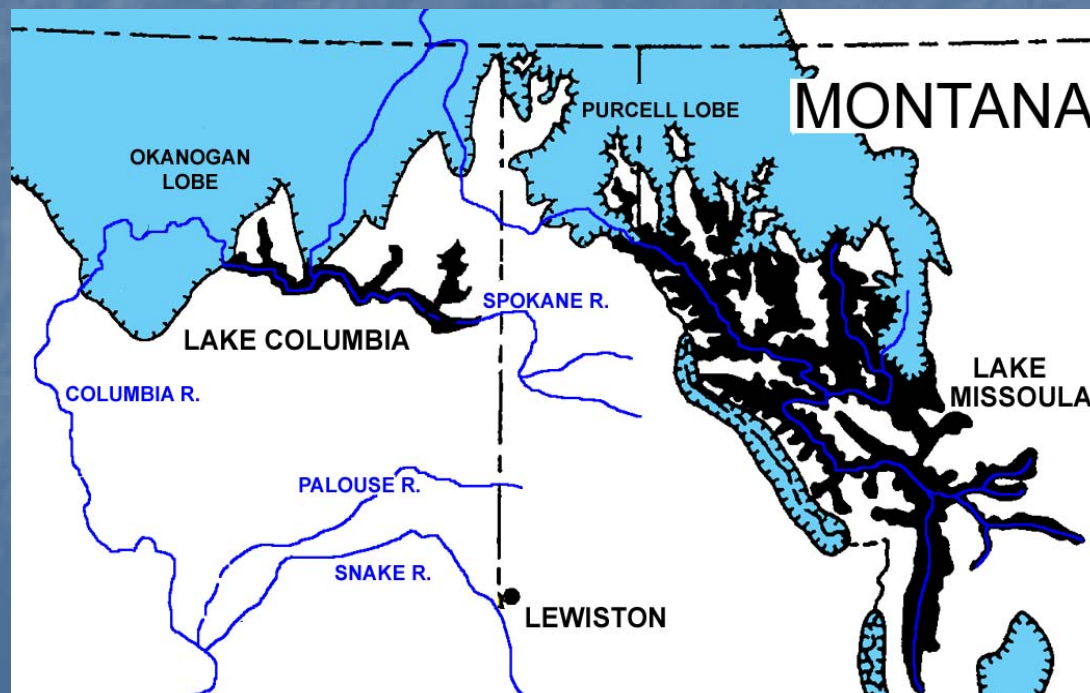
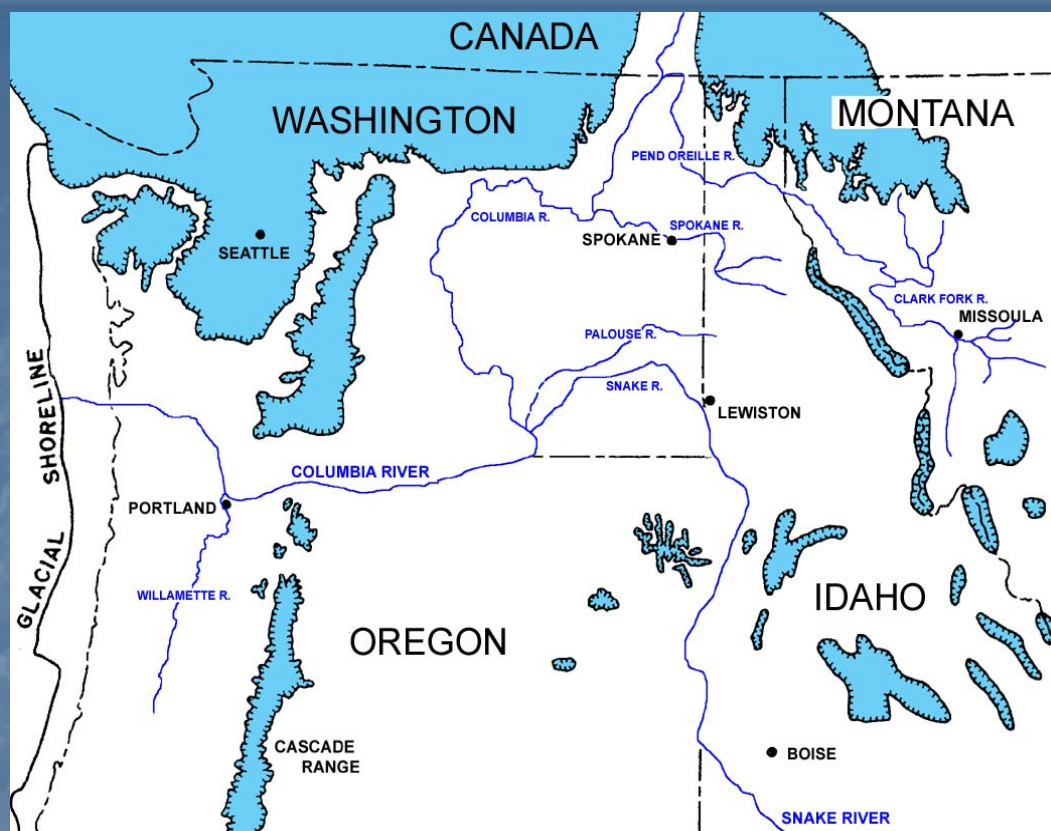


