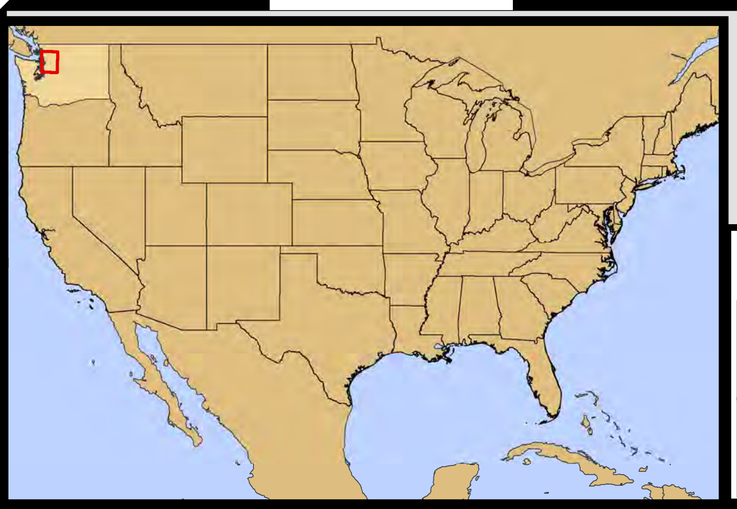
Northern Washington Hillshade

552.95kmE
572.95kmE
592.95kmE
612.95kmE
5381.248kmN
5361.248kmN
5341.248kmN
5321.248kmN
5301.248kmN
5281.248kmN
48.5° N
48.25° N
48° N
47.75° N
OSO
SEATTLE
kmN
122.5° W
122.25° W
122° W
121.75° W
121.5° W



km
0
10
20

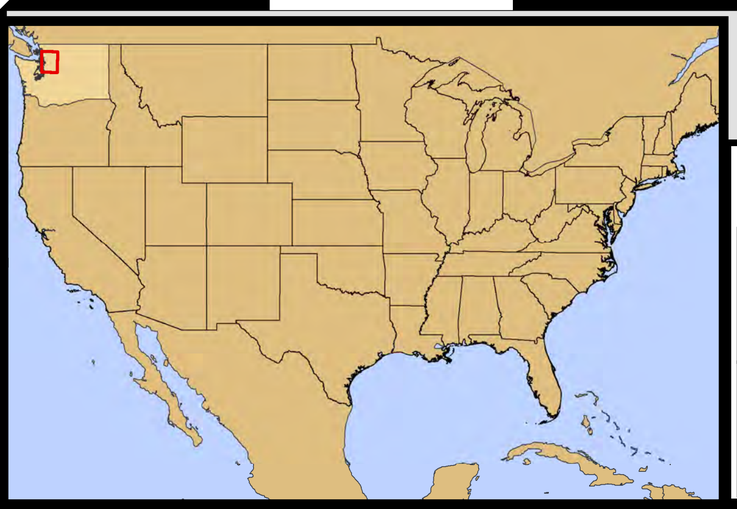
Sources:
Country and state boundaries provided by ESRI.
SRTM DEM data provided by OpenTopography.

1:175,000

N

Northern Washington Hillshade + Water

552.95kmE
572.95kmE
592.95kmE
612.95kmE
5381.248kmN
5361.248kmN
5341.248kmN
5321.248kmN
5301.248kmN
5281.248kmN
48.5° N
48.25° N
48° N
47.75° N
122.5° W
122.25° W
122° W
121.75° W
121.5° W



km
0
10
20

Sources:
Country and state boundaries provided by ESRI.
Hydrologic data provided by the USGS.
SRTM DEM data provided by OpenTopography.

