

Kahler Glen House Avalanche Incident

February 7, 2008

Incident Summary

Time: 7 February, 2008, approximately 16:00 hrs PST

Location: Near Lake Wenatchee, east slopes of north-central Washington Cascades WA

Activity: None

Caught: One home

Buried: Home taken off its foundation, moved down slope 30-50 ft and mostly destroyed

Injured: None

Killed: None

Preliminary Incident Narrative:

(Narrative prepared by Mark Moore, NWAC, based on information and photos provided by Mike Stanford, John Meriwether and Joanne Stanford):

The Incident: On February 7, 2008, the Northwest was experiencing some of the strongest westerly flow and heaviest orographic snowfall in the past 20+ years. During the two days prior to the event, the normally sheltered NWAC's Lake Wenatchee Remote Weather Station (1920 ft elevation) received 21 inches of new snow. This snowfall increased their unusually robust snowdepth to 69 inches, considerably more than normally experienced—the site reported only 38 inches on the same date the year prior. Around the time of the event, free winds at the 5000 ft level were averaging 50+ mph with many higher elevation Cascade weather stations reporting winds gusting to 80 to 100+mph. With such high winds, heavy snow loading of this steeper east-northeast facing slope was ongoing. Combined with an unusually deep snowpack that covered much of the terrain and vegetative anchors normally in evidence, the stage was set for a relatively large avalanche event.

As it had for much of the preceding week, on the morning of the 7th the NWAC continued an avalanche warning for generally HIGH danger below 7000 feet for all of the Washington Cascades and Olympics. The danger was underscored by the fact that all major east-west routes in the state across the Cascades were closed by avalanches, with the winter producing some of the longest pass closures in recent history.

As seen from the Google map shown below (Figure1) the approximate elevation of the home was around 2300 ft, with the ridgeline above at about 3150 ft (about 800 vertical). It is estimated that the natural slide (preliminarily classified as SS-N-R4-D3 traveled some 6-800 vertical feet before impacting the house—and it is indeed very fortunate that no one was home.

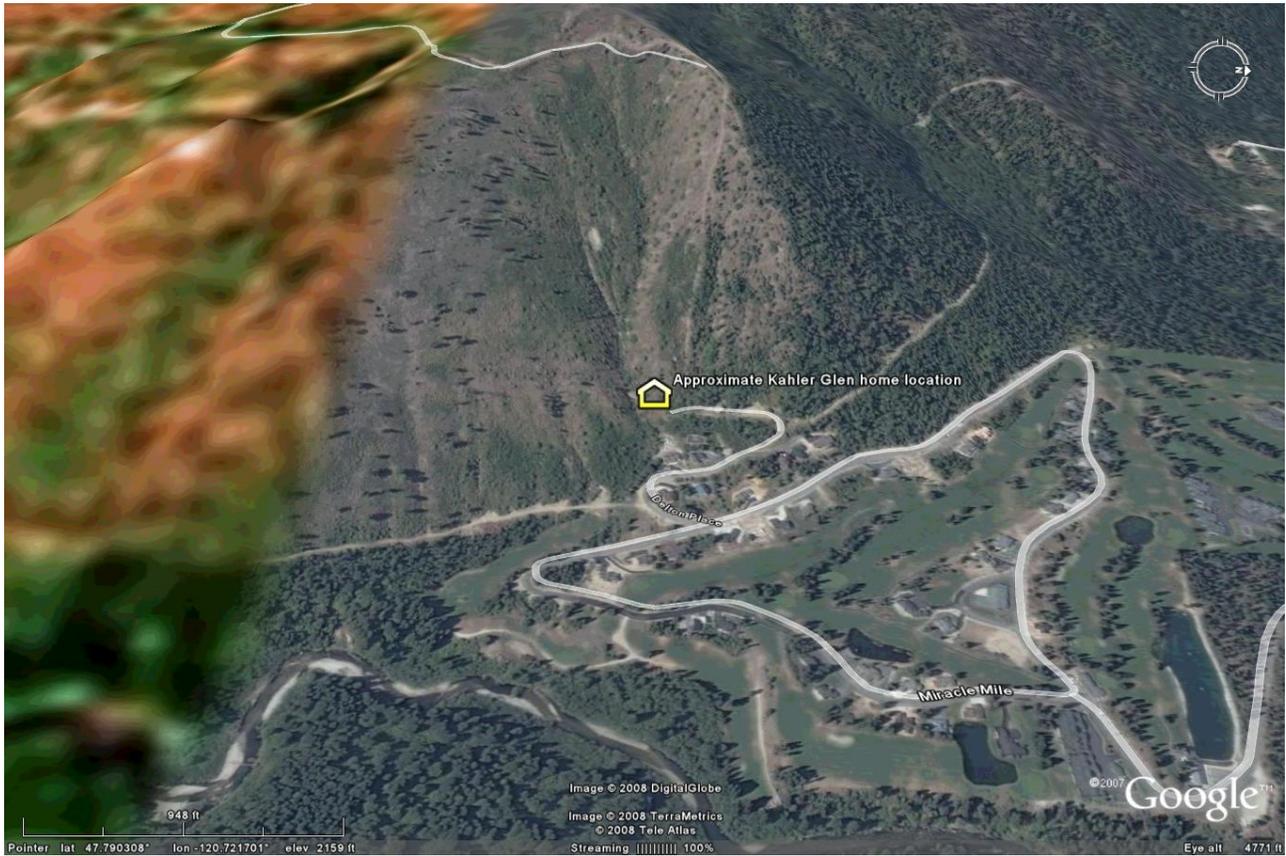


Figure 1. Google map of approximate house location, looking to the west. Kahler Glen golf course in foreground and Lake Wenatchee just off screen to right.



Figure 2. From just above impacted home looking uphill toward ridge. Fracture line dimly visible toward top of slope. (Photo courtesy Mike Stanford)



Figure 3. Part of fracture line near ridgeline. Slide may have released on a number of buried weak layers. (Photo courtesy Mike Stanford)



Figure 4. View of home after being hit and moved by slide. (Photo courtesy Mike Stanford)



Figure 5. View of home and adjacent slope that extends uphill toward ridge. (Photo courtesy Mike Stanford)