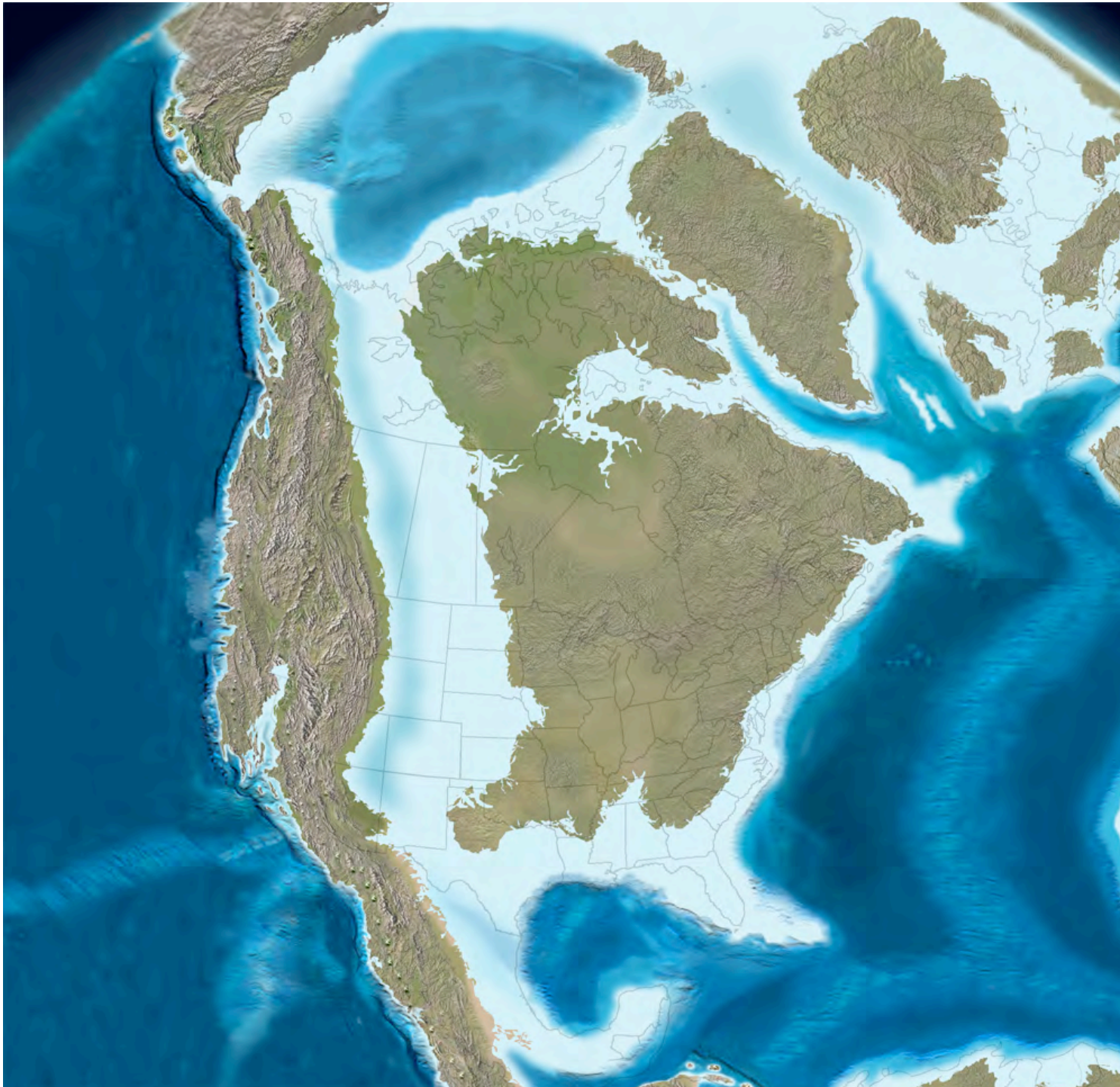