Surface Water

1:175,000

N

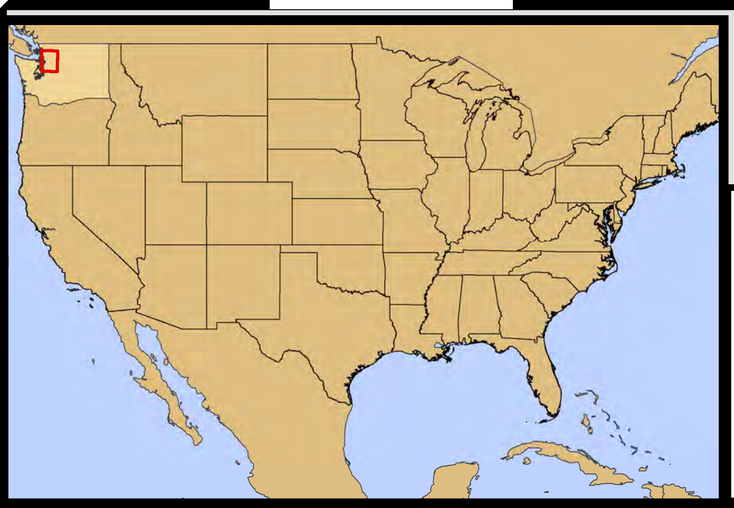
Northern Washington Topography

553.002720 573.002720 593.002720 613.002720

5381.247743 5361.247743 5341.247743 5321.247743 5301.247743 5281.247743

48.5° N 48.25° N 48° N 47.75° N 47.5° N

122.5° W 122.25° W 122° W 121.75° W 121.5° W



Sources:
All data provided by ESRI

1:175,000

N

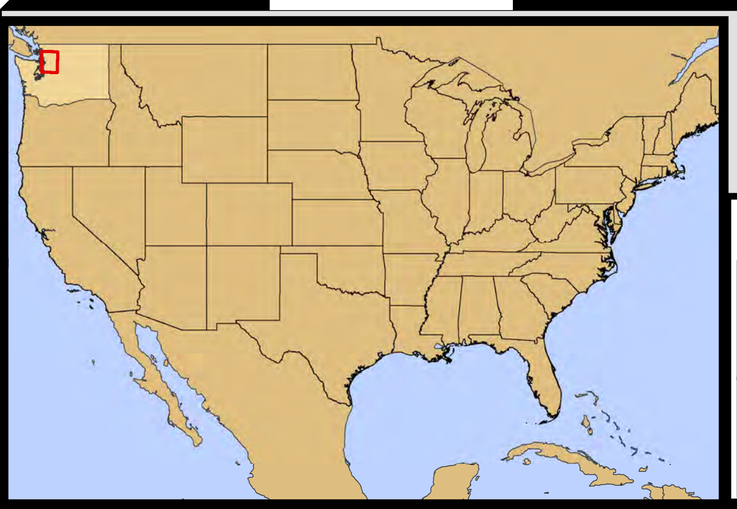
0 10 20 km

Contour intervals in meters

Map made 1/26/16

Northern Washington Aerial Imagery

552.95kmE
572.95kmE
592.95kmE
612.95kmE
5381.248kmN
5361.248kmN
5341.248kmN
5321.248kmN
5301.248kmN
5281.248kmN
48.5° N
48.25° N
48° N
47.75° N
122.5° W
122.25° W
122° W
121.75° W
121.5° W



km
0
10
20

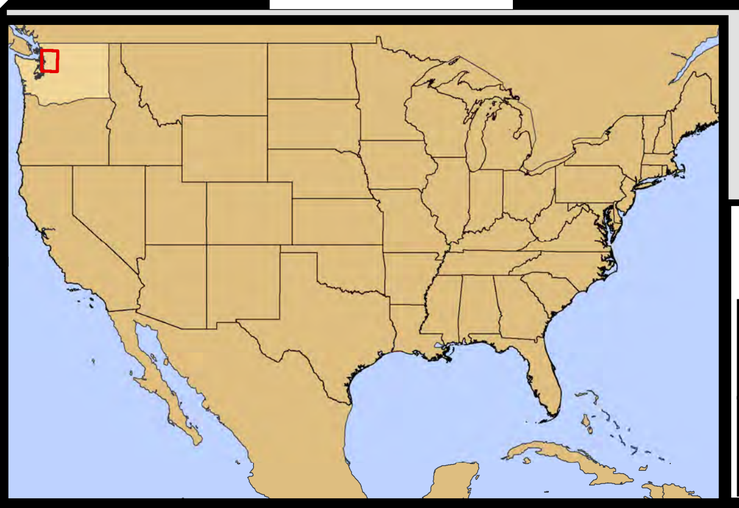
Sources:
Country and state boundaries provided by ESRI.
SRTM DEM data provided by OpenTopography.
Imagery provided by ESRI.

1:181,490

N

Northern Washington Slope

552.95kmE
572.95kmE
592.95kmE
612.95kmE
5381.248kmN
5361.248kmN
5341.248kmN
5321.248kmN
5301.248kmN
5281.248kmN
48.5° N
48.25° N
48° N
47.75° N
122.5° W
122.25° W
122° W
121.75° W
121.5° W



Sources:
Country and state boundaries provided by ESRI.
SRTM DEM data provided by OpenTopography.