The Great Missoula Floods

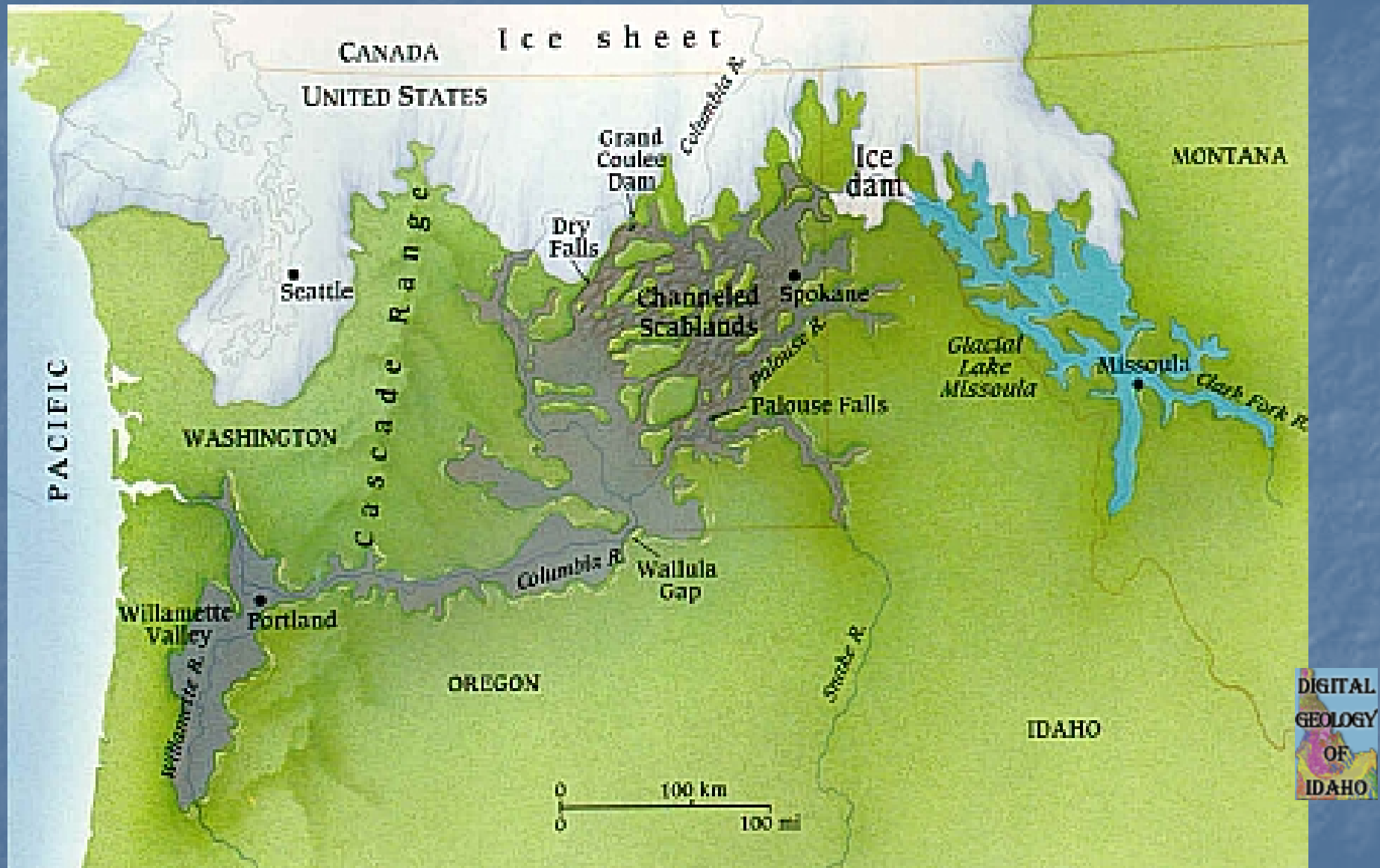
By Matthew Wilson, ISU Geosciences Geol 402 project,
2004



