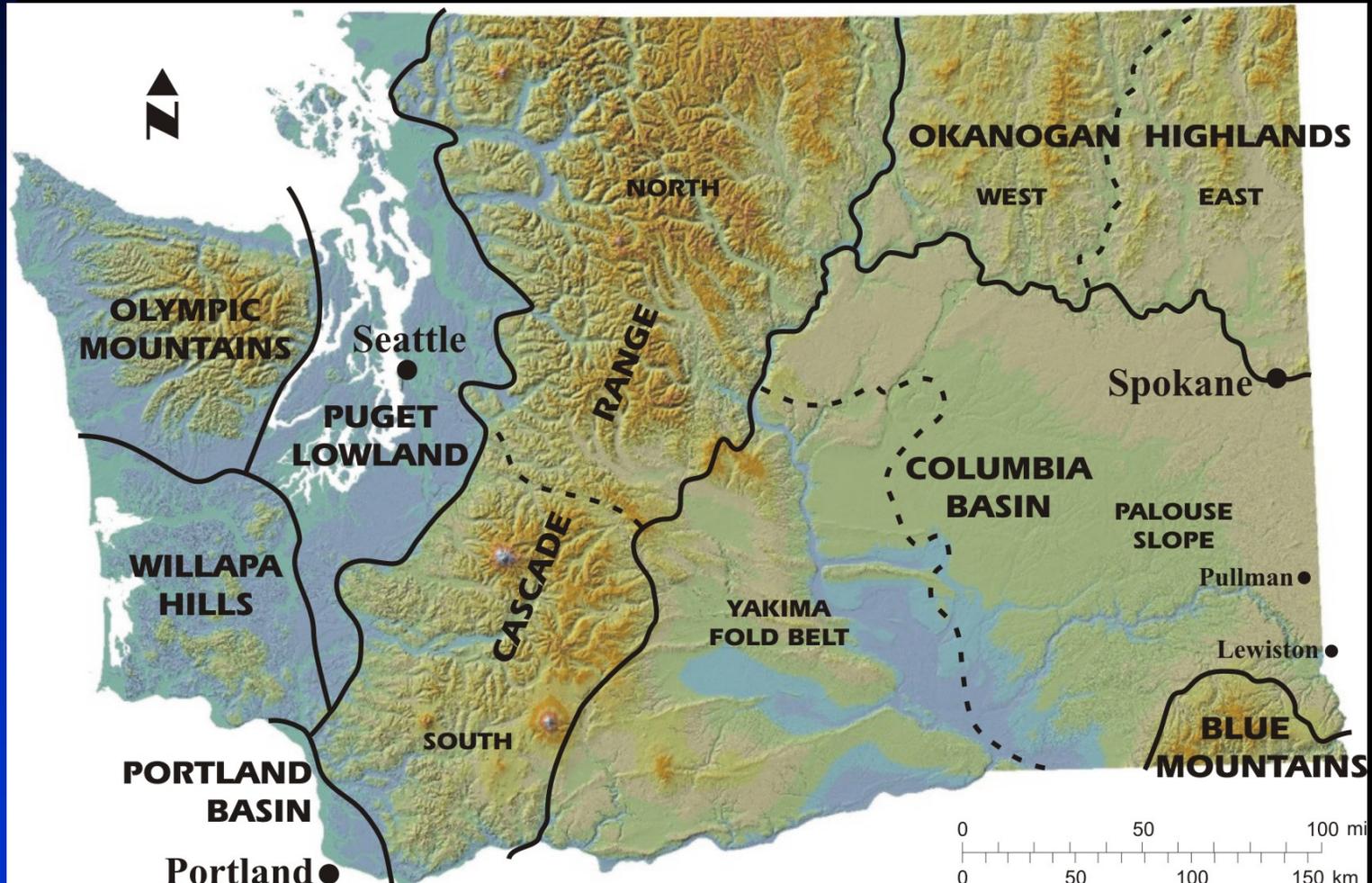


Geology of Washington

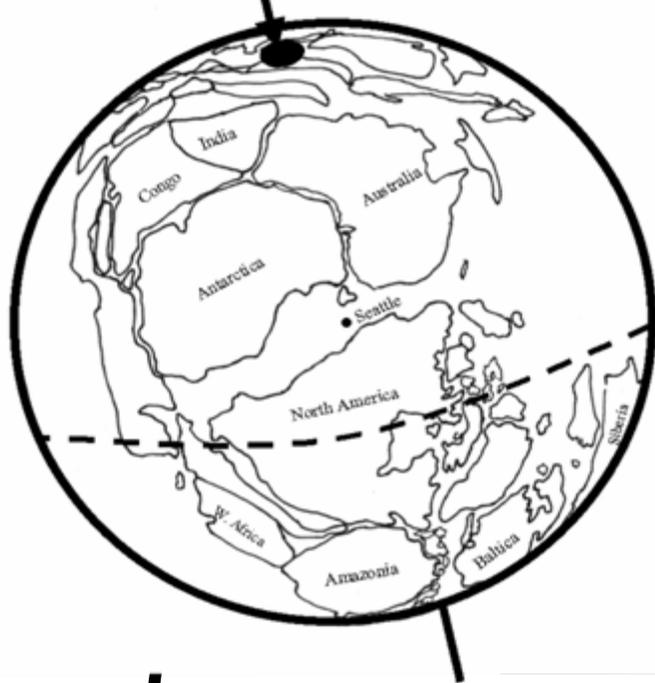
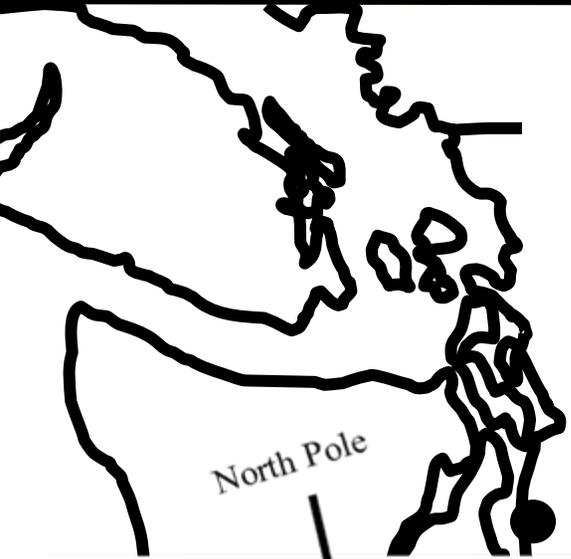
9/19/2007

