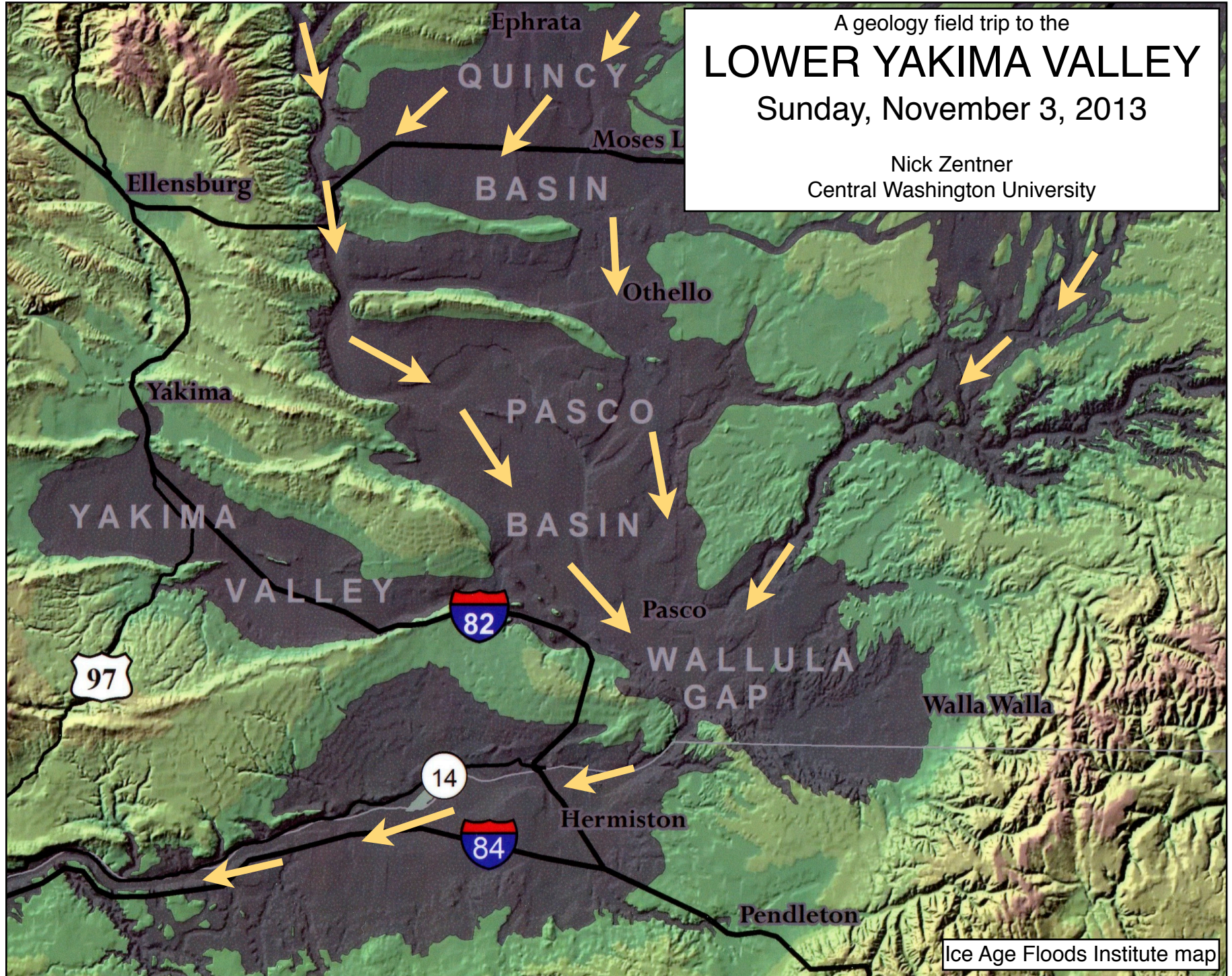