<http://www.iceagefloodsinstitute.org/>



History of Lake Missoula

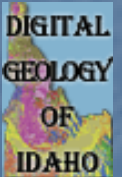


<http://nwcreation.net/articles/missoulaflood.htm>

Interesting Facts

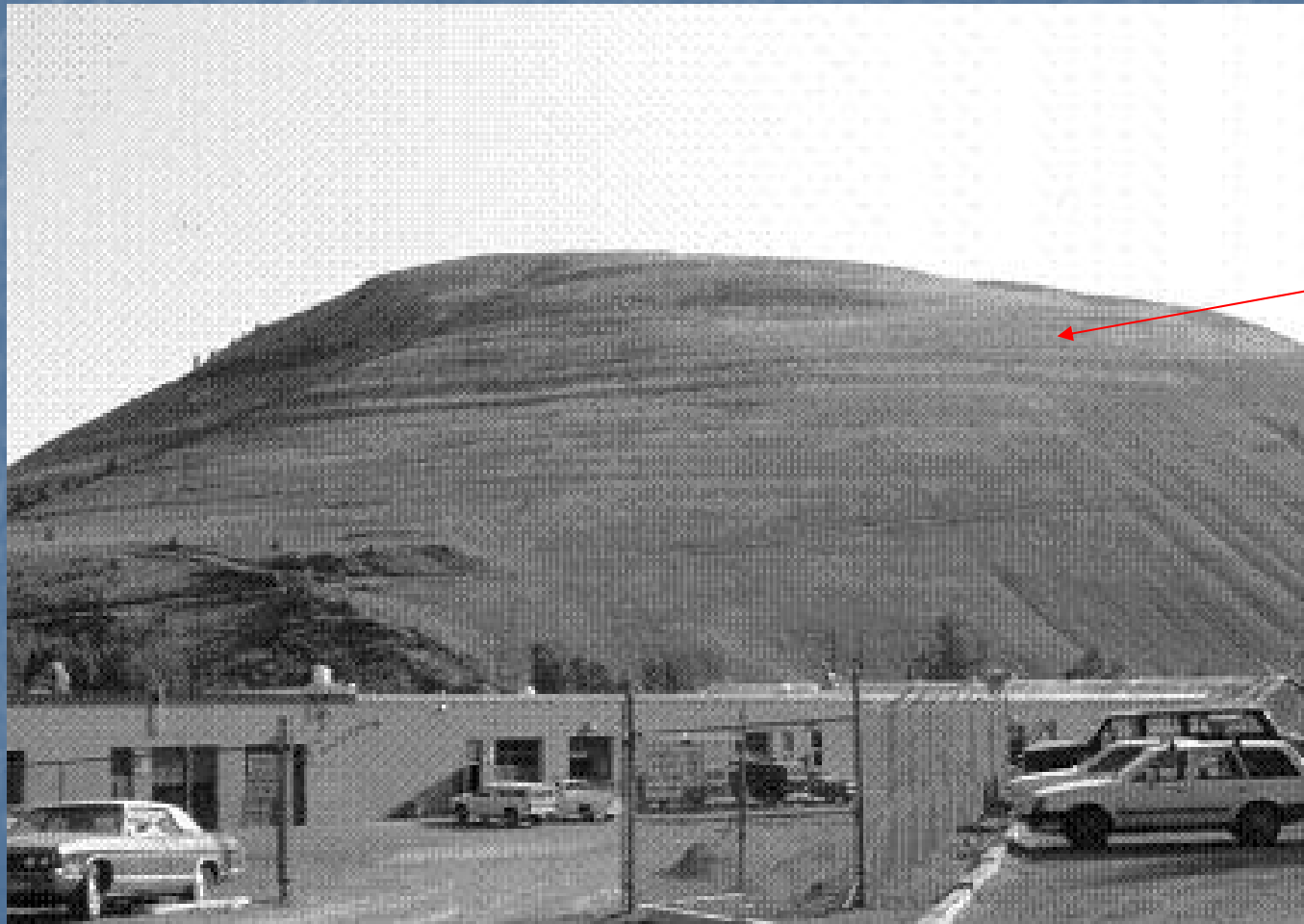
- **Volume: 2200 cubic Km** (slightly larger than Lake Erie and Ontario combined) Lake Bonneville 22,000 cubic km
- **Area: 7500 square Km**
- **Depth: 700 m**
- **Discharge: 17 million cubic m/s** (would drain lake Erie in eight hours)
- **Velocity: up to 45 m/s (100mph)**
- **Occurrence: at least 1 of above magnitudes (40 – 89 smaller floods)**





