

LANDSLIDE

Landslides can be initiated by rainfall, volcanic activity, earthquakes, changes in groundwater or disturbance of slope by construction activities. Slides can range in size from thin masses of soil a few yards wide to deep-seated bedrock slides more than six miles across.

In Cowlitz County, the slopes by Ocean Beach Highway (SR4) along the Columbia River in the western side of the County have yielded several slides as well as the cliffs located on the east side of I-5 near Woodland.

Housing developments or other structures built on top of, or below slopes are subject to landslide. In 1998-1999, Kelso experienced a slow-moving landslide of approximately 40 acres in a neighborhood known as Aldercrest. Besides the loss of homes and personal property, the city of Kelso sustained an \$8,000,000 loss from damaged roads, water and sewer systems, drainage systems and pump stations.

The Aldercrest-Banyon Landslide in Kelso in 1998/99 destroyed 135 homes causing an estimated \$13,200,000 worth of property damage to homeowners.

Check out this link for pictures and information regarding the Aldercrest slide:

http://web.umn.edu/~rogersda/professional_experience/aldercrest-banyon_ls.htm

Landslide Warning Signs

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| ➤ | Doors or windows stick or jam for the first time. |
| ➤ | New cracks appear in plaster, tile or brick foundation. |
| ➤ | Unusual bulges in the ground, cracks in street pavements or sidewalks. |
| ➤ | Soil, walls, sidewalks, or stairs begin pulling away from structures. |
| ➤ | Cracking of concrete floors and foundations. |
| ➤ | Broken underground utility lines. |
| ➤ | Sinkholes, springs or saturated ground in new locations. |
| ➤ | Tilting fences, retaining walls, utility poles, or trees. |
| ➤ | Bulging ground appears at the base of a slope. |
| ➤ | Rapid increase in creek water levels, possibly with increased turbidity (soil content). |