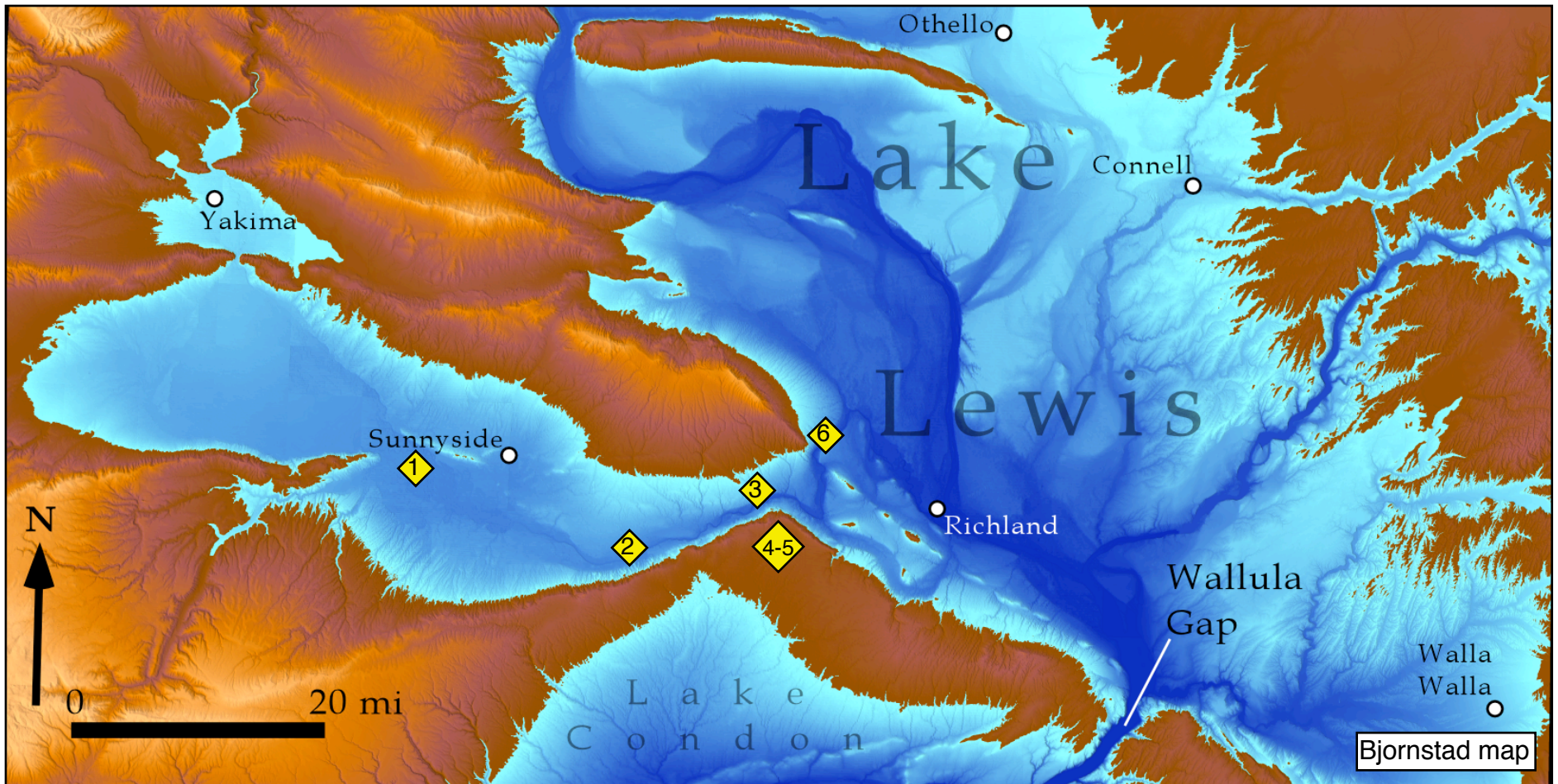


