

## Lake Creek Fault Presentation

Presenter: Timothy J. Walsh, Chief Geologist, Hazard Section, Washington Geological Survey, DNR  
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I (WX7RIK) attended this presentation and took some notes. There was a lot of information presented, and this is only a small part of that presentation.


- The Lake Creek Fault runs through the north end of Lake Crescent, Lake Sutherland, and up Little River.
- This fault was identified through seismic analysis using LIDAR from aircraft.
- This process gives them a topographic map of the area accurate within 4-inches. This topo is HD.
- They observed abrupt steps in the terrain, which identified the fault originally called the Little River Fault. This fault was then identified as a part of the Lake Crescent - Lake Sutherland fault and renamed Lake Creek Fault.
- If this fault quakes, the highest impact would be to Port Angeles.
- I photographed a slide I found very interesting (sorry for poor quality):

**Modeling a Magnitude 6.8 Earthquake on the Lake Creek–Boundary Creek Fault Zone in Clallam County**

**Table 1. Summary of significant losses in the M6.8 Lake Creek–Boundary Creek earthquake scenario. The counties most likely to be affected are Clallam, Jefferson, King, Kitsap, Mason, Skagit, and Snohomish.**

**\*Injury severity levels: 1—requires medical attention, but not hospitalization; 2—not life-threatening, but does require hospitalization; 3—hospitalization required; may be life-threatening if not treated promptly; 4—victims are killed by the earthquake**

LAKE CREEK–BOUNDARY CREEK SCENARIO EARTHQUAKE	
End-to-end length of fault (kilometers)	30
Magnitude (M) of scenario earthquake	6.8
Number of counties impacted	14
Total injuries (*severity 1, 2, 3, 4) at 2:00 PM	253
Total number of buildings extensively damaged	1,612
Total number of buildings completely damaged	407
Income losses in millions	\$128
Displaced households	460
People requiring shelter (individuals)	283
Capital stock losses in millions	\$518
Debris total in millions of tons	0.19
Truckloads of debris (25 tons per truckload)	7,680
People without power (Day 1)	9,095
People without potable water (Day 1)	544

 WASHINGTON STATE DEPARTMENT OF  
**Natural Resources**

- Some useful links to get started to become disaster resistant:
  - [www.dnr.wa.gov/ResearchScience/GeologyEarthSciences?Pages?Home.aspx](http://www.dnr.wa.gov/ResearchScience/GeologyEarthSciences?Pages?Home.aspx)
  - [www.emd.wa.gov/index.shtml](http://www.emd.wa.gov/index.shtml)
  - [www.crew.org](http://www.crew.org)
  - [www.drtoolkit.org](http://www.drtoolkit.org)