



Mt Hood

Issued: 6:02 PM PST Monday, December 26, 2016 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.

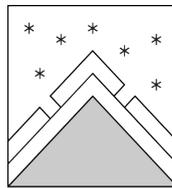
The Bottom Line: Very dangerous avalanche conditions are expected in much of the terrain Tuesday. Storm and wind slabs will be sensitive Tuesday. The safest plan is to avoid avalanche terrain of consequence until unstable layers stabilize.

Elevation	Tuesday		Outlook for Wednesday
Above Treeline	High	Very dangerous avalanche conditions. Travel in avalanche terrain not recommended.	High
Near Treeline	High	Very dangerous avalanche conditions. Travel in avalanche terrain not recommended.	High
Below Treeline	Considerable	Dangerous avalanche conditions. Careful snowpack evaluation, cautious route-finding and conservative decision-making essential.	Considerable

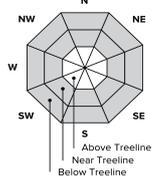
Avalanche Problems for Tuesday

Storm Slabs

Storm slabs usually stabilize within a few days, and release at or below the trigger point. They exist throughout the terrain, and can be avoided by waiting for the storm snow to stabilize.



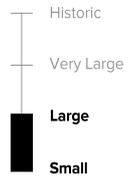
Avalanche Problem



Aspect/Elevation



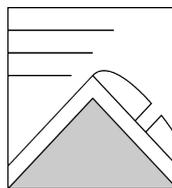
Likelihood



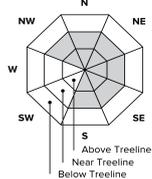
Size

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.



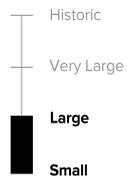
Avalanche Problem



Aspect/Elevation



Likelihood



Size

Snowpack Analysis

Weather and Snowpack

Strong storms a week ago Sunday and Monday deposited generally 3 inches of water equivalent recorded at NWAC stations on Mt Hood through early Tuesday morning.

Unfortunately, much of the heavy precipitation fell in liquid form with rain reaching above 7000 feet by Tuesday morning.

A sharp cooling trend mid-day Tuesday and showers deposited about 2 inches of snow. A strengthening rain crust was noted near and below treeline by late in the day Tuesday with the arrival of colder air.

A front Thursday and upper trough on Friday with low snow levels deposited about 5 inches of snow at NWAC stations on Mt Hood.

NW winds near and above treeline were moderate at Mt. Hood Friday night through mid-day Saturday. Christmas Day was partly to mostly sunny with light winds and cold temperatures.

The winds increased to moderate to strong Monday afternoon ahead of the arriving frontal system.

Recent Observations

Reports from the Mt Hood Meadows pro-patrol Wednesday reported a significantly different snowpack following rain, avalanches and cooling. A stout surface crust was found on all elevations up to at least 7200 feet. On exposed terrain, the crust was very supportable while in treed terrain the crust ranged from breakable to supportable.

The Meadows patrol checked in early Sunday morning to report NW winds had scoured windward aspects near and above treeline exposing the thick crust on many aspects. The crust was slick enough that Santa had trouble landing his sled on any slope steeper than 20 degrees.

Detailed Avalanche Forecast for Tuesday

Stormy conditions Monday night and Tuesday will cause an increasing avalanche danger!

New storm and wind slabs will build through Tuesday. Storm or wind slabs will likely be the most sensitive in areas where poorly bonded to an underlying crust.

Avoid travel in avalanche terrain of consequence Tuesday.

Mountain Weather Synopsis for Tuesday & Wednesday

A strong front moved across the Olympic range overnight and the Cascades early Tuesday morning. Moist post frontal flow is being carried into the Pacific Northwest by a very strong westerly jet stream directed precisely at us! The jet is in excess of 150 kts and will provide the punch to maintain moderate to at times heavy orographic precipitation along the west slopes and over the volcanoes through the day and overnight. A short wave disturbance rapidly approaching the coast should enhance precipitation near midday through the afternoon. Showers slowly taper Tuesday night into early Wednesday as brief high pressure rebuilds over the region midday Wednesday. This should cause showers to diminish or end by late morning, Wednesday with a brief break Wednesday night. Not much change in freezing levels is expected with snow levels generally between 1-2000 feet most areas into Wednesday. The next frontal system to affect the region should arrive late night Wednesday and early Thursday to renew the precipitation once again.

24 Hour Quantitative Precipitation ending at 4 am

Location	Wed	Thu
Hurricane Ridge	.25 - .50	.25 - .50
Mt Baker Ski Area	1.00	.25 - .50
Washington Pass	.25 - .50	.25 - .50
Stevens Pass	1.00	.25 - .50
Snoqualmie Pass	1.00	.25 - .50
Mission Ridge	lt .25	lt .10
Crystal Mt	.50	lt .25
Paradise	1.00 - 1.50	.25
White Pass	.75 - 1.00	lt .25
Mt Hood Meadows	1.50	lt .25
Timberline	1.50 - 2.00	lt .25

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	
Tuesday	2000'	2000'	1000'	2000'	2000'	
Tuesday Night	1500'	1500'	500'	1500'	2000'	
Wednesday	2000'	2000'	1000'	2000'	2000'	
Wednesday Night	2500'	2000'	1500'	2000'	2500'	*

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.