Department of Natural Resources-
Division of Geology

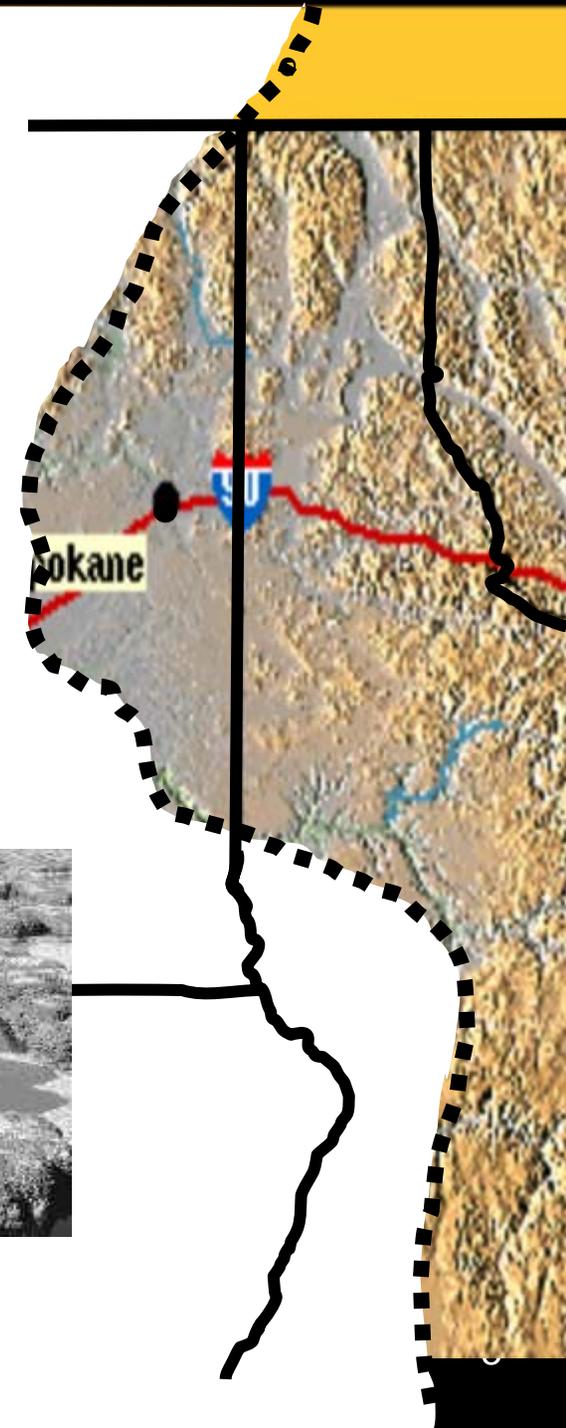
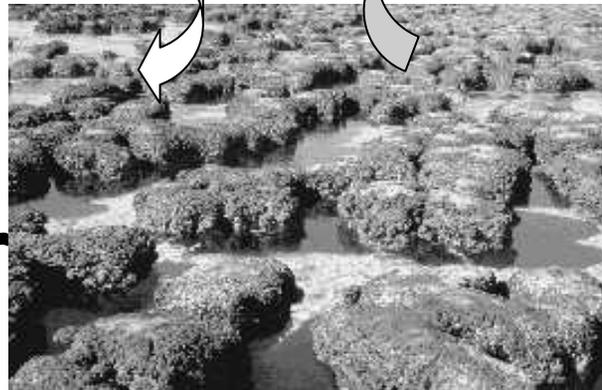
Physiographic Provinces of WA



Rifting on Rodinia Supercontinent (750 m.y.)



Rodinia is the oldest known Supercontinent existing 1100 to 750 million Years ago.



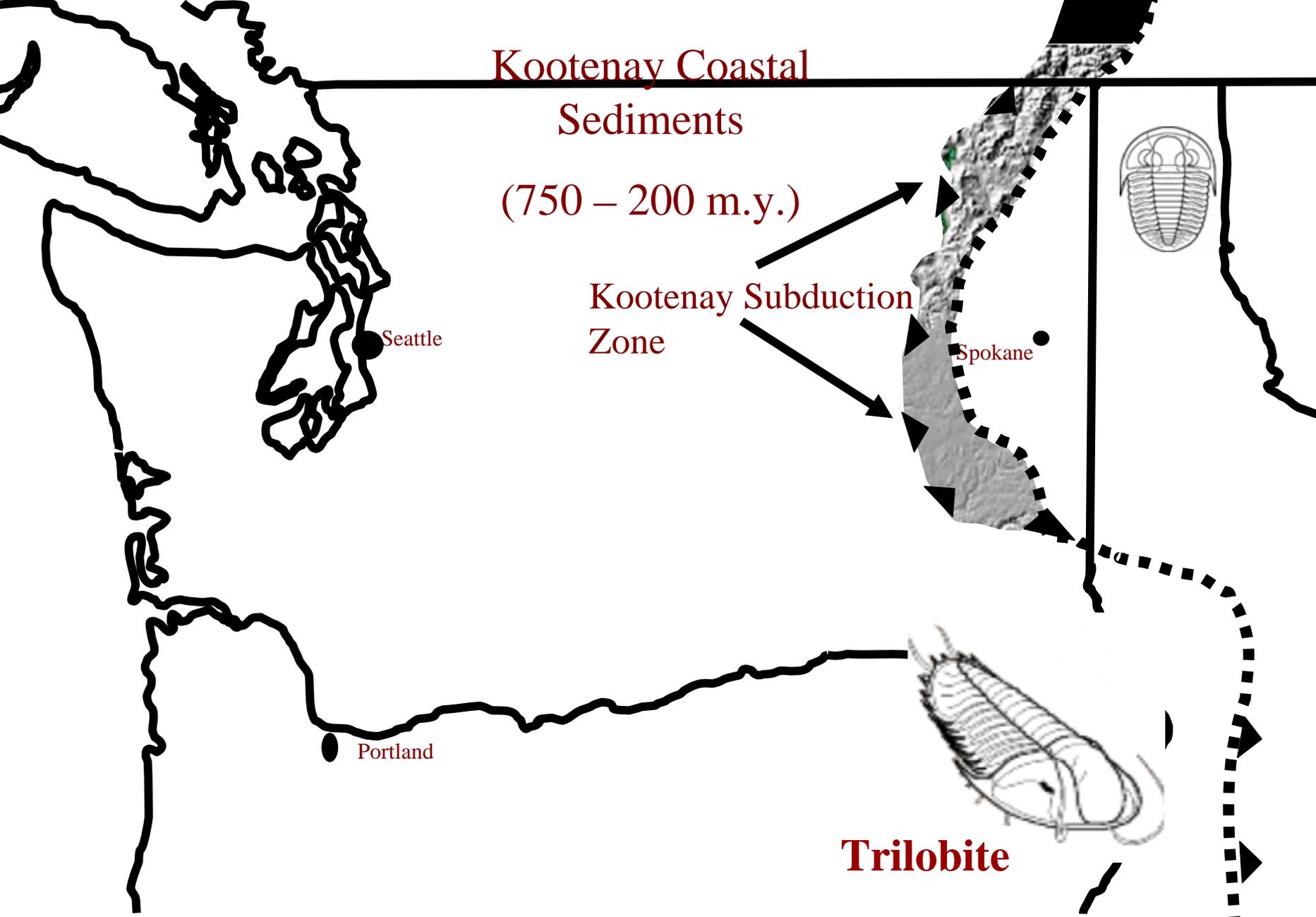
Pangaea approximately 200 million years ago - fit of continents