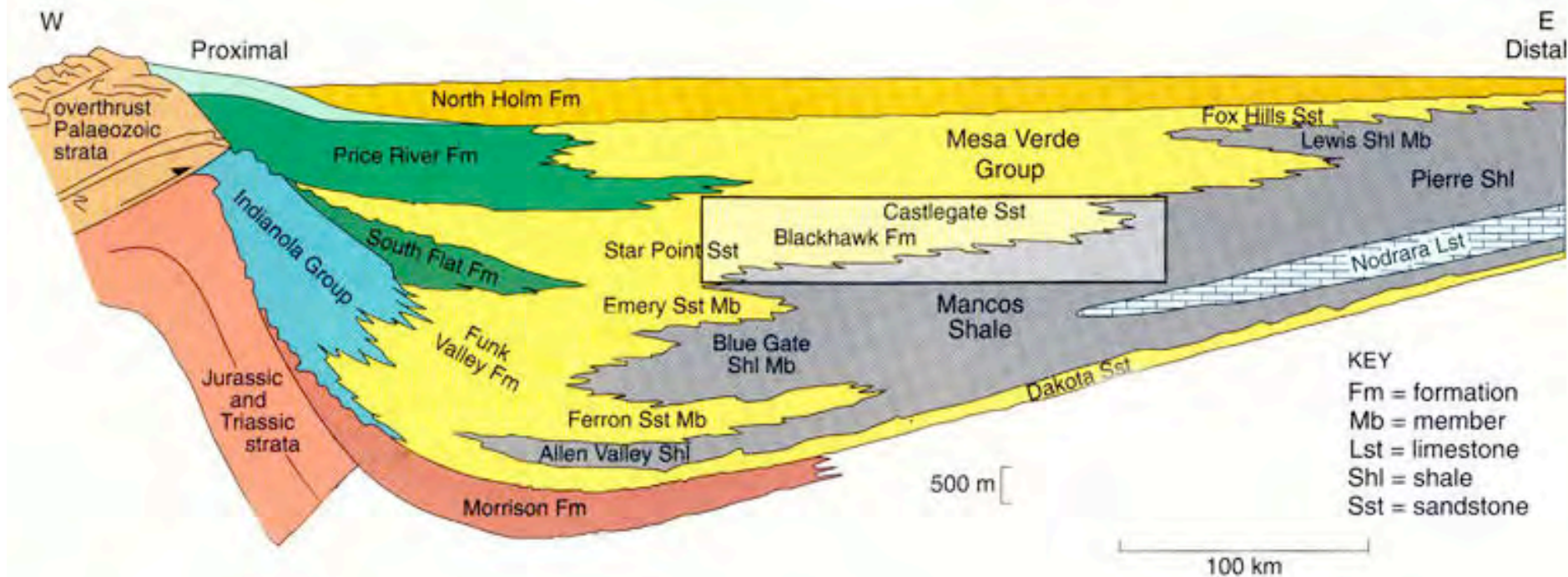


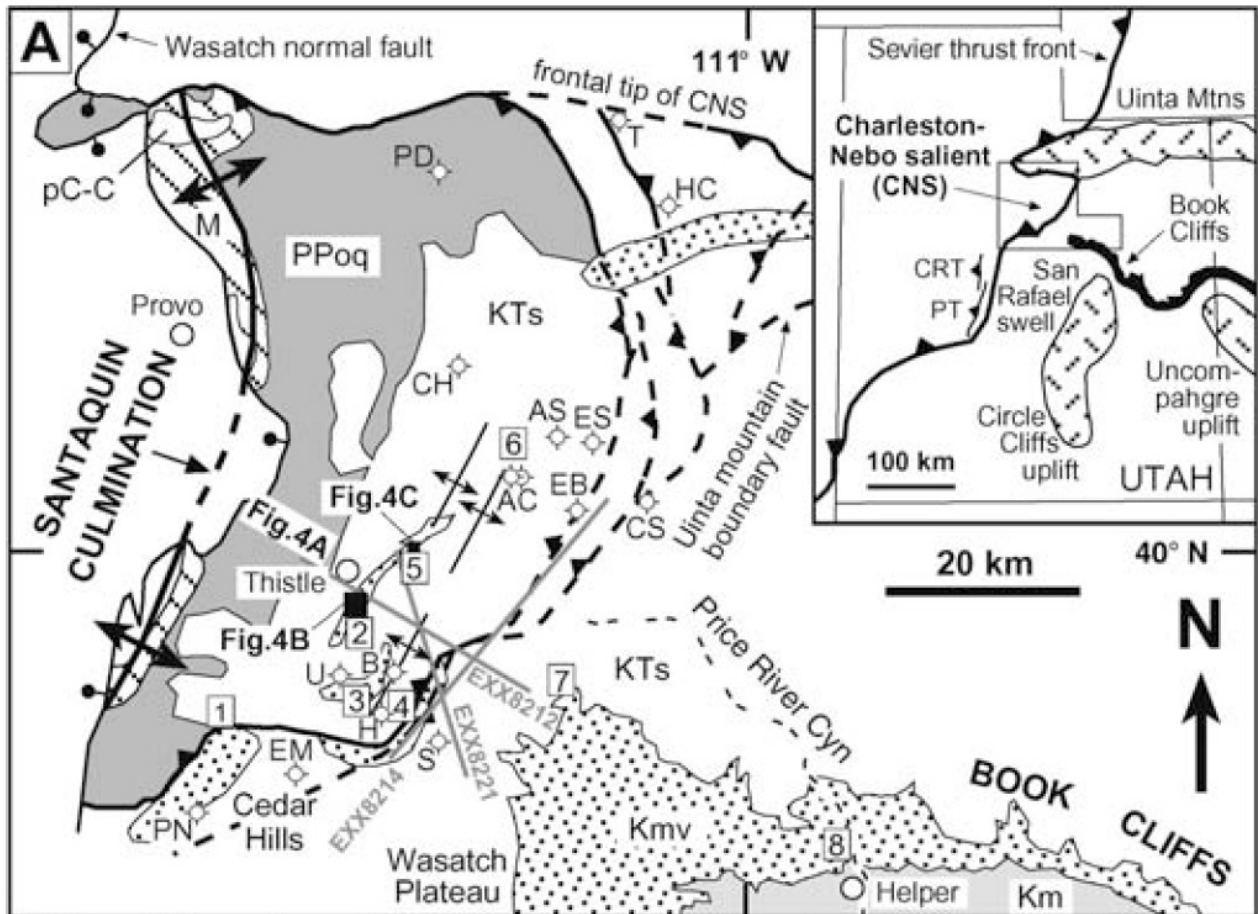
Book Cliffs, east of Woodside, Utah: Mesa Verde Group