A geology field trip to the  
**LOWER YAKIMA VALLEY**  
Sunday, November 3, 2013

Nick Zentner  
Central Washington University



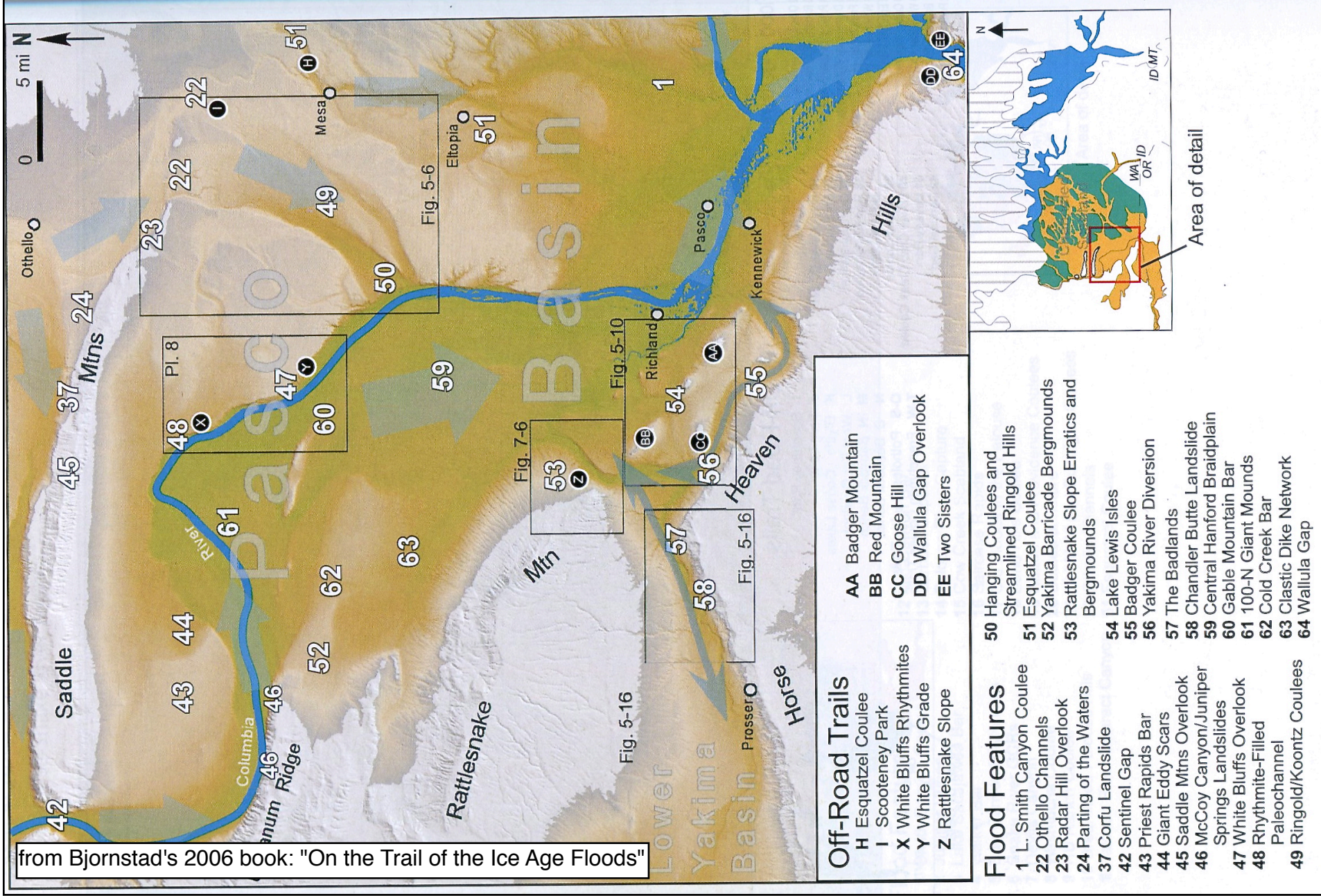
Ice Age Floods Institute map



Lake Lewis was a temporary lake during the Ice Age.