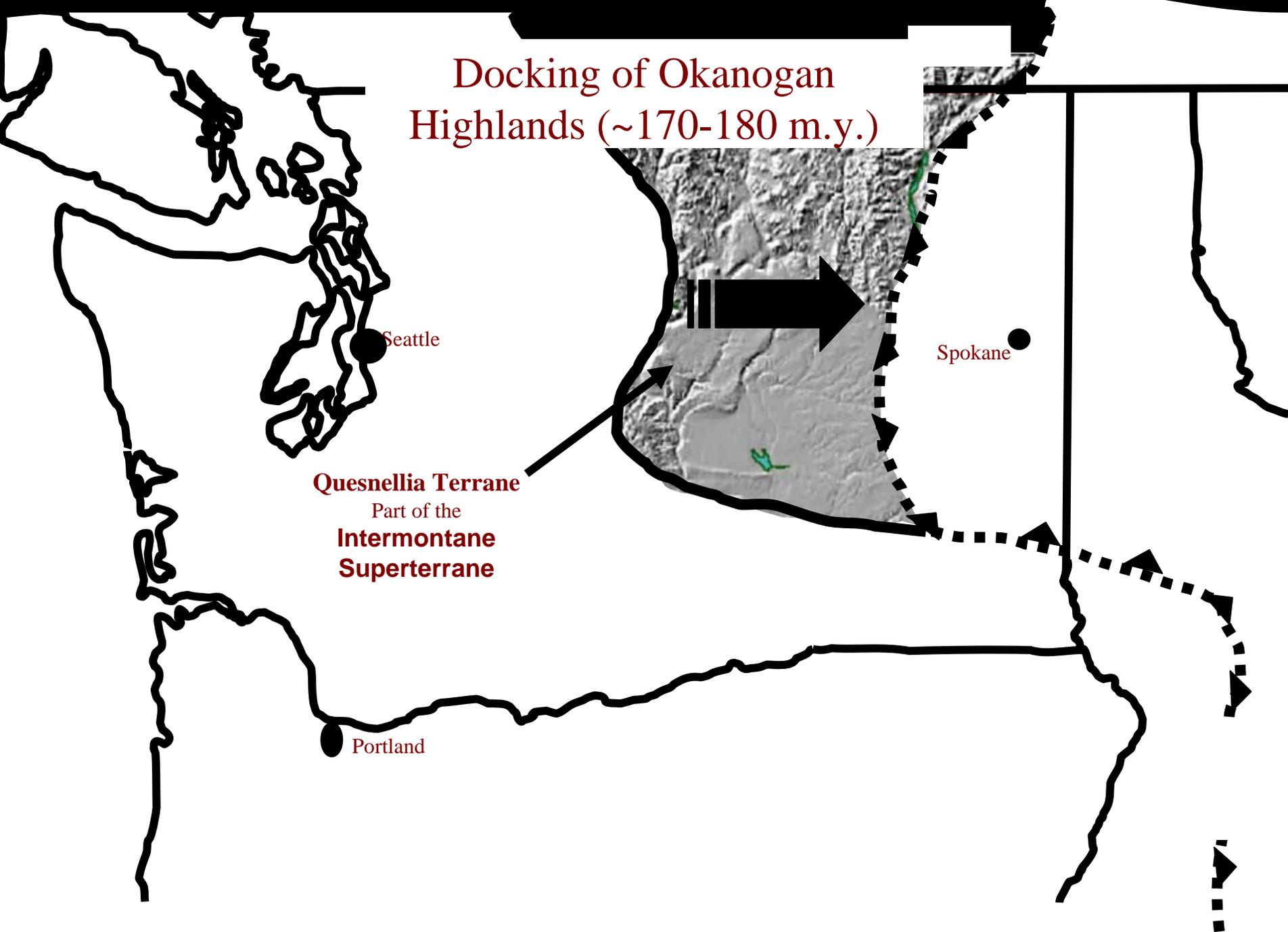
Kootenay Coastal Sediments

(750 – 200 m.y.)

Kootenay Subduction Zone



Docking of Okanogan Highlands (~170-180 m.y.)



