

Mt Hood

Issued: 6:00 PM PST Tuesday, December 27, 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.

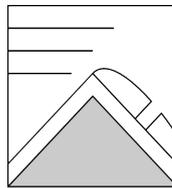
The Bottom Line: Very dangerous avalanche conditions persist in much of the terrain. Storm and large wind slabs will be sensitive Wednesday. The safest plan is to avoid avalanche terrain of consequence until the storm and wind slabs stabilize.

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

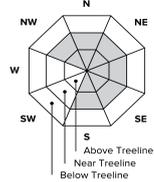
Avalanche Problems for Wednesday

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.



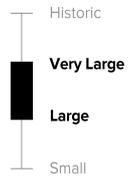
Avalanche Problem



Aspect/Elevation



Likelihood



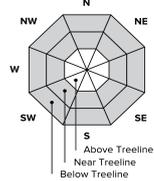
Size

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.



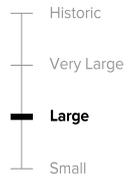
Avalanche Problem



Aspect/Elevation



Likelihood



Size

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.

Christmas Day was partly to mostly sunny with light winds and cold temperatures.

A strong front moved into the region Monday afternoon, passing Mt Hood early Tuesday, followed by heavy snow showers and strong westerly winds through the day Tuesday at low snow levels. Storm total snow from Monday morning through Tuesday afternoon have been over 2 feet and still snowing Tuesday evening!

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.

Patrol at Mt Hood Meadows Tuesday, reported very sensitive storm slab releases, with slabs releasing upon approach to ridges or steeper features.

Detailed Avalanche Forecast for Wednesday

Stormy conditions Tuesday night should gradually ease by Wednesday as a brief break in storms occurs through the day Wednesday. Light winds and a lack of significant additional snowfall should allow for a gradual decrease in danger. However, cold temperatures will limit the stabilization Wednesday.

Storm or wind slabs will be widespread and continue to be sensitive to trigger Wednesday. The current storm slabs may be weakly bonded to a slick crust formed last week. In wind loaded areas, some large to very large avalanches are likely!

Avoid travel in avalanche terrain of consequence Tuesday.

Mountain Weather Synopsis for Wednesday & Thursday

West flow and moisture will decrease on Wednesday as an upper short wave begins to move across the Northwest. This will cause alpine winds and showers that are mainly along the west slopes to decrease and end on Wednesday morning. A warm front will move over the flattened ridge over the Northwest on Wednesday night and Thursday morning. This will cause moderately increasing alpine winds and some light snow in the Olympics and north Cascades. A weakening cold front will move over the further flattened ridge over the Northwest Thursday afternoon and night. It is possible this cold front is weaker than earlier indicated. This will cause further moderately increasing alpine winds and snow mainly in the Olympics and Washington Cascades. Snow levels over the west slopes of the central west and southwest Cascades are a bit of tough call by Thursday afternoon with temperature inversions possible. Any temperature inversions should mix out by Thursday night.

24 Hour Quantitative Precipitation ending at 4 am

Location	Thu	Fri
Hurricane Ridge	lt .25	.25 - .50
Mt Baker Ski Area	.25	1.00
Washington Pass	lt .25	.50
Stevens Pass	lt .25	.50 - .75
Snoqualmie Pass	lt .25	.50
Mission Ridge	lt .10	lt .25
Crystal Mt	lt .25	lt .25
Paradise	.25	.25 - .50
White Pass	lt .10	lt .25
Mt Hood Meadows	lt .10	0
Timberline	lt .10	0

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	
Wednesday Morning	1500'	500'	0'	1000'	1500'	
Wednesday Afternoon	2000'	1000'	0'	1500'	2000'	
Wednesday Night	3000'	1000'	0'	1500'	4000'	*
Thursday Morning	4000'	2000'	1000'	2500'	5000'	*
Thursday Afternoon	5000'	3000'	2000'	4000'	6000'	
Thursday Night	2000'	1000'	1000'	2000'	4000'	

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.