



Northwest
Avalanche
Center



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Olympics

Issued: 8:23 PM PST Friday, December 23, 2016 by Garth Ferber

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.

Sorry for the delay in issuing this forecast. There was a lot of information to process and many significant changes from previous forecasts.

Minor change to the Olympics zone 830 pm Friday.

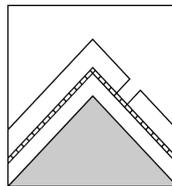
The Bottom Line: Don't be caught surprised by the unusual PWL at Hurricane on Saturday. Limit your travel to low angle slopes until we are sure this layer is stabilized.

Elevation	Saturday		Outlook for Sunday
Above Treeline	Considerable	Dangerous avalanche conditions. Careful snowpack evaluation, cautious route-finding and conservative decision-making essential.	Considerable
Near Treeline	Considerable	Dangerous avalanche conditions. Careful snowpack evaluation, cautious route-finding and conservative decision-making essential.	Considerable
Below Treeline	Considerable	Dangerous avalanche conditions. Careful snowpack evaluation, cautious route-finding and conservative decision-making essential.	Considerable

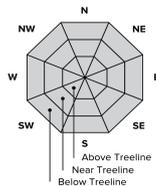
Avalanche Problems for Saturday

Persistent Slab

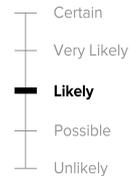
Persistent slabs can be triggered by light loads and weeks after the last storm. You can trigger them remotely and they often propagate across and beyond terrain features that would otherwise confine wind and storm slabs. Give yourself a wide safety buffer to handle the uncertainty.



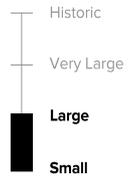
Avalanche Problem



Aspect/Elevation



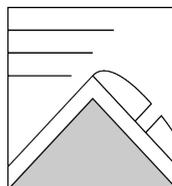
Likelihood



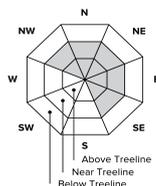
Size

Wind Slab

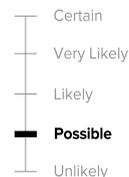
Wind slabs can take up to a week to stabilize. They are confined to lee and cross-loaded terrain features and can be avoided by sticking to sheltered or wind scoured areas.



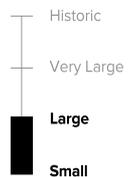
Avalanche Problem



Aspect/Elevation



Likelihood



Size

Snowpack Analysis

Weather and Snowpack

A front crossed the Northwest on Thursday followed by an upper trough on Friday. This has caused about 8-10 inches of snow at Hurricane. South winds Thursday became light on Friday a cooling trend Friday.

Recent Observations

NWAC pro-observer Matt Schonwald was at Hurricane Ridge on Friday and gave an important report so pay attention. He was triggering collapsing and whooping in every open area that he visited on Friday. In 2 snowpits on slopes less than 30 degrees he found the December 17th PWL and preserved surface hoar and preserved faceted snow at about 46-50 cm below the surface with moderate Extended Column tests indicating propagation. While the ski conditions were excellent he was unable to access steeper higher open terrain safely.

Matt also reported that cornices were growing on the lee northeast sides of ridges on Friday.

Detailed Avalanche Forecast for Saturday

An upper trough will exit the Northwest on Saturday and high pressure will begin to build offshore. Light snow showers mainly along the west slopes Saturday morning should give way to partial clearing Saturday afternoon with light west to northwest winds and cool temperatures.

Don't be caught surprised by the unusual PWL at Hurricane on Saturday. Limit your travel to low angle slopes until we are sure this layer is stabilized.

Wind slab should also be possible on Saturday due to recent south winds. Watch for firmer wind transported snow mainly on northwest to southeast slopes.

Although cornices won't be listed as an avalanche problem avoid ridges that may have a cornice and slopes below cornices.

The same danger levels will be indicated in all the terrain bands in the outlook for Sunday due to the cool weather and until there is known favorable change in the PWL layer.

Mountain Weather Synopsis for Saturday & Sunday

A longwave trough axis is centered over the West Coast this morning. Light snow that had rotated up from the south Friday out ahead of the trough, generally produced 2-4 inches of new snow throughout the Olympics and Cascades, except locally up to 9 inches for Mt. Baker. As the trough slowly passes through today, scattered snow showers should mostly be confined to the west slopes. Most areas will see a partial clearing trend this afternoon, except with clouds staying banked up mainly against the west slopes of the central and south Washington Cascades. Christmas Day looks mostly sunny and cold. An upper ridge will move over the PNW on Monday providing us with a dry day with fairly light winds. An incoming Pacific frontal system will spread high clouds over the area Sunday night but precipitation should hold off until Monday.

24 Hour Quantitative Precipitation ending at 4 am			Snow Level/Freezing Level in feet				
Location	Sun	Mon					Easterly
			Northwest	Northeast	Central	South	Flow in
			Olympics	Cascades	Cascades	Cascades	Passes
Hurricane Ridge	lt .10	0					
Mt Baker Ski Area	lt .10	0					
Washington Pass	0	0					
Stevens Pass	lt .10	0					
Snoqualmie Pass	lt .10	0					
Mission Ridge	0	0					
Crystal Mt	lt .10	0					
Paradise	lt .10	0					
White Pass	lt .10	0					
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.			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.				
Saturday			1000'	500'	0'	500'	1000'
Saturday Night - Sunday Night			1000'	0'	0'	0'	500'