Quesnellia Terrane
Part of the
Intermontane Superterrane

Portland

Seattle

Spokane

Wrangellia ~90 my

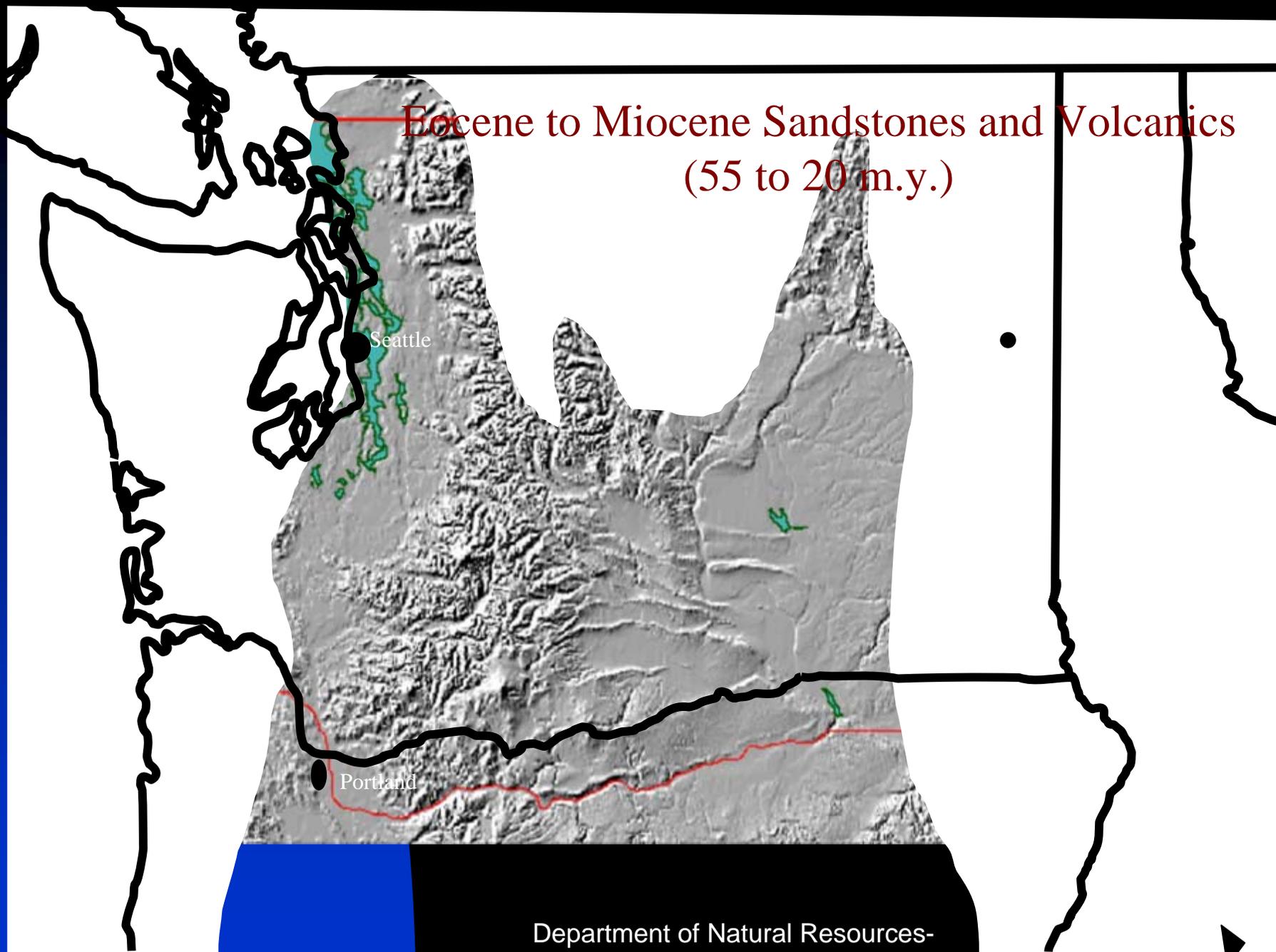


Seattle

Spokane

Portland

Eocene to Miocene Sandstones and Volcanics
(55 to 20 m.y.)