Lake formed many times. Water depth was up to 900 feet deep.  
Elevation of highest water: 1250 feet above sea level.

from Bjornstad's 2006 book: "On the Trail of the Ice Age Floods"



### Off-Road Trails

- H Esquatzel Coulee
- I Scootney Park
- X White Bluffs Rhythmites
- Y White Bluffs Grade
- Z Rattlesnake Slope

- AA Badger Mountain
- BB Red Mountain
- CC Goose Hill
- DD Wallula Gap Overlook
- EE Two Sisters

### Flood Features

- 1 L. Smith Canyon Coulee
- 22 Othello Channels
- 23 Radar Hill Overlook
- 24 Parting of the Waters
- 37 Corfu Landslide
- 42 Sentinel Gap
- 43 Priest Rapids Bar
- 44 Giant Eddy Scars
- 45 Saddle Mtns Overlook
- 46 McCoy Canyon/Juniper Springs Landslides
- 47 White Bluffs Overlook
- 48 Rhythmite-Filled Paleochannel
- 49 Ringold/Koontz Coulees

- 50 Hanging Coulees and Streamlined Ringold Hills
- 51 Esquatzel Coulee
- 52 Yakima Barricade Bergmounds
- 53 Rattlesnake Slope Erratics and Bergmounds
- 54 Lake Lewis Isles
- 55 Badger Coulee
- 56 Yakima River Diversion
- 57 The Badlands
- 58 Chandler Butte Landslide
- 59 Central Hanford Braidplain
- 60 Gable Mountain Bar
- 61 100-N Giant Mounds
- 62 Cold Creek Bar
- 63 Clastic Dike Network
- 64 Wallula Gap