0 10 20 km

Slope (degrees)

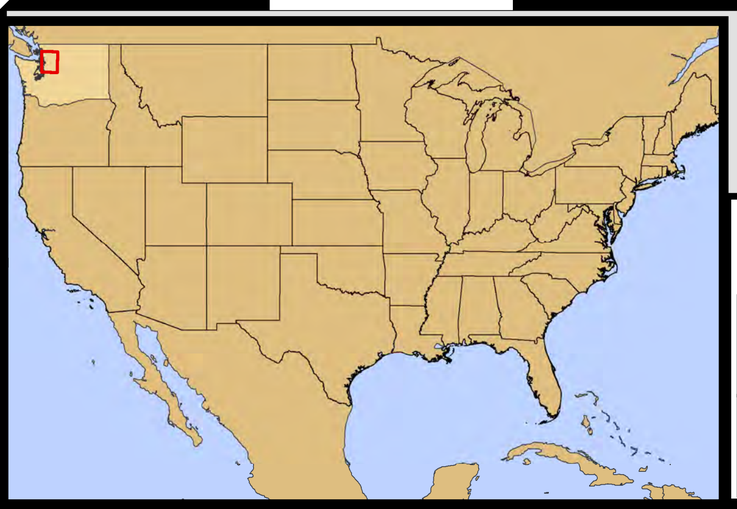
0° - 5°	25° - 30°
5° - 10°	30° - 35°
10° - 15°	35° - 40°
15° - 20°	40° - 45°
20° - 25°	45° - 81.08°

N

1:175,000

Northern Washington Aspect

552.95kmE
572.95kmE
592.95kmE
612.95kmE
5381.248kmN
5361.248kmN
5341.248kmN
5321.248kmN
5301.248kmN
5281.2
48.5° N
48.25° N
48° N
47.75° N
122.5° W
122.25° W
122° W
121.75° W
121.5° W



0 10 20 km

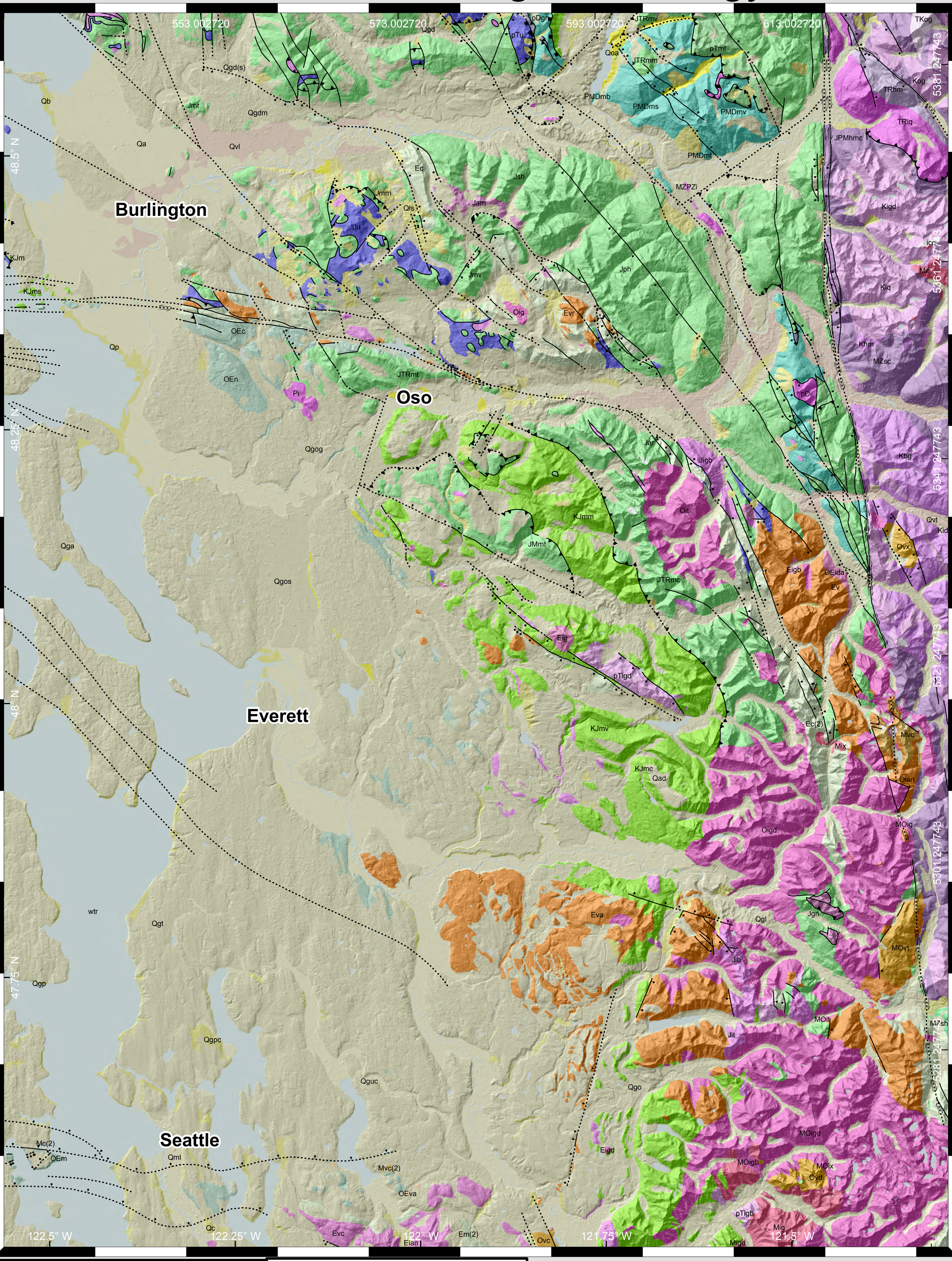
Sources:
Country and state boundaries provided by ESRI.
SRTM DEM data provided by OpenTopography.