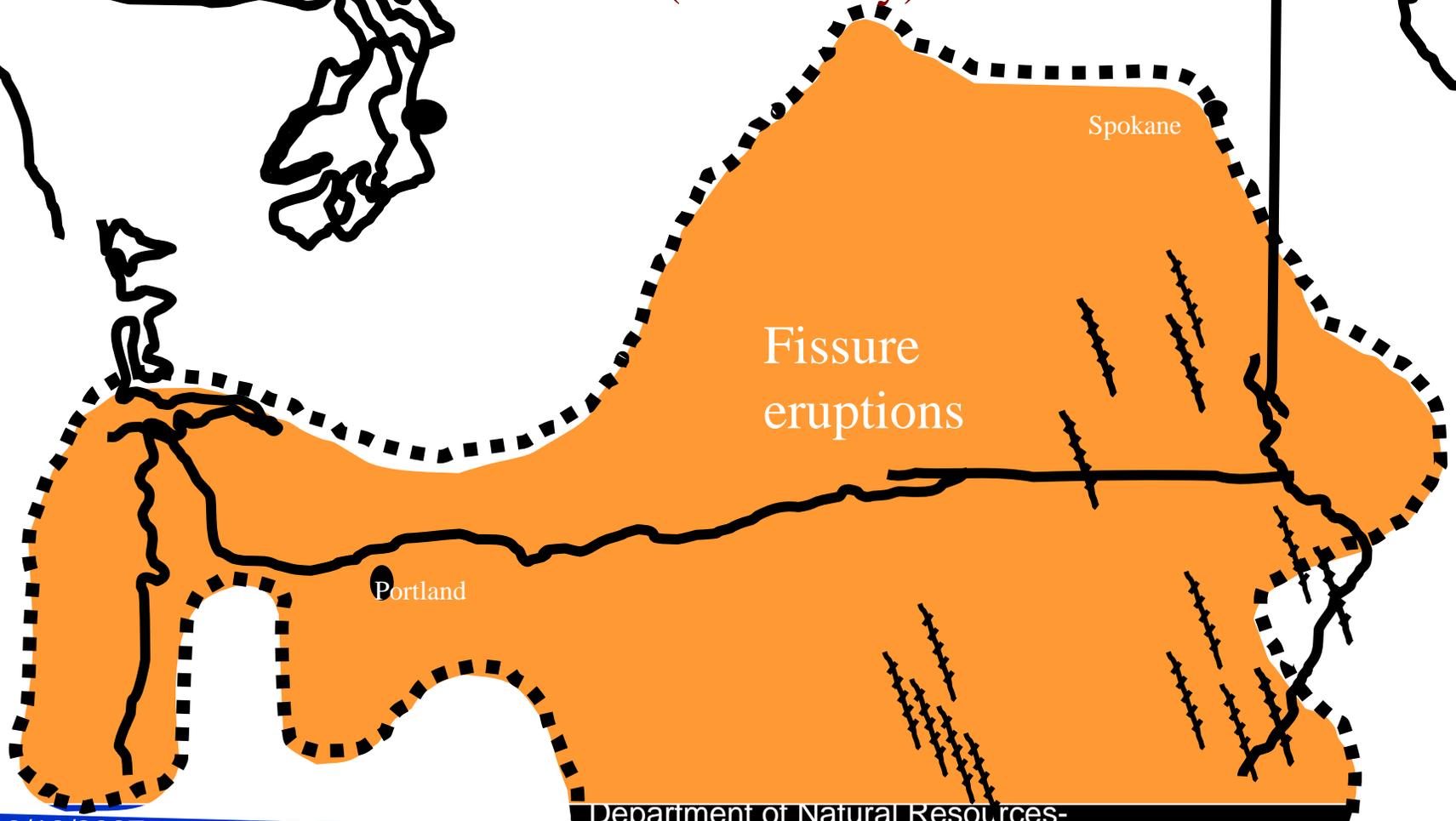


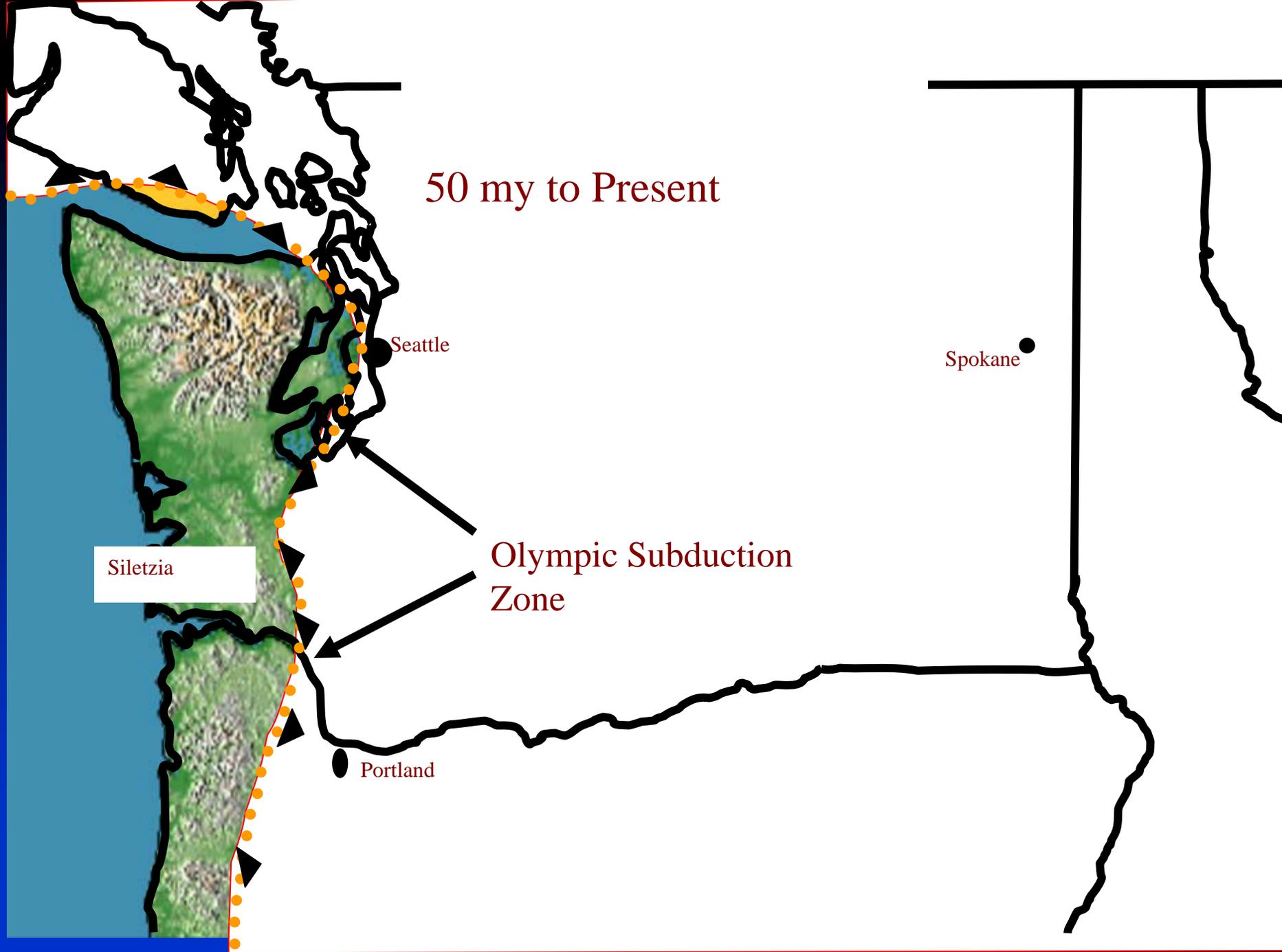
Seattle

Portland



Extent of Columbia River Basalts (17.5-6 my)