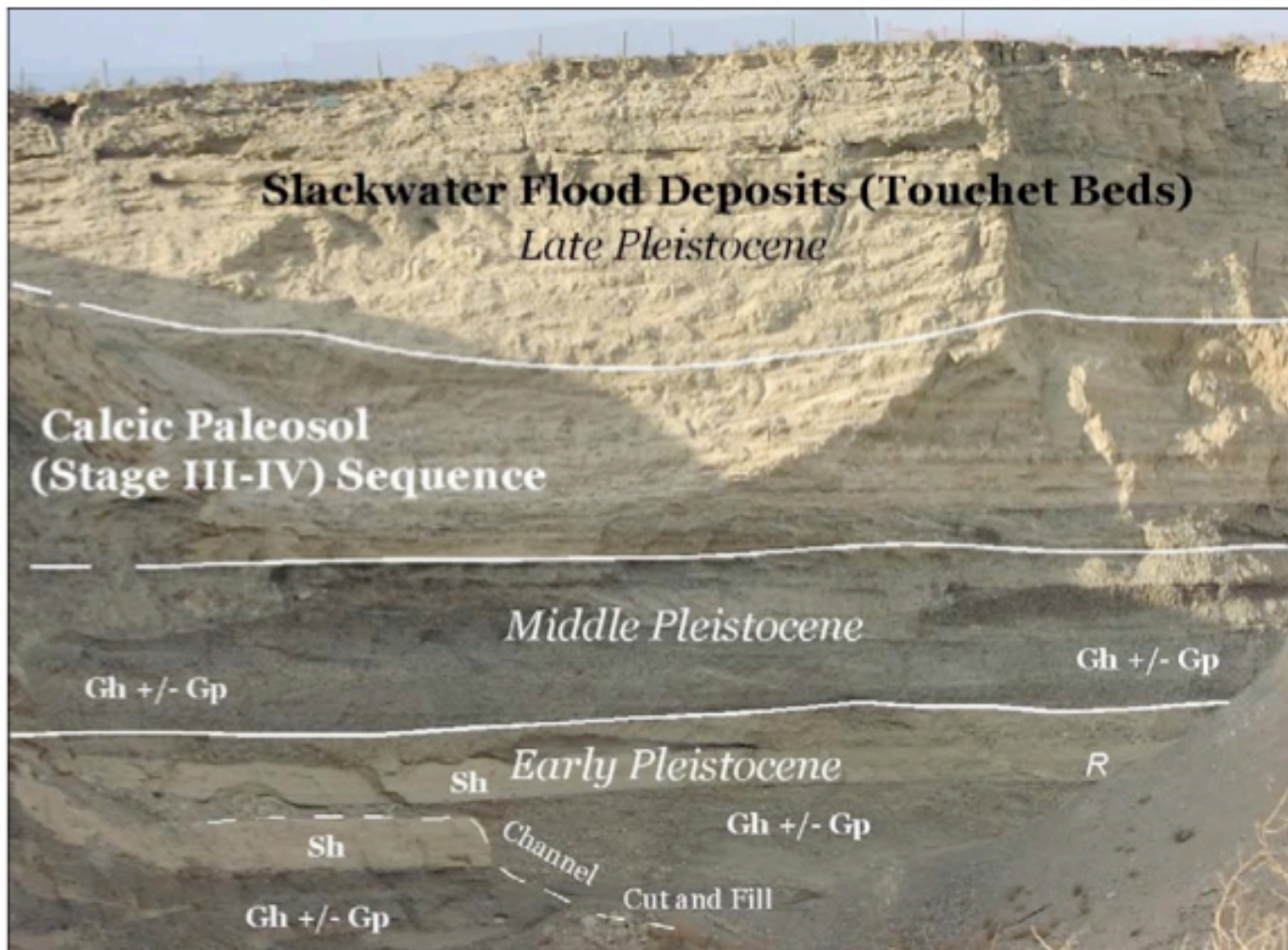
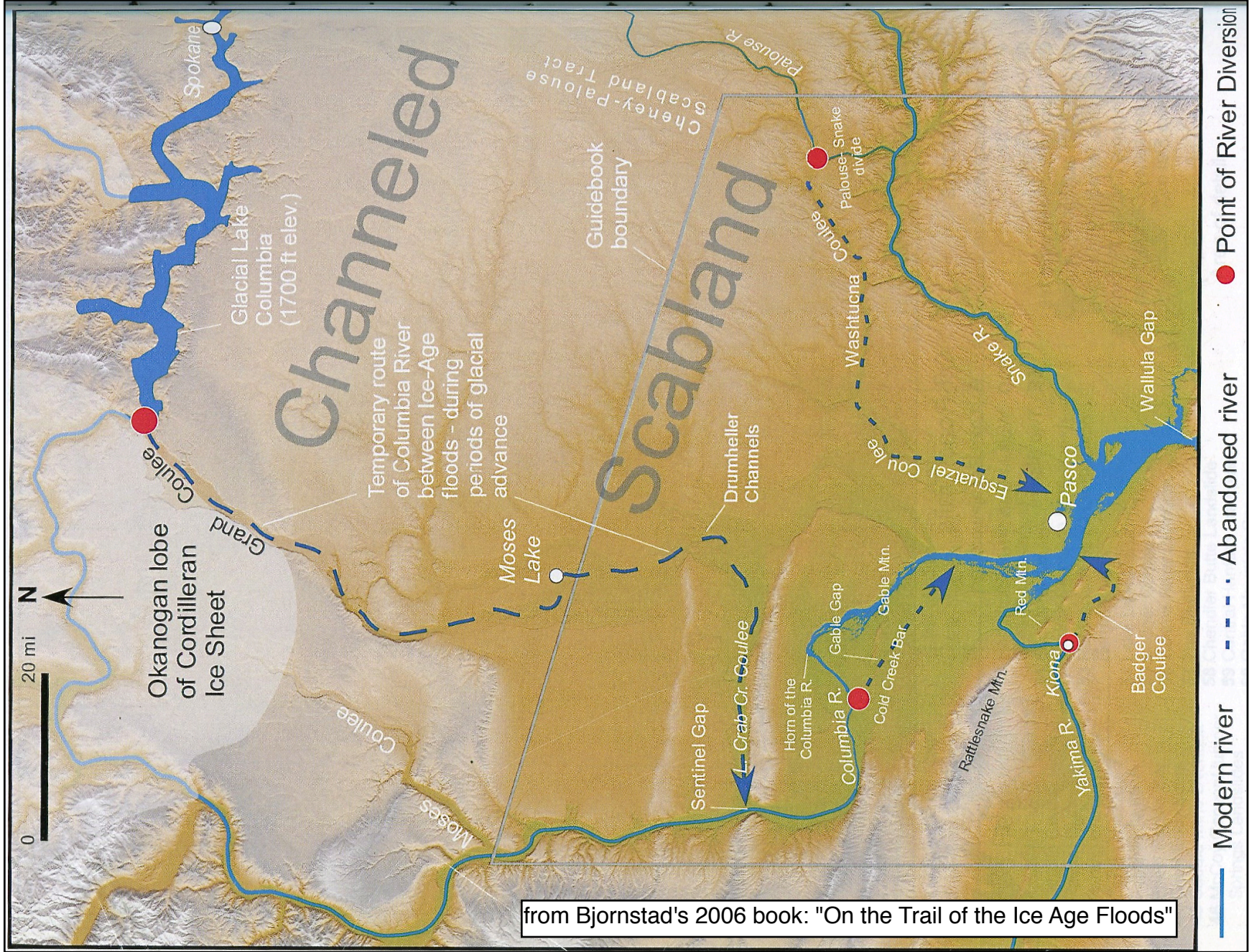
