Mt Hood

Issued: 9:25 PM PST Thursday, April 20, 2017

by Dennis D'Amico

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.

NWAC Spring Forecast Schedule

The NWAC issued daily mountain weather and avalanche forecasts through Saturday, April 15th. Mountain weather and avalanche forecasts will be issued during the spring transition April 20-22nd and April 27-29th. Weekend outlooks will be issued Thursdays, May 4th, 11th, 18th and 25th.

Special advisories, watches and warnings will be issued throughout the spring for unusual or dangerous avalanche conditions. You can find out what constitutes a special advisory, watch or warning here.

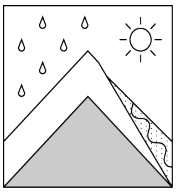
The Bottom Line: Don't let the sunshine blind you to spring avalanche hazards on Friday! The loose wet potential will ramp up quickly as temperatures warm along with increasing sunshine. A more winter-like snowpack should be found above treeline where lingering wind slabs may still be sensitive. Cornices are still large so give them a wide safety margin.

Elevation	Friday		Outlook for Saturday
Above Treeline	Considerable	Dangerous avalanche conditions. Careful snowpack evaluation, cautious route-finding and conservative decision-making essential.	Moderate
Near Treeline	Moderate	Heightened avalanche conditions on specific terrain features. Evaluate snow and terrain carefully; identify problem features.	Moderate
Below Treeline	Moderate	Heightened avalanche conditions on specific terrain features. Evaluate snow and terrain carefully; identify problem features.	Moderate

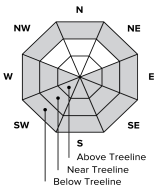
Avalanche Problems for Friday

Loose Wet

Loose wet avalanches occur where water is running through the snowpack, and release at or below the trigger point. Avoid terrain traps such as cliffs, gullies, or tree wells. Exit avalanche terrain when you see pinwheels, roller balls, a slushy surface, or during rain-on-snow events.

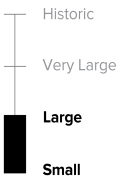


Avalanche Problem



Aspect/Elevation

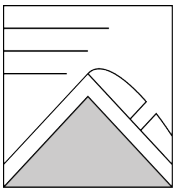
Likelihood



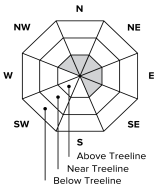
Size

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.

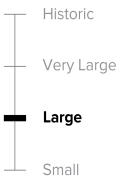


Avalanche Problem



Aspect/Elevation

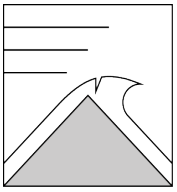
Likelihood



Size

Cornices

Cornices are easy to identify and are confined to lee and cross-loaded ridges, sub-ridges, and sharp convexities. They are easiest to trigger during periods of rapid growth (new snow and wind), rapid warming, and during rain-on-snow events. Cornices often catch people by surprise when they break farther back onto flatter areas than expected.



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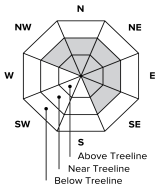
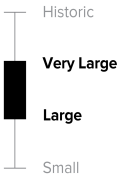


Aspect/Elevation

Likelihood



Size

Snowpack Analysis

The active weather pattern continues into late April for the Pacific Northwest despite what the calendar says. Over the last few days, Mt. Hood stations have picked up 1 - 1.5 inches of water equivalent (WE). Much or all of this has fallen as snow above 5500-6000 feet. Moderate W-SW transport winds have occurred near and above treeline over this stretch as well. Natural loose wet avalanches have likely occurred throughout the week as the snow-line has oscillated or on solar aspects at lower elevations during sunbreaks.

Recent observations

None

Detailed Avalanche Forecast for Friday

After a cool start, strong late April sunshine and rising freezing levels will quickly increase the loose wet hazard on all solar aspects. If the alpine winds out of the E-SE and high clouds increase in the afternoon as forecast, the greatest loose wet hazard above treeline will likely peak late morning through early afternoon. Fresh snow near and above tree-line will quickly activate with a natural shed cycle likely on steeper solar slopes. Loose wet avalanches at lower elevation may be less likely to initiate naturally, but if skier triggered, could entrain older snow layers and become large in specific areas. Keep this in mind around terrain traps.

Winds have transported recent snowfall over the past week onto lee slopes, with the most snowfall and transport occurring above treeline. Be suspicious of steeper wind loaded slopes below ridges. Expect the wind slab hazard to increase quickly with elevation.

Cornices are still large so give them a wide safety margin. Natural cornice releases and resulting slab avalanches are dangerous and unpredictable. Give cornices a wide berth if traveling along ridge-lines and avoid slopes below large cornices. See a blog post regarding cornices here.

Avoid unsupported slopes with overhanging blocks of snow and smooth rock underneath. Glide avalanches can release at any time, not just during the heat of the day, and are by definition difficult to predict and manage.

Mountain Weather Synopsis for Friday & Saturday

After a relatively cool start this morning with most mountain sites in the mid to upper 20s, freezing levels will peak into the 7500-9000 ft range over the Olympics and Cascades this afternoon. As of 1 PM, many NWAC stations are in the 40s with a few pushing into the 50s as a high amplitude upper level ridge moves over the West Coast. As has been the case with dry weather forecasts as of late, there are a few caveats. The next approaching frontal system should start to spread some high cloud over the area from the SW in the late afternoon/early evening. Also, offshore gradients will increase though the Passes creating locally breezy conditions this afternoon and tonight. Crest level E-SE winds particularly in the southeast/central-east Washington Cascades and the Mt. Hood area will increase overnight as the next Pacific frontal system approaches. Mid and high level clouds will increase Friday night in advance of the front, but precipitation should hold off until Saturday morning. Rain and snow will lift northeast over the area during the day on Saturday, followed by post-frontal showers late Saturday afternoon/evening. Showers should taper off Saturday night.

24 Hour Quantitative Precipitation ending at 4 am

Location	Sat	Sun
Hurricane Ridge	0	.25
Mt Baker Ski Area	0	.50
Washington Pass	0	lt .25
Stevens Pass	0	.25
Snoqualmie Pass	0	.25
Mission Ridge	0	lt .10
Crystal Mt	0	lt .25
Paradise	0	.25
White Pass	0	lt .25
Mt Hood Meadows	0	lt .10
Timberline	0	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	Olympics	Northwest Cascades	Northeast Cascades	Central Cascades	South Cascades	Easterly Flow in Passes
Friday Afternoon - Friday Night	7500'	7500'	7000'	7500'	8500'	*
Saturday	5500'	5500'	5500'	5500'	6000'	
Saturday Night	4000'	4000'	4000'	4000'	4500'	

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.