50 my to Present

Seattle

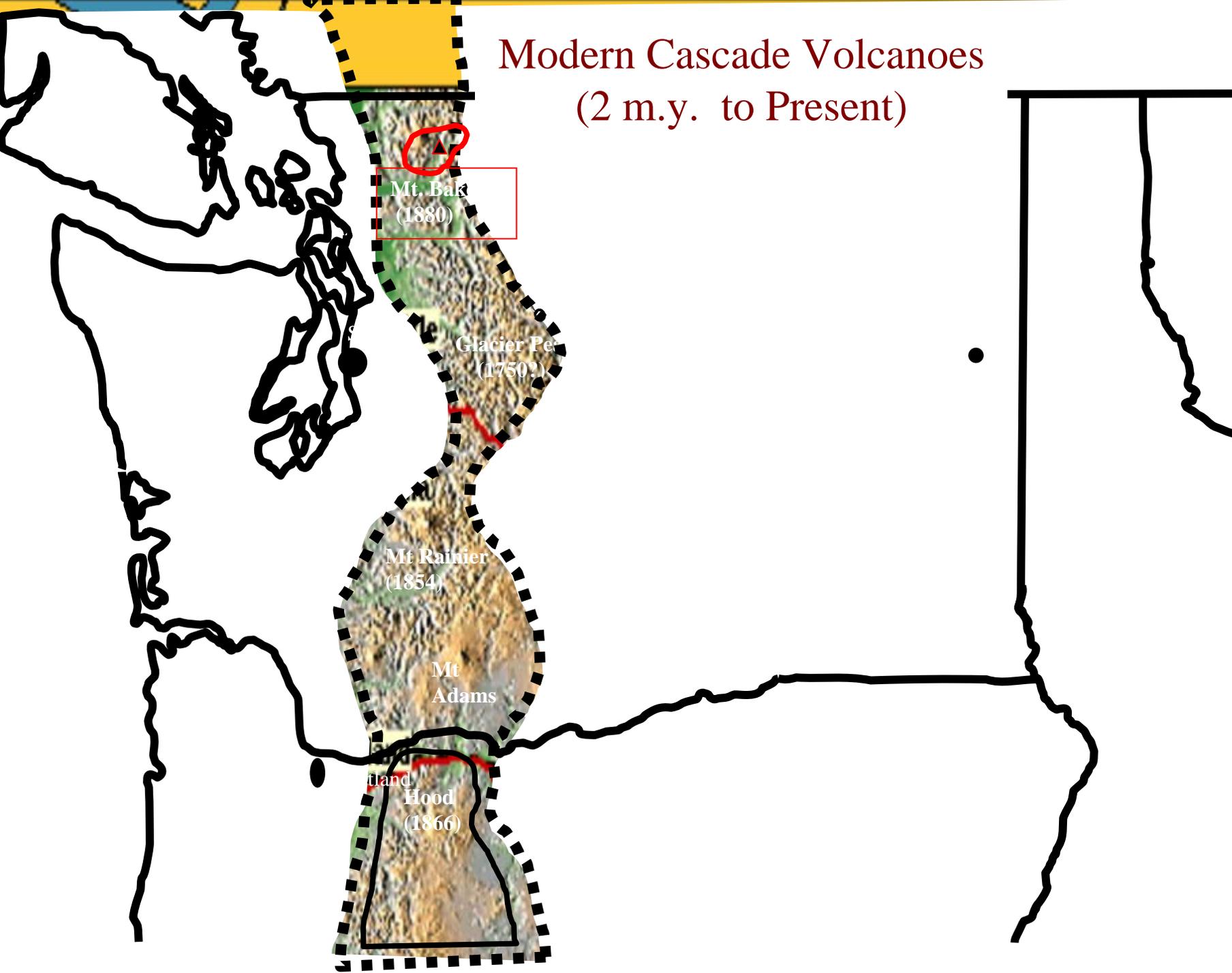
Spokane

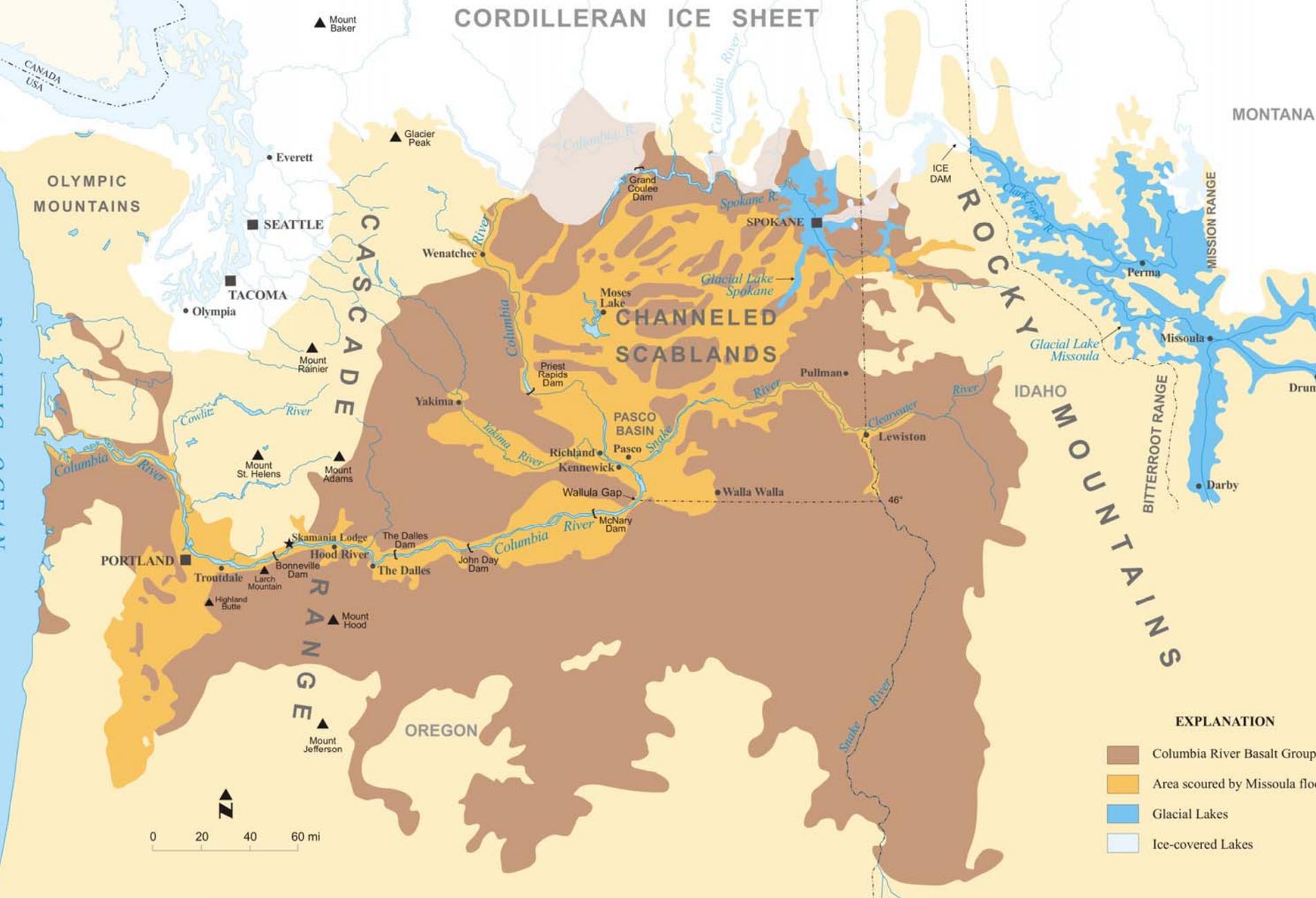
Siletzia

Olympic Subduction
Zone

Portland

Modern Cascade Volcanoes (2 m.y. to Present)