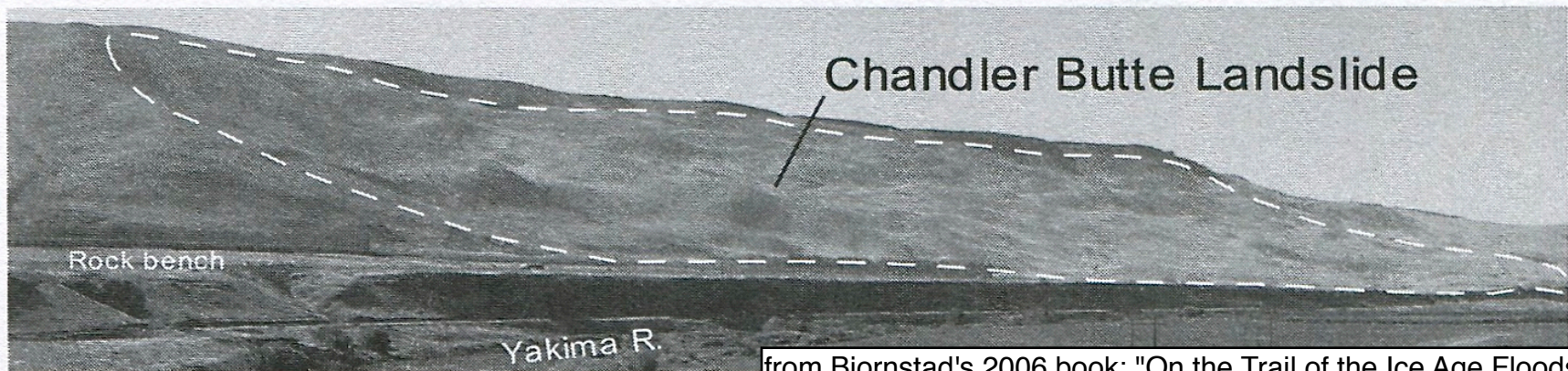