Evidences of Lake Missoula

Mt Jumbo

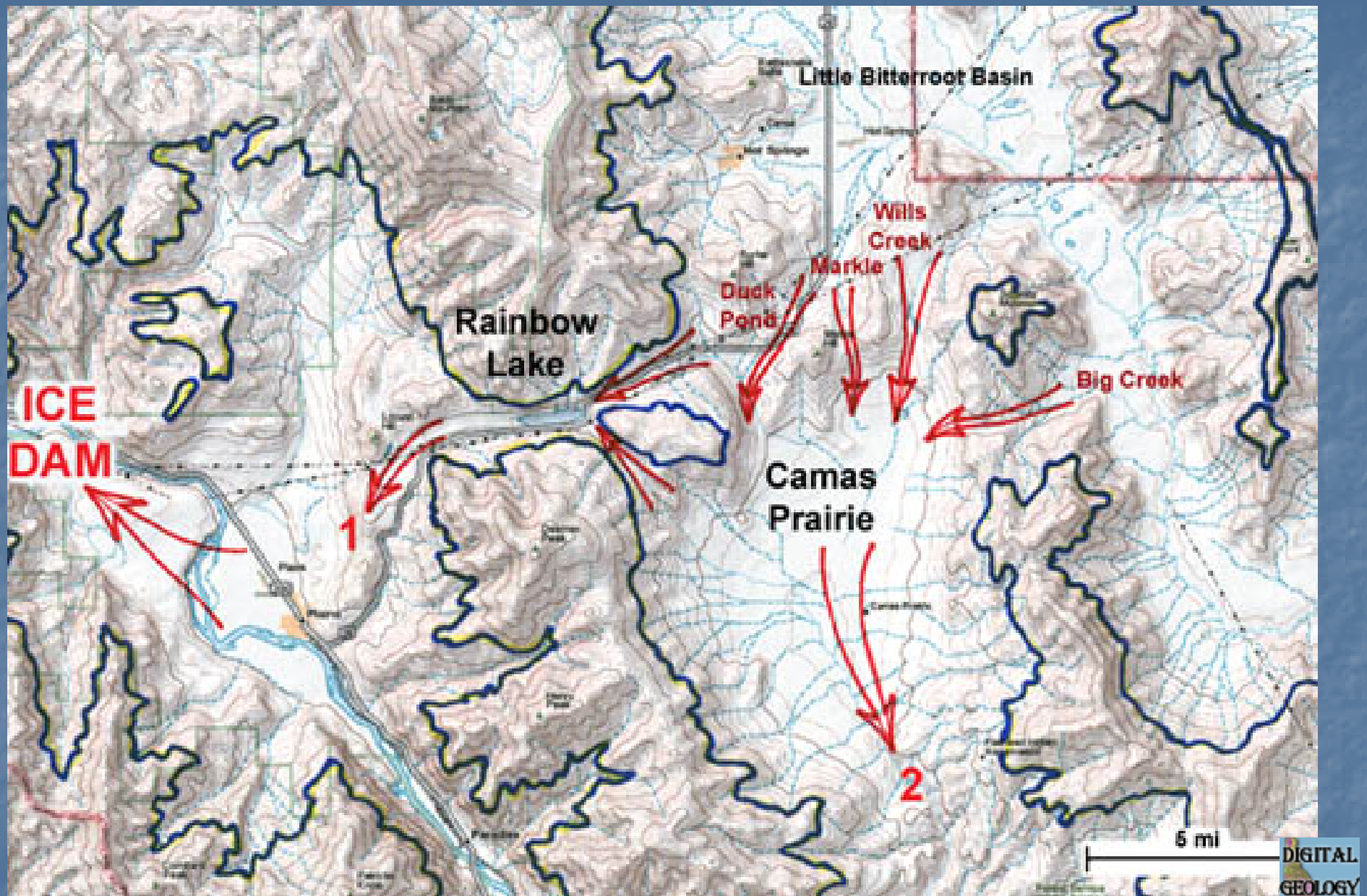


Shore
lines

Mission Mountains near Flathead Lake