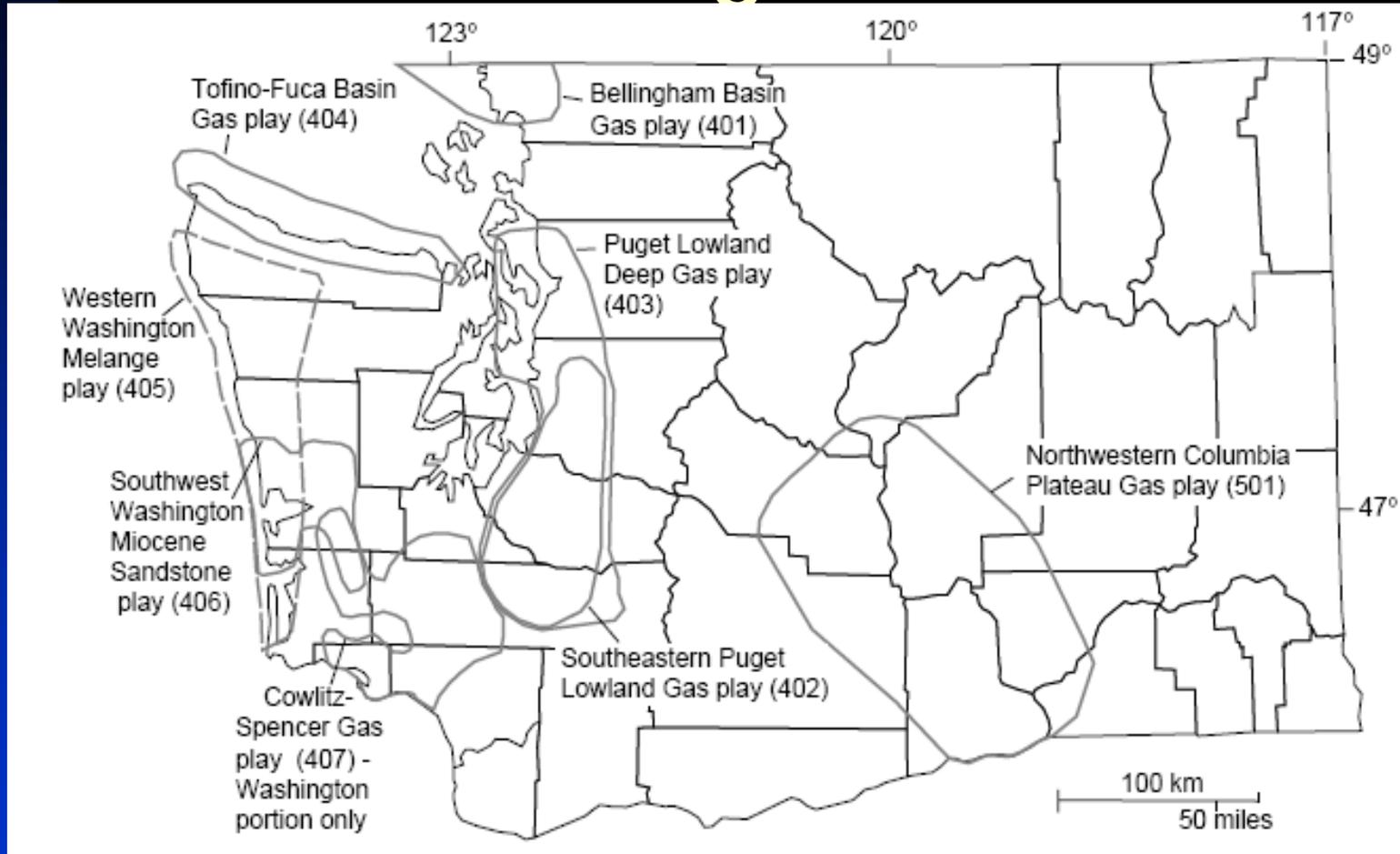




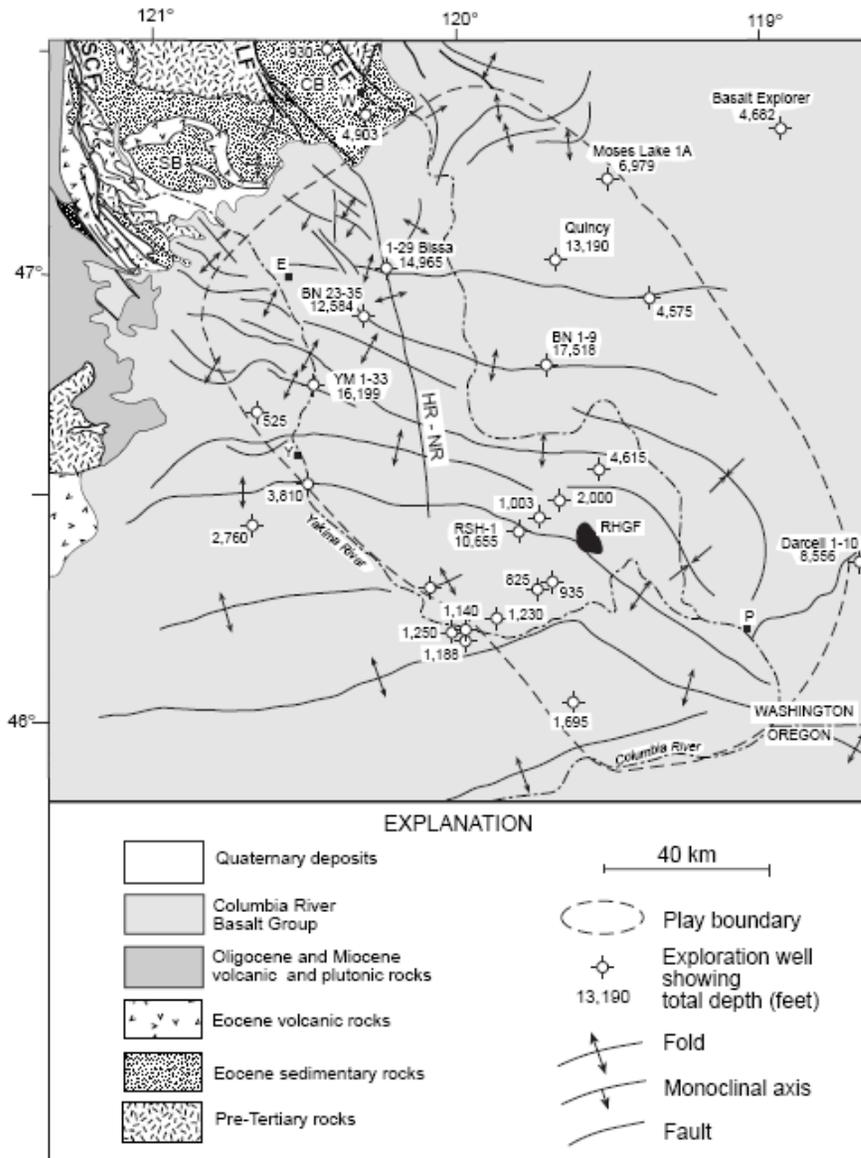
Potential Carbon Sequestration Methods

- Saline aquifers
- Geologic structures and gas exploration
- Coal beds
- Basalt

