

WASHINGTON STATE DEPT OF  
**NATURAL  
RESOURCES**  
WASHINGTON  
GEOLOGICAL SURVEY

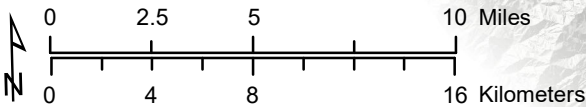
# Perceived Shaking and Damage Potential

## Simulated Cascadia Subduction Zone Magnitude 9.0 Earthquake

Appendix D: Plate 5

This map is intended to provide nontechnical users with an estimate of the geographic distribution of building damage. The damage categories are taken from the Modified Mercalli Intensity scale, which is based on observed effects on people, objects, and buildings. The damage potential categories are derived from the peak ground velocity developed for this project. The peak ground velocity breakpoints are established by Wald and others (2006). Further information is available at <https://earthquake.usgs.gov/learn/topics/mercalli.php>

Modified Mercalli Intensity Scale	Perceived Shaking	Damage Potential
IV	Light	None
V	Moderate	Very light
VI	Strong	Light
VII	Very Strong	Moderate
VIII	Severe	Moderate/ Heavy
IX	Violent	Heavy



**Source Data:**  
Hydrography: National Hydrography Dataset, 2018  
Modified Mercalli Intensity for Washington and Multnomah Counties:  
Bauer and others, 2018  
**Projection:** Lambert Conformal Conic, EPSG 2913.