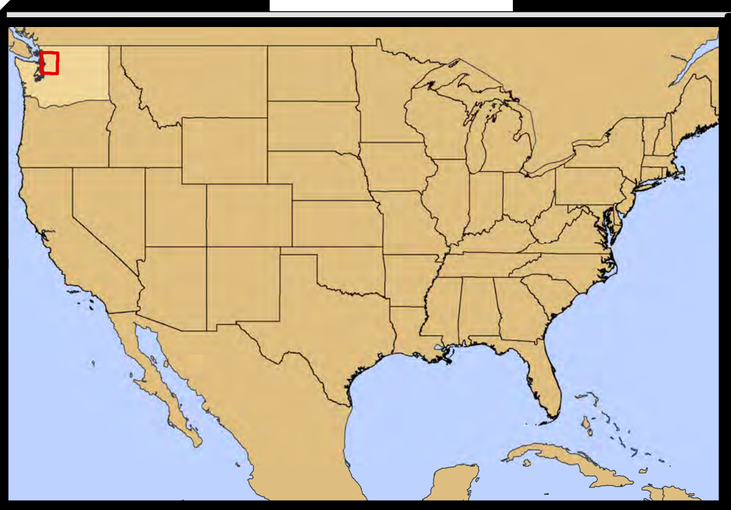
Flat
315° - 45°
45° - 135°
135° - 225°
225° - 315°

1:175,000

N

Northern Washington Geology





Sources:
Country and state boundaries provided by ESRI.
Geology Layers provided by the USGS.
Map made 1/29/16

1:175,000

N

0 10 20 km

Northern Washington Geology

Legend

Faults 250K

Dip-Slip Movement

Normal fault - Identity and existence certain, location accurate. Bar and ball on downthrown block [43]

Normal fault - Identity and existence certain, location concealed. Bar and ball on downthrown block [45]

Low-angle normal fault - Identity and existence certain, location accurate. Rectangles on upper plate [31]

Low-angle normal fault - Identity and existence certain, location concealed. Rectangles on upper plate [33]

Thrust fault - Identity and existence certain, location accurate. Sawteeth on upper plate [7]

Thrust fault - Identity and existence certain, location concealed. Sawteeth on upper plate [9]

Strike-Slip Movement

Right-lateral strike-slip fault - Identity and existence certain, location accurate. Arrows show relative motion [13]

Right-lateral strike-slip fault - Identity and existence certain, location concealed. Arrows show relative motion [15]

Left-lateral strike-slip fault - Identity and existence certain, location concealed. Arrows show relative motion [21]

Oblique-Slip Movement

Normal right-lateral strike-slip fault - Identity and existence certain, location accurate. Arrows show relative horizontal motion; bar and ball on downthrown block [78]

Normal right-lateral strike-slip fault - Identity and existence certain, location concealed. Arrows show relative horizontal motion; bar and ball on downthrown block [80]