<http://www.pbs.org/wgbh/nova/megaaflood/scab-nf.html>

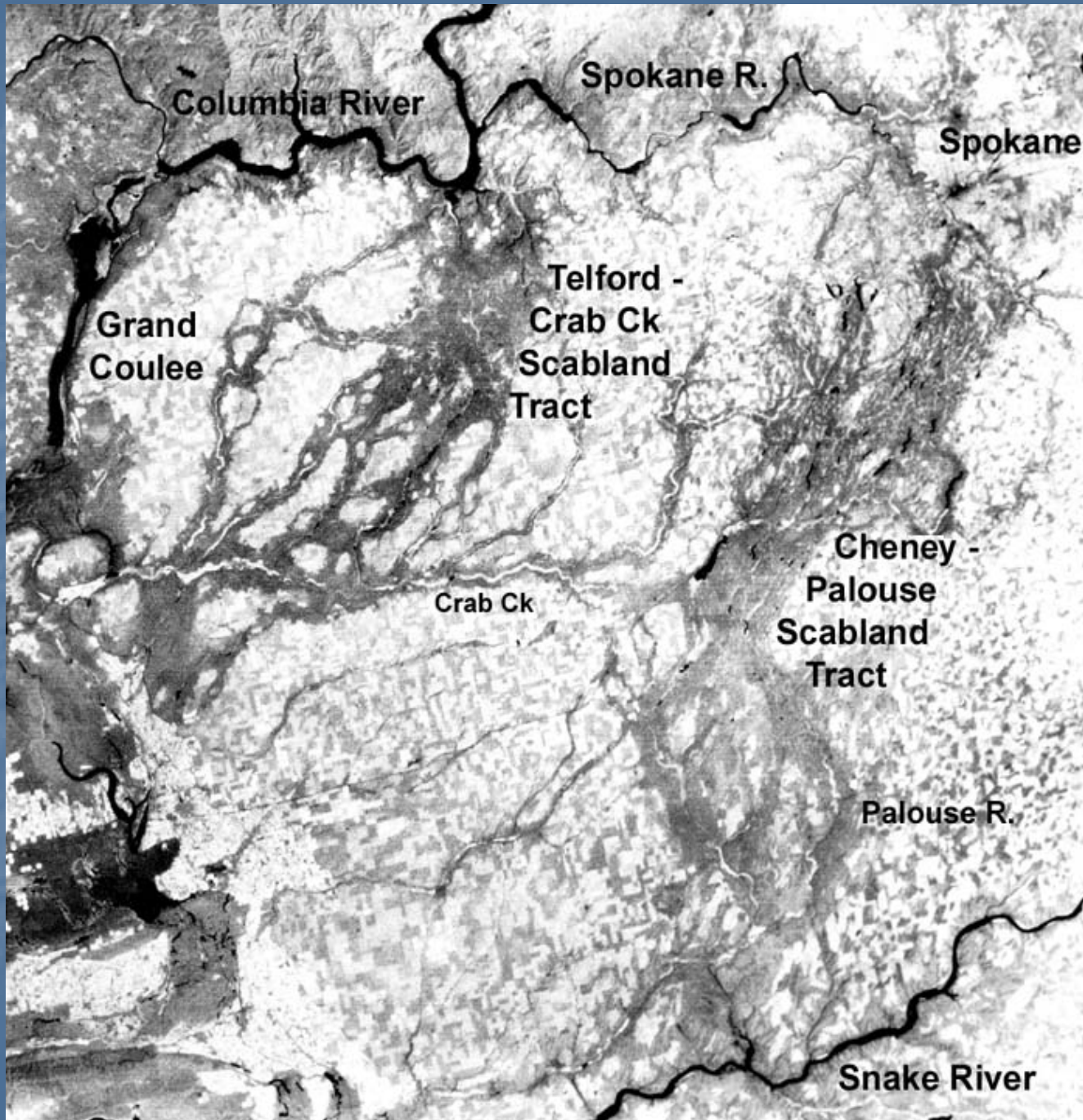


