow over the Northwest - a change from the cold north flow seen over the Northwest the past week. So the Arctic air mass that has been over the Northwest will start to get eroded this weekend and snow levels will go up though it will be hard to predict how fast along the Cascade crest. A weak warm front will rotate around the low and south to north over the Northwest Saturday afternoon and night. This will cause light to moderate snow to move south to north over the Olympics and Cascades, which should be heaviest on the central and southern volcanoes. A moderate warm front will rotate around the low and south to north over the Northwest on Sunday. This should cause renewed heavier snow to move south to north over the Olympics and Cascades which should initially be heaviest on the central and southern volcanoes. A temporary change to west winds, a better shot of snow and more of a bump in snow levels should make it into the passes Sunday evening.

24 Hour Quantitative Precipitation ending at 4 am

Location	Sun	Mon
Hurricane Ridge	.25	.25 - .50
Mt Baker Ski Area	.25	.75
Washington Pass	lt .25	.50
Stevens Pass	lt .25	.50 - .75
Snoqualmie Pass	lt .25	.75
Mission Ridge	lt .25	.50
Crystal Mt	.25	.50
Paradise	.50	1.00
White Pass	.25	.50
Mt Hood Meadows	.50	1.00
Timberline	.50	1.00

LT = less than; WE or Water equivalent is the liquid water equivalent of melted snow in hundredths of inches. As a rough approximation 1 inch of snow = about .10 inches WE, or 10 inches of snow = about 1 inch WE.

Snow Level/Freezing Level in feet

Day	Northwest Northeast Central South					Easterly Flow in Passes
	Olympics	Cascades	Cascades	Cascades	Cascades	
Saturday Morning	500'	0'	0'	0'	0'	*
Saturday Afternoon	1000'	0'	0'	0'	0'	*
Saturday Night	1500'	500'	0'	500'	1000'	*
Sunday Morning	2000'	1500'	0'	1000'	1500'	*
Sunday Afternoon	2500'	2000'	500'	1500'	2500'	*
Sunday Evening	2000'	2000'	1000'	2000'	3000'	
Sunday Night	1500'	1500'	1000'	1000'	2000'	

Cascade Snow / Freezing Levels noted above refer to the north (approximately Mt Baker and Washington Pass), central (approximately Stevens to White Pass) and south (near Mt Hood). Freezing Level is when no precipitation is forecast.

* Note that surface snow levels are common near the passes during easterly pass flow and may result in multiple snow / freezing levels.