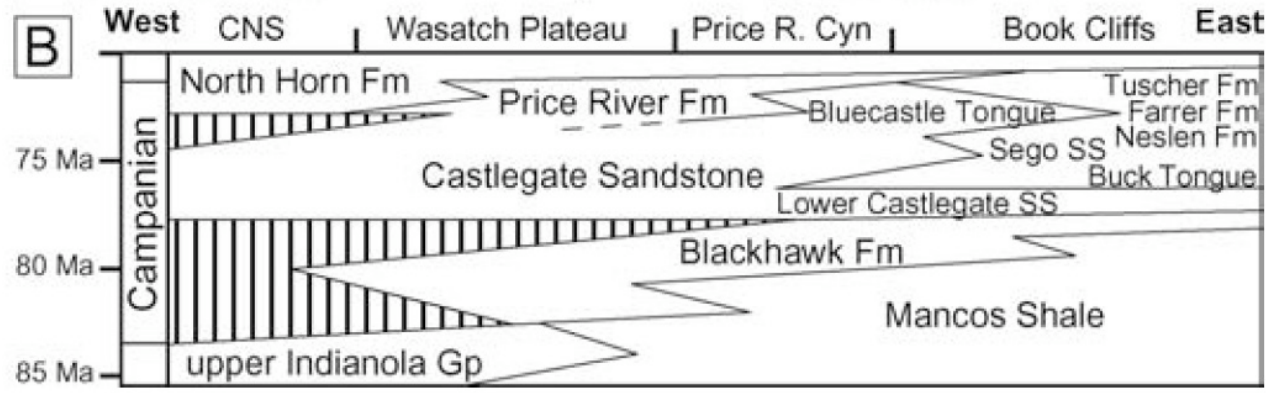
Western Interior Seaway 85 Ma

Ron Blakey
[http://jan.ucc.nau.edu/
~rcb7/](http://jan.ucc.nau.edu/~rcb7/)

