# Legend – Oregon HazVu: Statewide Geohazards Viewer

http://www.oregongeology.org/hazvu/

## Radon Potential

**Radon Potential**

- High
- Moderate
- Low

Radon potential is the ability of rock and soil derived from it to produce radon. Radon is a colorless and odorless gas. The only way to determine radon levels accurately in individual buildings is by making measurements of indoor air.

## Flood Hazard

**Special Flood Hazard Area (9/22/14)**

- Effective FEMA 100 yr Flood
- Preliminary FEMA 100 yr Flood
- State Digitized Flood Data
- Q3 FEMA Flood Data

The 100-year floodplain is a flood zone developed by statistical analyses of stream discharge data to define the 1%-annual-chance flood event (e.g. the "100-year flood"). The resulting flood water surface is mapped on best available topographic data, ranging from USGS topographic maps (least accurate) to lidar (most accurate). The flood hazard dataset uses multiple data layers in order to fully cover the state of Oregon.

## Cascadia Earthquake Hazard

**Statutory Tsunami Inundation Line**

This line depicts the regulatory tsunami inundation boundary (Oregon Revised Statutes [ORS] 455.446 and 455.447) that was created by DOGAMI in 1995 to implement Senate Bill 379. It was created to prohibit the construction of new essential and special occupancy structures seaward of its location.

- Violent
- Severe
- Very Strong
- Strong
- Moderate
- Light

**Cascadia Earthquake Expected Shaking**

These data show the amount of shaking you can expect to feel if a magnitude 9.0 Cascadia Subduction Zone (CSZ) earthquake occurs. A CSZ earthquake will create a local tsunami that will inundate the Oregon coast.

## Coastal Erosion Hazard

- Very High (Active) Hazard Zone
- High Hazard Zone
- Moderate Hazard Zone
- Low Hazard Zone
- NO DATA

These hazard zones represent areas of low to very high (active) erosion of beach or dune sediments by wave action, tidal currents, or drainage. Oregon residents who own structures on or near a beach or bluff should be aware of this hazard and its potential impact. NO DATA denotes coastal areas not mapped.

## Volcano Hazard

- High Hazard Zone
- Moderate Hazard Zone

These data depict areas where volcanic hazards may occur during or after volcanic activity. Volcanoes can produce volcanic ash, mudflows, debris flows, avalanches of hot volcanic material, lava flows, and landslides. Residents and visitors to these areas should have an evacuation plan ready should volcanic activity begin.

Oregon Department of Geology and Mineral Industries
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## Earthquake Hazard

**Active Faults**

Potentially hazardous faults are those that have been identified by the US Geological Survey as having moved in the last 1.6 million years. These faults may be the source of future damaging earthquakes, and severe ground disruption is possible within the buffer zones.

Magnitude

- 5-7
- 3-5
- 2-3
- 1-2
- 0-1

**Earthquake Epicenter (1971-2008)**

An earthquake epicenter is the point on the Earth's surface that is directly above the location where an earthquake originates.

- High
- Moderate
- Low

**Earthquake Liquefaction (Soft Soil) Hazard**

The intense shaking of an earthquake can cause soil liquefaction – where loosely packed, water-logged sediments are transformed into a substance that acts like a liquid. Buildings and infrastructure sitting on these soft soils are likely to be severely damaged in an earthquake.

- Violent
- Severe
- Very Strong
- Strong
- Moderate
- Light

**Expected Earthquake Shaking**

These data show the strongest shaking expected to occur during an earthquake in a 500-year period. The stronger the amount of shaking, the more structural damage will occur.

## Landslide Hazard

- Low – Landsliding unlikely
- Moderate – Landsliding possible
- High – Landsliding likely
- Very high – Existing landslides

**Landslide Susceptibility**

Based on soil, rock type, nd historical landslides. To be used for regional planning.

## Landslide Inventory

- Scarp
- Head Scarp

**Deposits**

- Talus-Colluvium
- Fan
- Landslide

Scarps are concave, steep areas of a slope where material has been removed due to landsliding. A head scarp is the area at the top of a slope where material has been removed due to landsliding. Talus-colluvium is a general term for loose sediments built up at the base of a slope due to transportation by gravity. A fan is an outspread mass of material, usually at the base of a narow channel, deposited by a landslide. Landslide is a general term for deposits of material that have been moved by landsliding.

## Buildings

**State Owned/Leased Facility**

Facility owned or leased by the state of Oregon.

- School
- Community College
- Police Station
- Fire Station
- Emergency Operations Center
- Hospital

**Public Buildings**

The buildings shown represent schools and critical facilities that were evaluated in 2006 to assess their earthquake vulnerability. (Final results from this study were published by DOGAMI in 2007. See DOGAMI Open-File Report O-07-02.) This is not a comprehensive data layer of schools or critical facilities in the State.

Use the Public Buildings Search Tool on the map to access the vulnerability reports and click on "RVS Report."