Figure 4. West end of Kiona Quarry exposure. Notice the high-relief, channel-fill structure that truncates the lowermost Sh bed. Sh = horizontally-laminated sand, Gh = horizontally bedded gravel and sand, Gp = planar-cross bedded gravel and sand. R = location of reversed magnetic-polarity samples. from Bjornstad's 2006 book: "On the Trail of the Ice Age Floods"

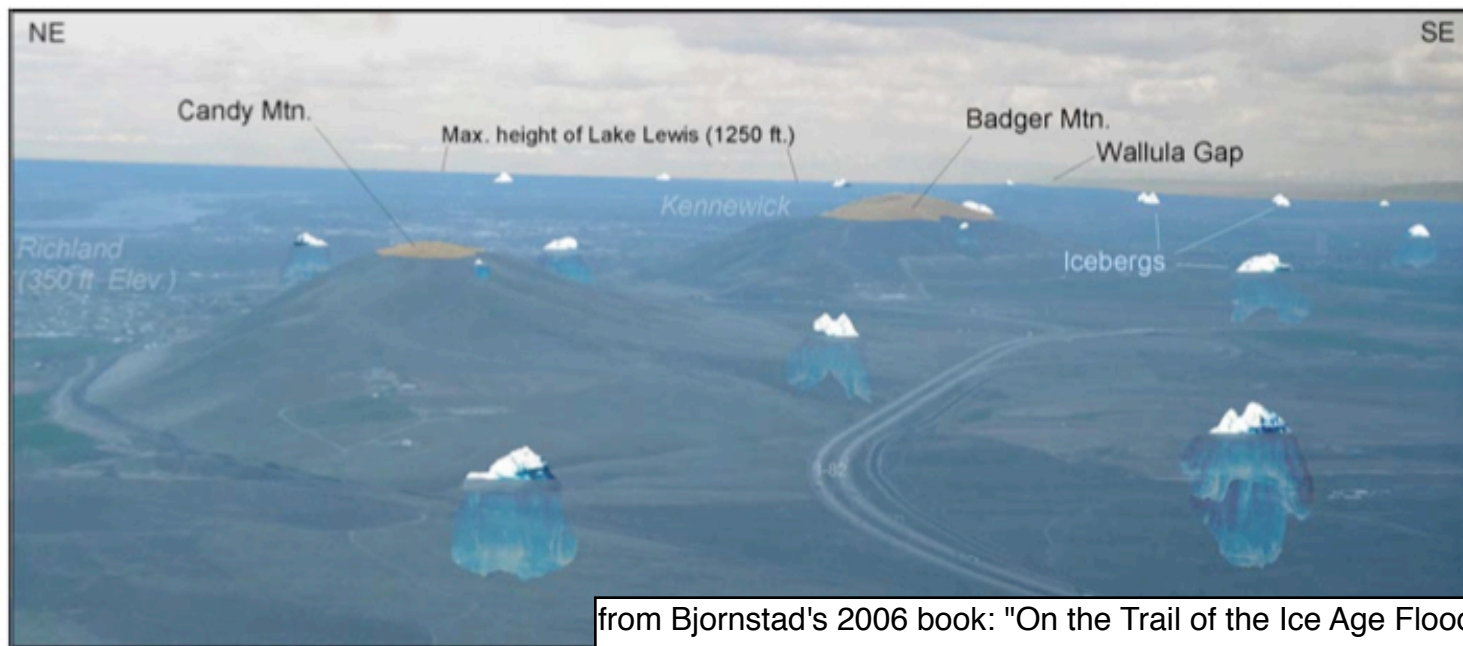


from Bjornstad's 2006 book: "On the Trail of the Ice Age Floods"