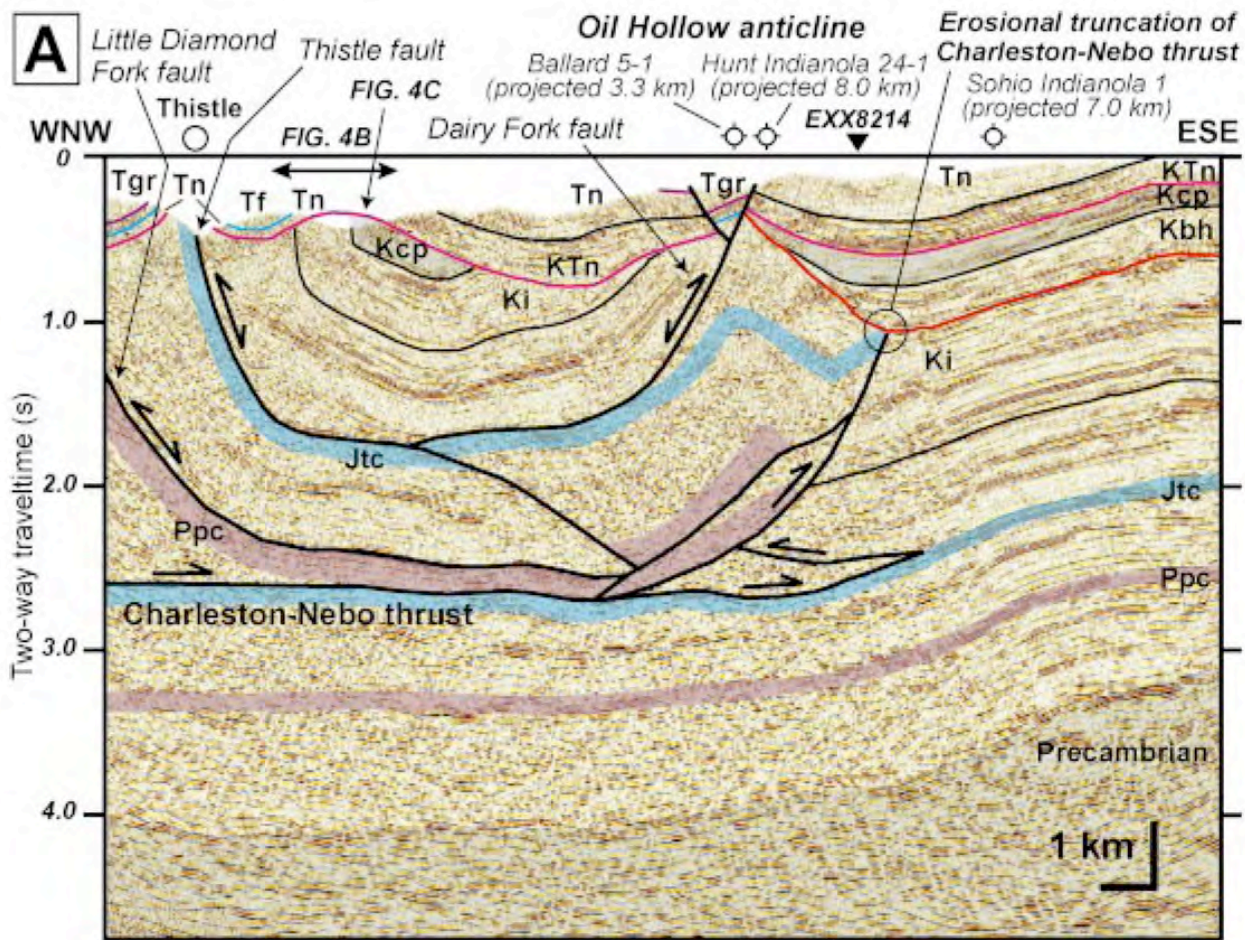




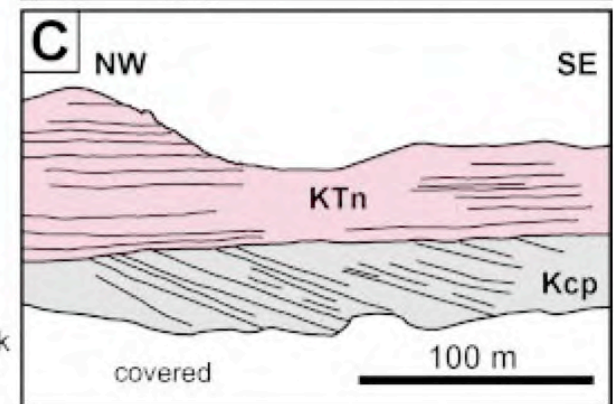
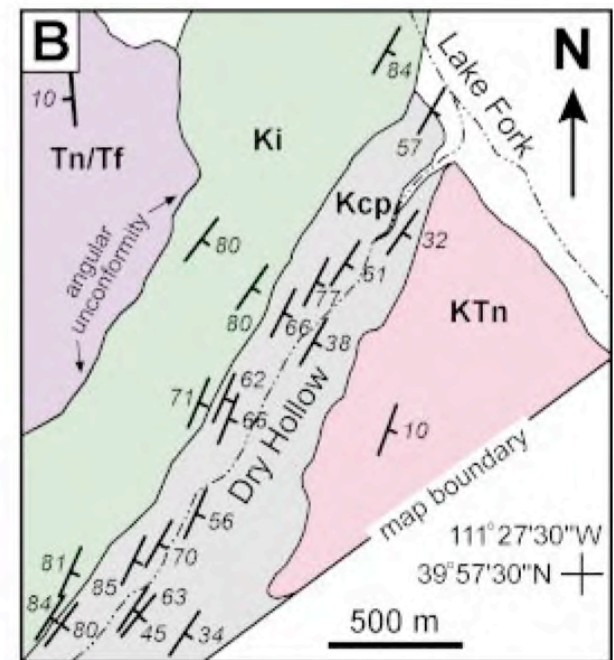
- AC-Amoco Cottonwood
- AS-Amoco Strawberry 1
- B-Ballard 5-1
- CH-Chevron Halls 1-13-3C
- CS-Chevron Strawberry 1
- EB-Exxon Buffalo Cyn 1
- EM-Exxon Mount Baldy 1
- ES-Exxon Strawberry 1
- HC-Hamon Carrant Ck 1-26
- H-Hunt Indianola 24-1
- PD-Placid Daniels 1
- PN-Phillips Nielsen-Seager 1
- S-Sohio Indianola 1
- T-Terra 1-33
- U-Union J-9