Ripples at Camas Prairie, Montana

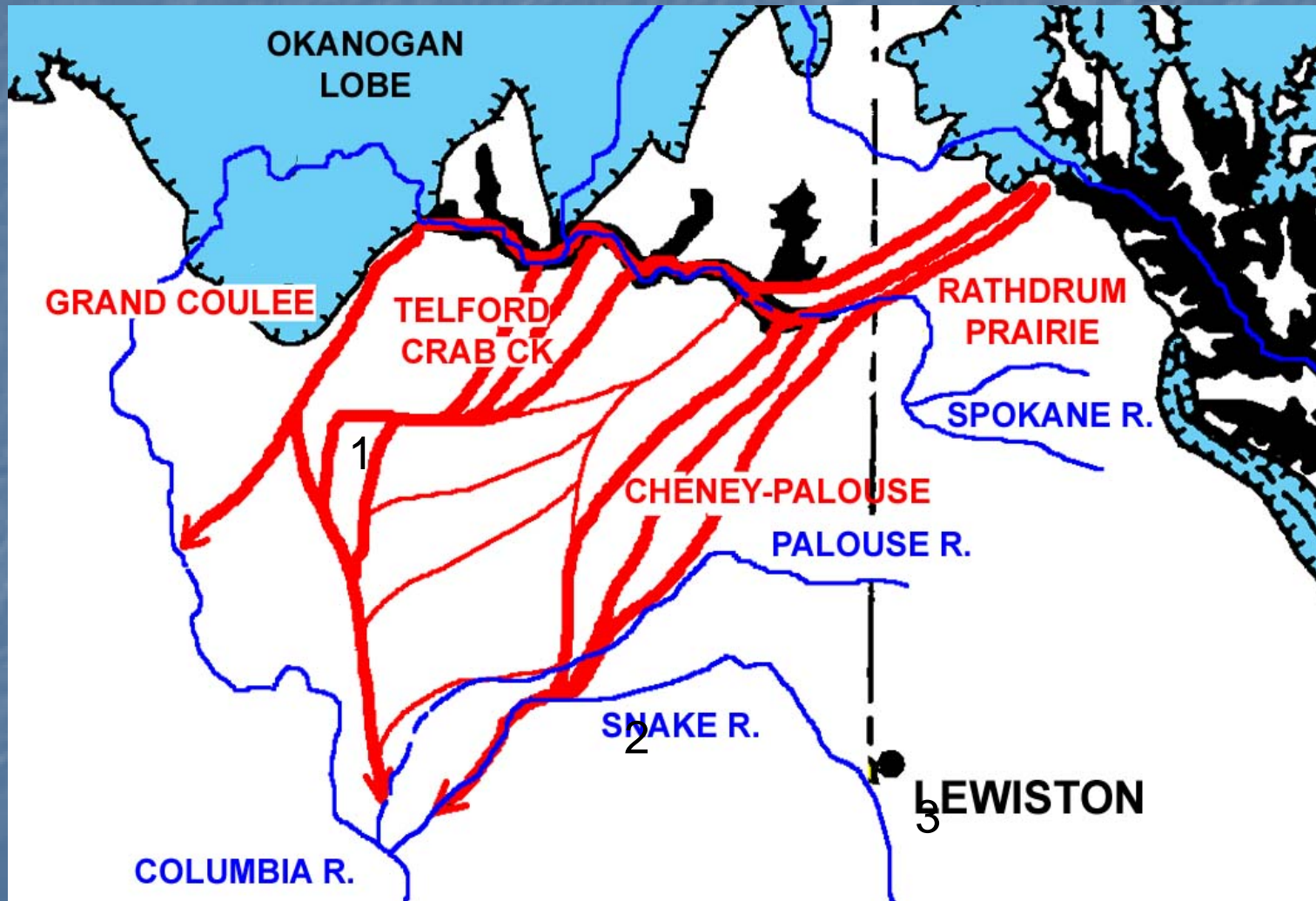
Amplitude: up to 15m
Wavelength: up to 150m



