

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

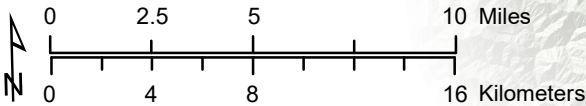
WAHKIAKUM CO. COWLITZ CO.

-123°

**Potential Permanent Ground Deformation  
Due to Earthquake-Induced Landslides  
or Liquefaction Lateral Spreading  
Cascadia Subduction Zone Magnitude 9.0 Earthquake  
Wet (Saturated) Soil Scenario**

**Permanent Ground Deformation**

- None
- Low (0–10 cm; 0–4 inches)
- Moderate (10–30 cm; 4–12 inches)
- High (30–100 cm; 12–39 inches)
- Very High (100–1180 cm; 39–173 inches)



**Source Data:**  
Hydrography: National Hydrography Dataset, 2018  
Ground deformation from earthquake-induced landslide and  
liquefaction lateral spreading in Washington, Multnomah Counties:  
Bauer and others, 2018  
**Projection:** Lambert Conformal Conic, EPSG 2913.