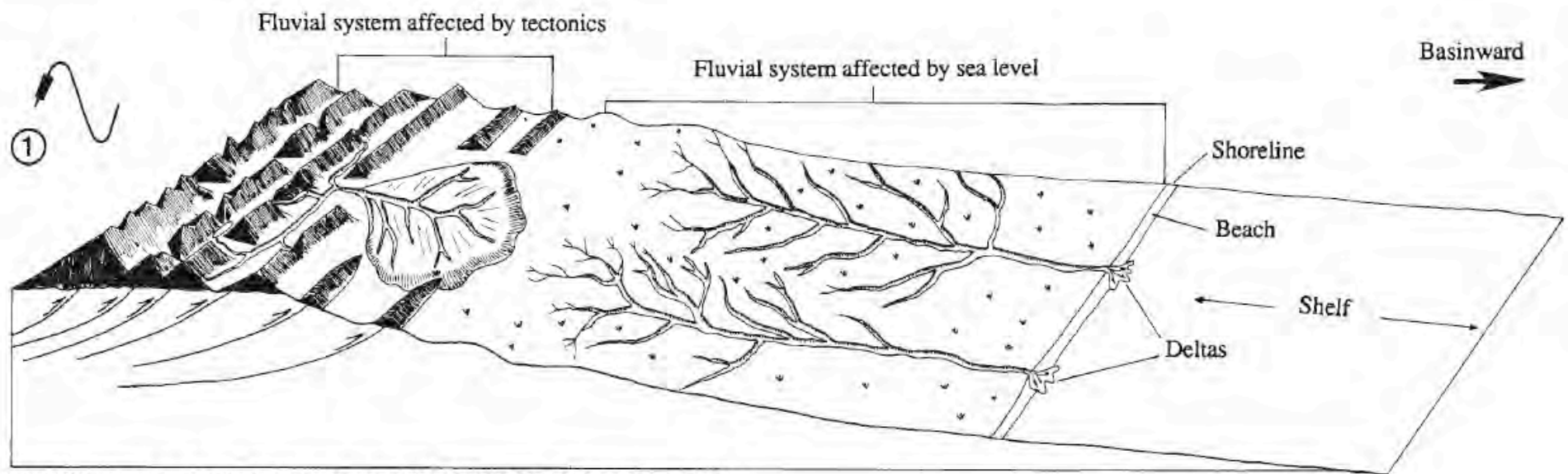
Horton et al 2004



Tertiary (T) Jurassic (J) Tgr-Green River KTn-lower North Horn Ki-Indianola
 Cretaceous (K) Permian (P) Tf-Flagstaff Kcp-Castlegate-Price River Jtc-Twin Creek
 Tn-upper North Horn Kbh-Blackhawk Ppc-Park City



Horton et al 2004



MINOR, INTRA-CASTLEGATE TRANSGRESSIVE SYSTEMS TRACT

Inferred Paleogeography (Van Wagoner et al 1995)