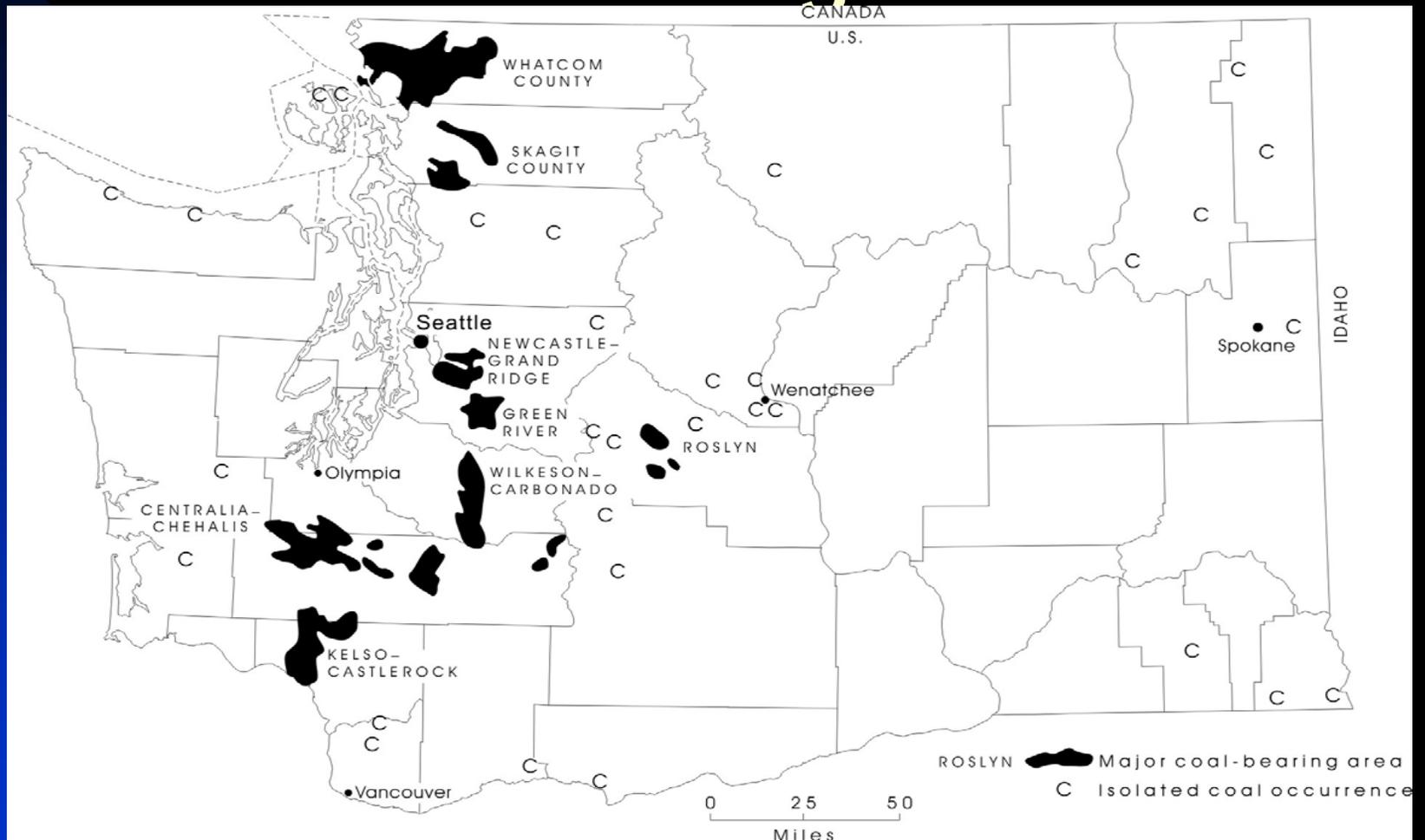
Washington Basins



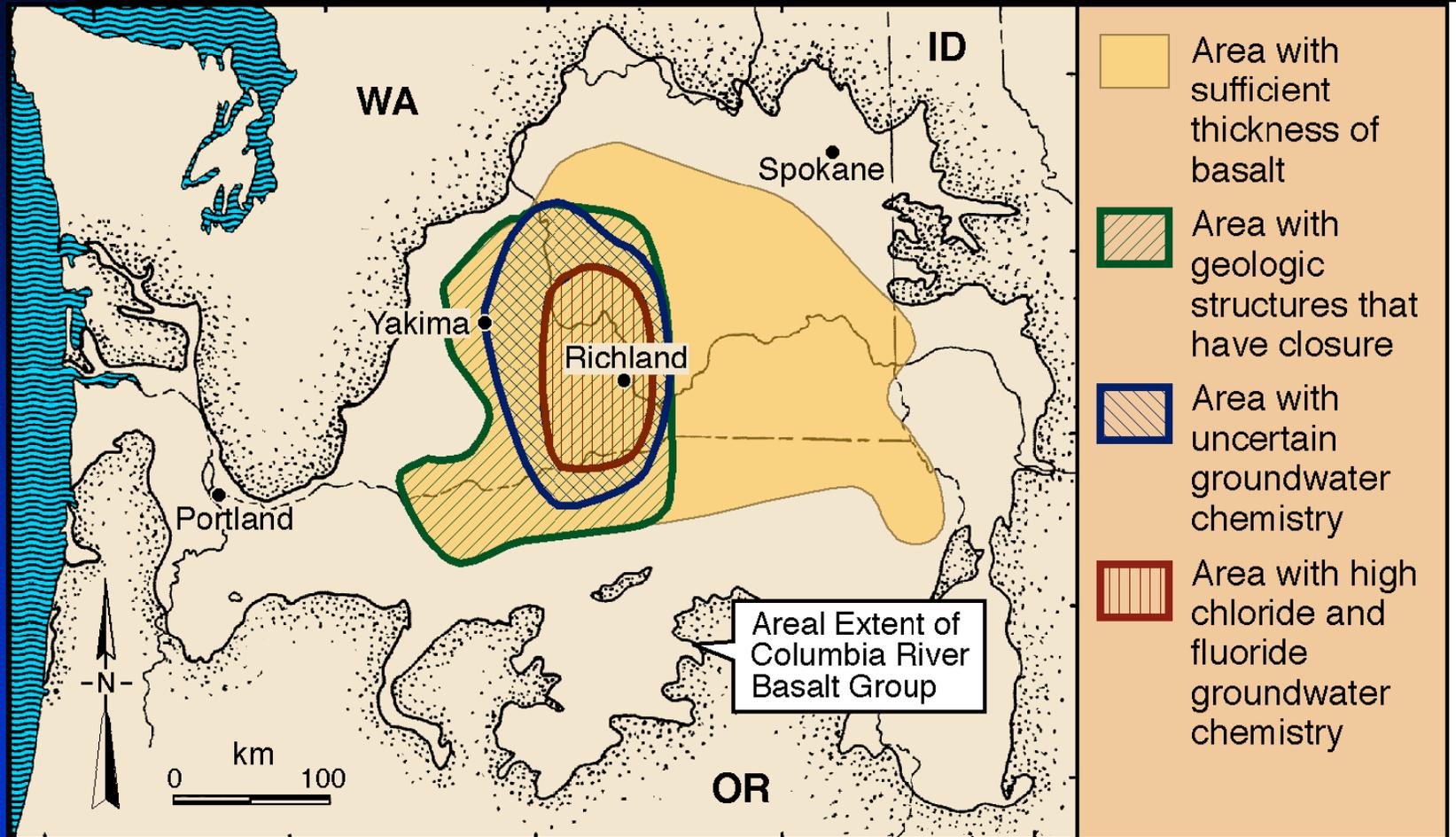
Washington Fold Belt & Gas Wells



Coal In Washington



Thickest basalts





Mapped Quaternary Faults Walla Walla quad