Movement Unknown

Fault, unknown offset - Identity and existence certain, location accurate [1]

Fault, unknown offset - Identity and existence certain, location concealed [3]

Geologic Units 250K

Unconsolidated Sediments

Quaternary alluvium, dune sand, loess, and modified land

Quaternary beach, continental sedimentary, lacustrine, fluvial, mass-wasting, terraced sedimentary, and peat deposits

Quaternary alluvium, older (includes alluvial fans and talus)

Pleistocene glacial drift, alpine, Fraser-age

Pleistocene (Fraser-age) continental glacial drift, outburst flood deposits, and glaciolacustrine deposits

Pleistocene glacial drift, continental, pre-Fraser

Sedimentary Rocks and Deposits

Miocene continental sedimentary rocks

Miocene–Eocene continental sedimentary rocks

Eocene continental sedimentary rocks

Oligocene–Eocene nearshore sedimentary rocks

Miocene to Eocene marine sedimentary rocks

Eocene marine sedimentary rocks

Volcanic Rocks and Deposits

Miocene–Oligocene and Oligocene lava flows

Oligocene–Eocene and younger Eocene lava flows

Eocene lava flows

Quaternary fragmental volcanic rocks or deposits

Miocene fragmental volcanic rocks or deposits

Miocene–Oligocene and Oligocene fragmental volcanic rocks

Eocene fragmental volcanic rocks

Intrusive Igneous Rocks

Pleistocene–Pliocene and Pliocene to Miocene intrusive igneous rocks

Miocene–Oligocene and Oligocene intrusive igneous rocks

Oligocene–Eocene and Eocene intrusive igneous rocks

Pre-Tertiary ultrabasic (ultramafic) rocks

Cretaceous intrusive igneous rocks

Mesozoic intrusive igneous rocks

Mesozoic and Paleozoic intrusive igneous rocks

Metasedimentary and Metavolcanic Rocks (Greenschist Facies and Lower)

Pre-Tertiary metasedimentary and metavolcanic rocks

Cretaceous–Jurassic sedimentary, metasedimentary, volcanic, and metavolcanic rocks

Pre-Cretaceous–Devonian metasedimentary and metavolcanic rocks

Mesozoic schist

Permian–Devonian metasedimentary and metavolcanic rocks

Metamorphic Rocks (Amphibolite Facies and Higher)

Tertiary–Cretaceous orthogneiss and mixed metamorphic and igneous rocks

Cretaceous metamorphic rocks

Cretaceous orthogneiss and migmatite

Cretaceous–Jurassic and Jurassic metamorphic rocks

Triassic heterogeneous metamorphic rocks

Mesozoic to Paleozoic metamorphic rocks

Pre-Devonian gneiss

Other Features or Geologic Units

Water

Ice

N Washington Population Density (2012)

553.002720
573.002720
593.002720
613.002720
5381.247743
5361.247743
5341.247743
5321.247743
5301.247743
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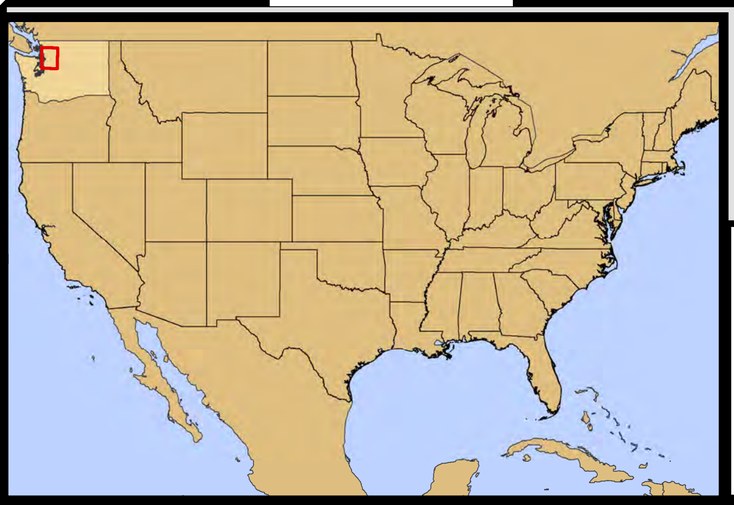
48.5° N
48.25° N
48° N
47.75° N
122.5° W
122.25° W
122° W
121.75° W
121.5° W
©2013 Esri



0 10 20 km

Sources:
Country and state boundaries provided by ESRI.
Population Density data provided by ESRI