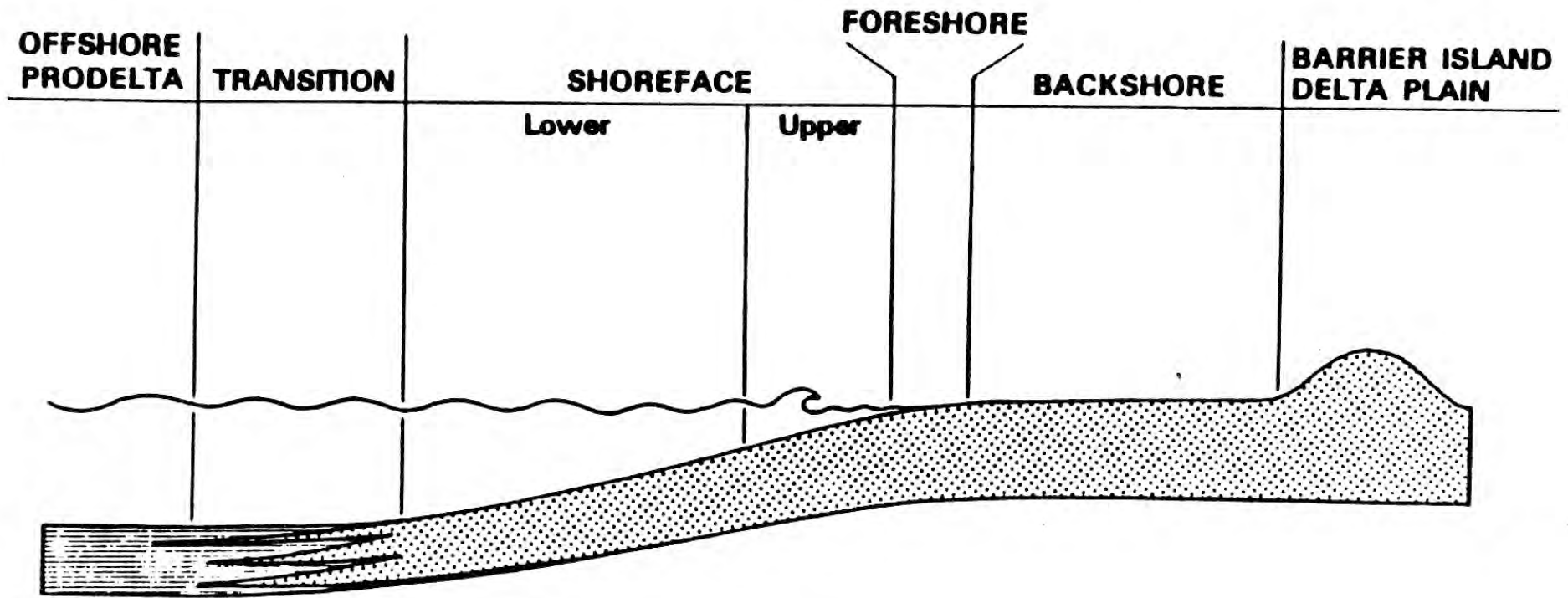


Figure 14. Modern wave-dominated shoreline profile with terminology applied to Blackhawk shoreface-foreshore sequences (modified after Harms et al., 1975).



Blackhawk Fm: Interbedded coals and fluvial sandstones



Interbedded fluvial sandstones and coals (nb recessive profile)



Blackhawk Fm:
Thin bedded fluvial
Sandstone and
Carbonaceous
claystone



Blackhawk Fm: Sandstone and coal beds, Helper UT

www.flickr.com 811796501_of6757248e_b.jpg



Blackhawk:
Fluvial Sandstone
and non-marine
siltstone & claystone



Castlegate: Shoreface overlying prodelta shales



Castlegate: Shoreface



Castlegate: Lower Shoreface: burrows and laminated bedding



Castlegate: Transition zone: hummocky cross bedding



Castlegate: Upper Shore Face



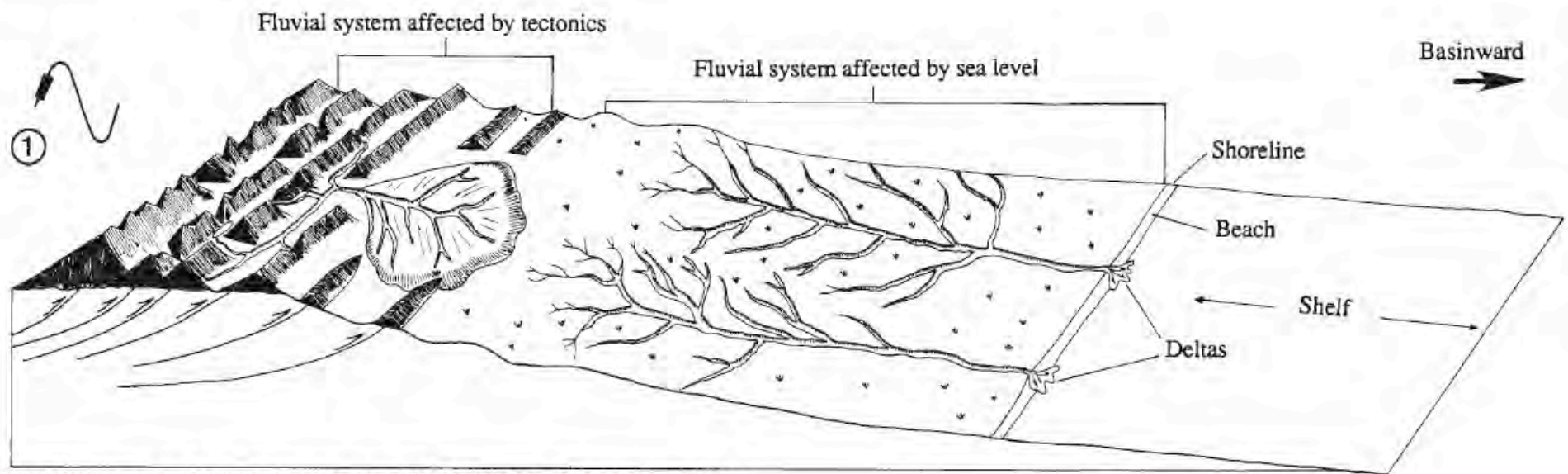
Castlegate: Interbedded prodelta siltstones and claystones