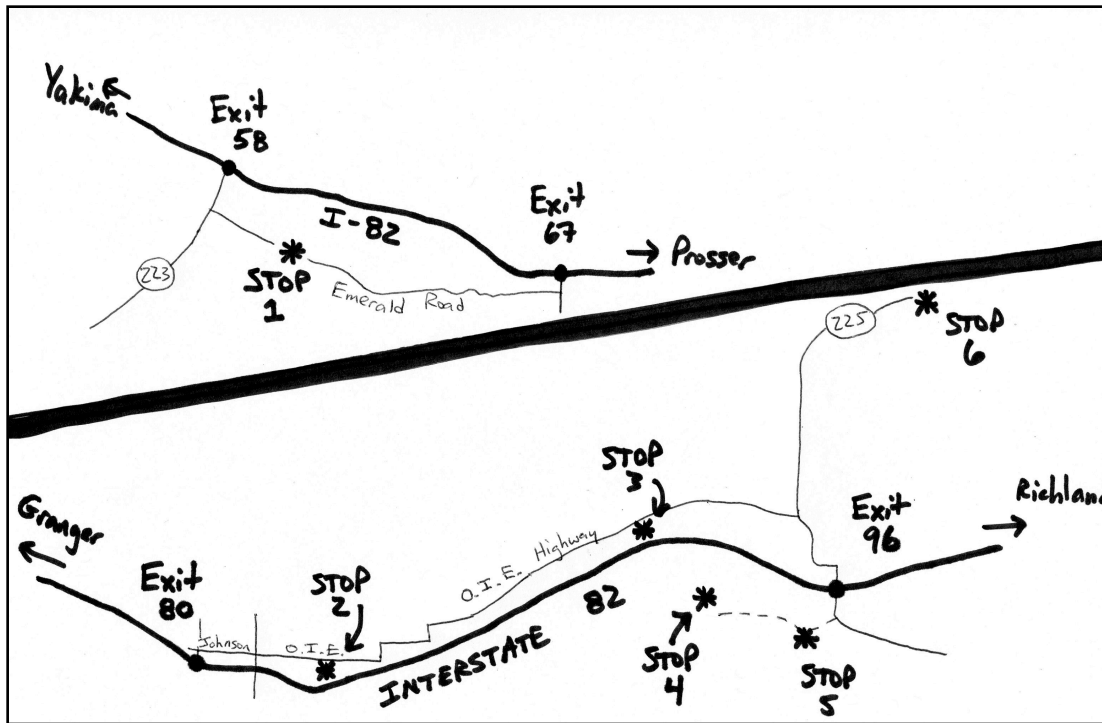
from Bjornstad's 2006 book: "On the Trail of the Ice Age Floods"

**Figure 5-17. Chandler Butte Landslide complex along the north slope of the Horse Heaven Hills. Looking southwest with the Yakima River in foreground. A flood-scoured basalt bench of the Badlands lies just beyond the river.**



from Bjornstad's 2006 book: "On the Trail of the Ice Age Floods"

**Figure 3. Lake Lewis as it might have appeared in the southern Pasco Basin at the highest flood stage. View is looking east. Candy and Badger Mountains were islands, temporarily, during the larger floods. The Columbia River and the Tri-Cities are in the distance on the left and Badger Coulee is to the right. Icebergs tended to congregate around the margins of the Pasco Basin where flood currents were not as strong and developed back eddies.**



## STOP 1

Exit 58. South on 223. Left of Emerald Road. Park at intersection of S. Branch Nass Rd. and Emerald Road. (Park on gravel shoulder of Branch Nass )  
N46.32030, W120.14742

## STOP 2

Exit 80. North on N Gap Rd. Right on Johnson Rd. It turns into O.I.E. Highway. Right on Pleasant Drive. Park at end of Dead End.  
N46.22553, W119.72035

## STOP 3

Right on O.I.E east toward Benton City. Valley narrows considerably. Look for sign on right. "Chandler Power & Pumping Plant". Park. Very short hike (<500 yards). N46.26639, W119.59438

## STOP 4 & 5

O.I.E east enters Benton City. Right on 225. Under I-82. Right on N McBee Road (gravel road). Up and up to top of ridge. At top, right on lesser road (worse gravel). Park at 100 yards. Stop 4. N46.24644, W119.52248  
Back down McBee Road. Stop 5 at irrigational canal at bottom of hill. N46.24171, W119.48153

## STOP 6

Left on 225. North. Back under I-82. Follow 225 through Benton City. Stay on 225 north. Stop 6 is between Milepost 7 and 8. Gravel parking lot on left. Rattlesnake Wildlife Recreation Area. Wooden Sign. Discover Pass required! Open-ended, optional hike looking for impressive ice-rafted erratics! N46.34281, W119.47471