










# Mt Hood

Issued: 7:24 PM PST Monday, March 20, 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.

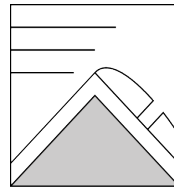
**The Bottom Line:** Above treeline, dangerous avalanche conditions should develop through the day with storm or wind slabs becoming touchy by afternoon. At lower elevations, shallow wet snow conditions should maintain the possibility of mostly small loose-wet avalanches. Avoid overhead hazard, such as the recently formed large cornices.

Elevation	Tuesday		Outlook for Wednesday
 Above Treeline	 Considerable	Dangerous avalanche conditions. Careful snowpack evaluation, cautious route-finding and conservative decision-making essential.	 Considerable
 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

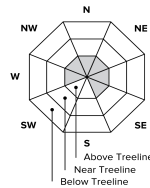
## Avalanche Problems for Tuesday

### 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.



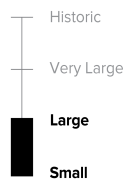
Avalanche Problem



Aspect/Elevation



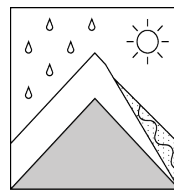
Likelihood



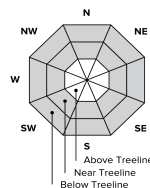
Size

### 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.



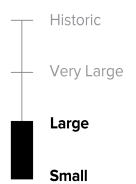
Avalanche Problem



Aspect/Elevation



Likelihood



Size

# Snowpack Analysis

## Weather and Snowpack

The first week or so of March was very cool and snowy. NWAC stations at Mt Hood piled up about 6-7 ft of snow.

The 2nd week of March was equally active with non-stop Pacific frontal systems pummeling the PNW. Unfortunately, these systems delivered far more rain than snow. At least two regional avalanche cycles occurred during the stretch. Significant snowpack consolidation occurred over this period due to rainfall and warmer temperatures.

After a short respite from the active weather pattern on Thursday, another strong low pressure system brought about an inch of predominately rain to the NWAC Mt. Hood stations Friday night and Saturday morning. Rapid cooling late Saturday morning was followed by snow showers with light new snow accumulation. Strong W-SW winds were transporting new snow above treeline by mid-day Saturday.

Sunday was cool with light winds and mostly sunny skies at Mt. Hood. Increasing clouds Monday with moderate daytime warming allowed additional slow snowpack settlement.

## Recent Observations

Mt. Hood Meadows pro-patrol reported a switch from rain to snow at mid-mountain by noon Saturday with strong W-SW winds beginning to build fresh new wind slab above treeline.

NWAC Observer, Laura Green was out Saturday and observed a snowscape of deep rain runnels from overnight rains. Along exposed ridges in higher elevations, wind slabs were forming along lee ridges as well as cornices.

## Detailed Avalanche Forecast for Tuesday

A weak disturbance will spread increasing light rain and snow at gradually rising freezing levels overnight Monday. Only light amounts of precipitation are expected overnight. This should begin to wet and weaken shallow surface snow layers.

A stronger band of moisture Tuesday should bring periods of moderate rain and snow at gradually rising freezing levels. Winds should be moderate along the ridges above treeline Tuesday.

These conditions should cause dangerous avalanche conditions through the day, building fresh wind slabs at higher terrain along ridges, mainly on NW-NE-E facing terrain. The wind slab problem should become increasingly sensitive to human trigger, especially by Tuesday afternoon. Watch for firmer wind transported snow on all aspects, especially in areas of complex terrain.

At lower elevations, light rain should maintain shallow wet snow conditions and make small loose-wet snow avalanches possible.

Avoid areas with terrain traps where a small loose wet avalanche could have unintended consequences.

It is always a good plan to travel well back from ridges, [suspected of cornice formation](#), or on steep slopes below cornices.

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## Mountain Weather Synopsis for Tuesday & Wednesday

Bands of light to moderate showers continue their steady march from south to north across the region Tuesday. An upper trough remains well offshore and is directing the series of frontal shower bands across the region in SSW flow aloft. The SSW flow has also brought more mild air into the area with freezing levels pushing 7000 feet in most of the west slope Cascade and Mt Hood areas Tuesday. Another band of showers extends from about Crystal Mountain northward across the Mt Baker area, moving NNE. Some areas have mostly missed the precipitation while others have had some heavy showers Tuesday afternoon. The upper trough moves east to reach the coast early Wednesday and should be accompanied by another frontal passage to move across the Cascades midday Wednesday. This should renew light to moderate precipitation and gradually shift winds to a more westerly direction. Freezing levels should lower Wednesday as the trough passes. Post frontal showers should diminish overnight Wednesday with further cooling.

**24 Hour Quantitative Precipitation ending at 4 am**

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

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	Snow Level/Freezing Level in feet					Easterly Flow in Passes
	Olympics	Northwest Cascades	Northeast Cascades	Central Cascades	South Cascades	
Tuesday Afternoon	5500'	5500'	5000'	6000'	6500'	*
Tuesday Night	4500'	4500'	4500'	5000'	5500'	*
Wednesday	3500'	4000'	4000'	4000'	4000'	
Wednesday Night	2500'	2000'	2000'	2500'	3000'	

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.