Scablands, northeastern Washington

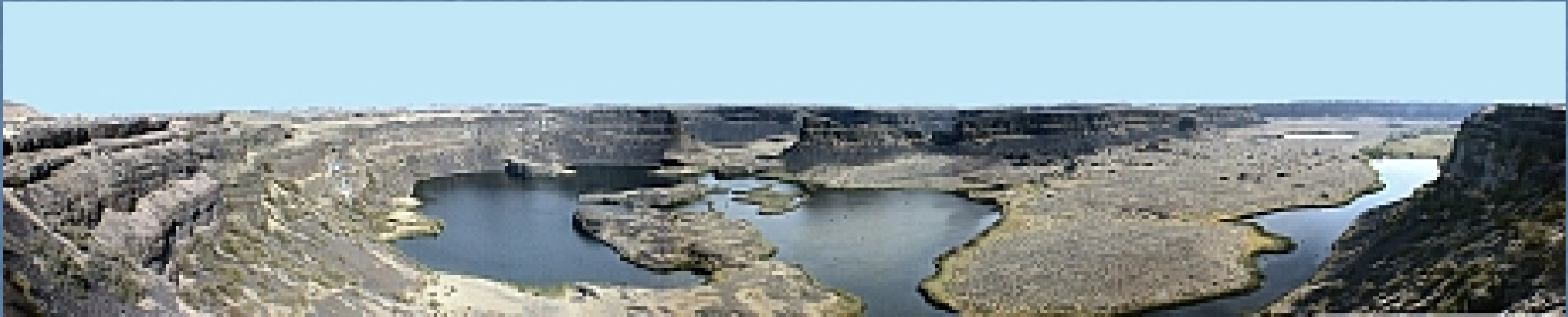


Main Channels of Flood

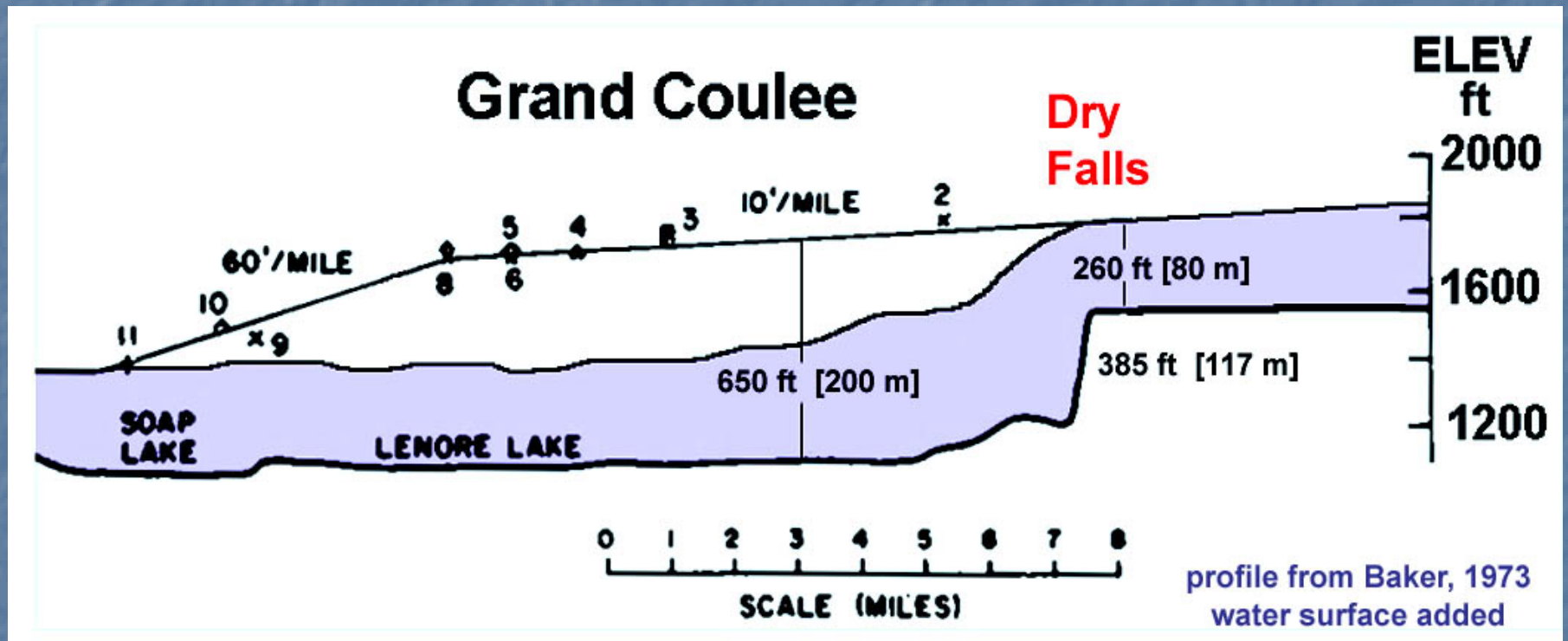


Dry Falls

Largest water fall in the world 117m



"Colossal Cataract"



Palouse Falls & Gorge

56 m. tall

120 m from top of falls to skyline



Multnomah Falls

Columbia River Gorge



Multnomah Falls in the Columbia River Gorge was created when floodwaters incised the main canyon.

Deposits



Pendant bar with ripples at
confluence of Palouse and
Snake Rivers

Fore-sets in bar dip 26 degrees

Erratics



www.mines.edu/academic/geology/faculty/klee/missoula.doc

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