1:175,000

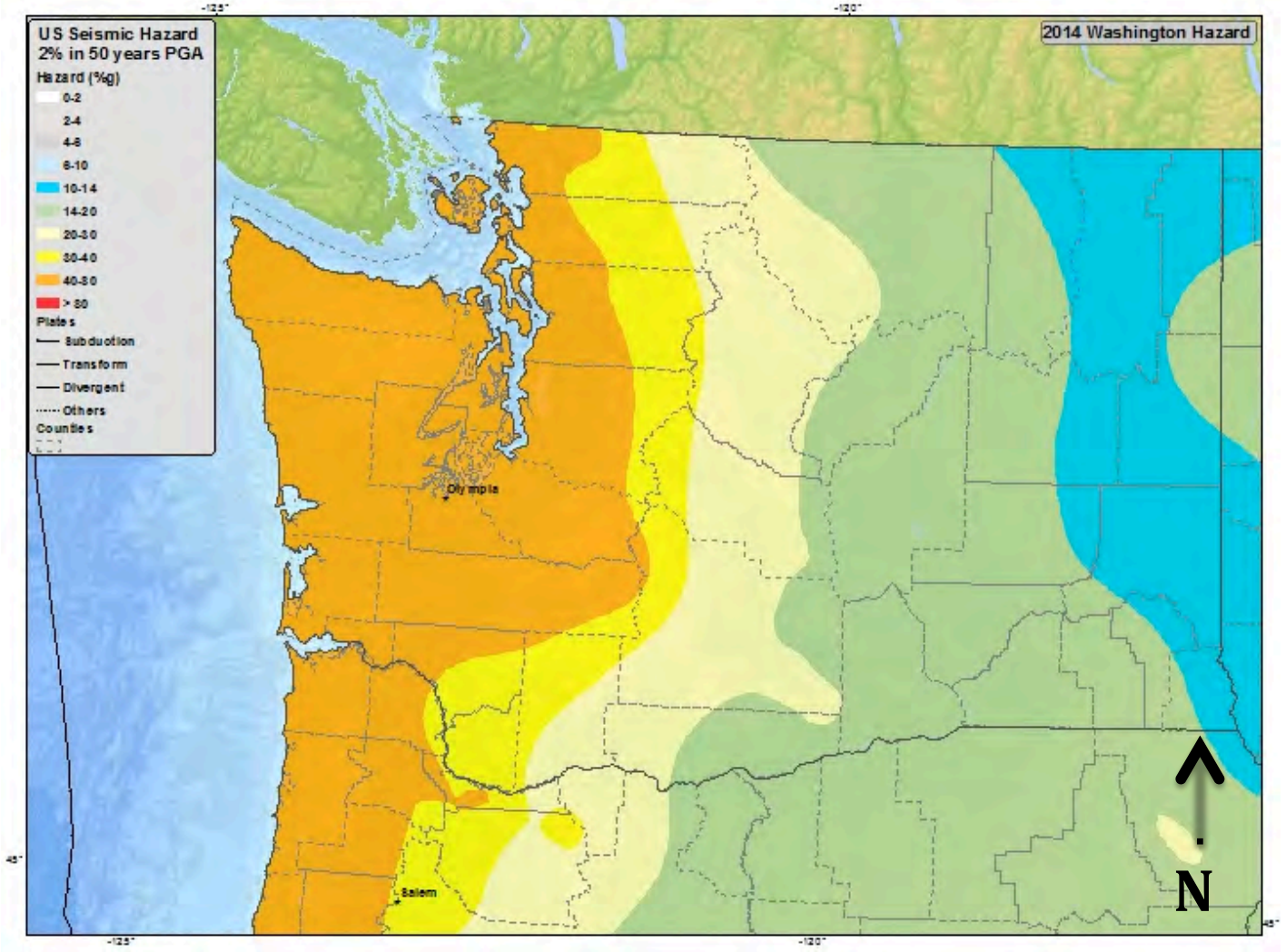
N

2012 Population Density (Pop per Square Mile) (Esri)

- 100,001 or more people
- 25,001 to 100,000 people
- 10,001 to 25,000 people
- 1,001 to 10,000 people
- 101 to 1,000 people
- 100 or less people
- No population

Washington

2014 Seismic Hazard Map



Seismic Hazards Map of WA state from the USGS Earthquake Hazards Program website: http://earthquake.usgs.gov/earthquakes/states/washington/hazards.php