Mancos Shale and deep water sandstone, Uinta Basin

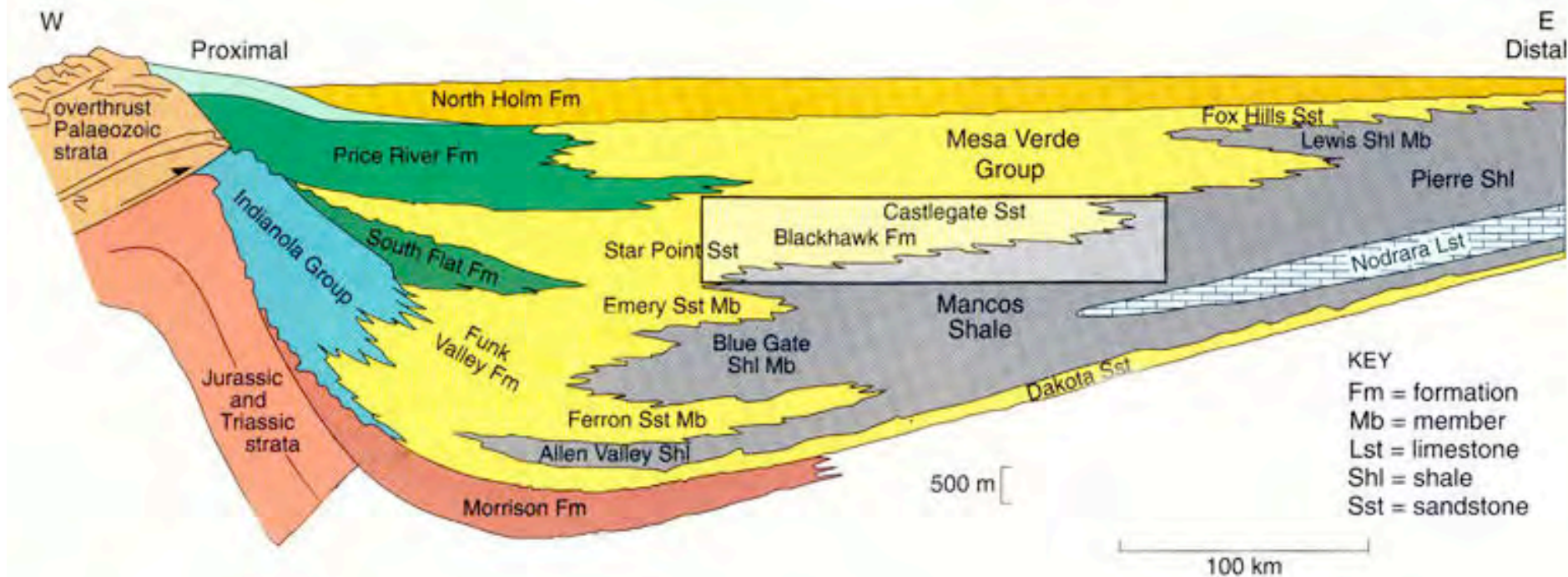


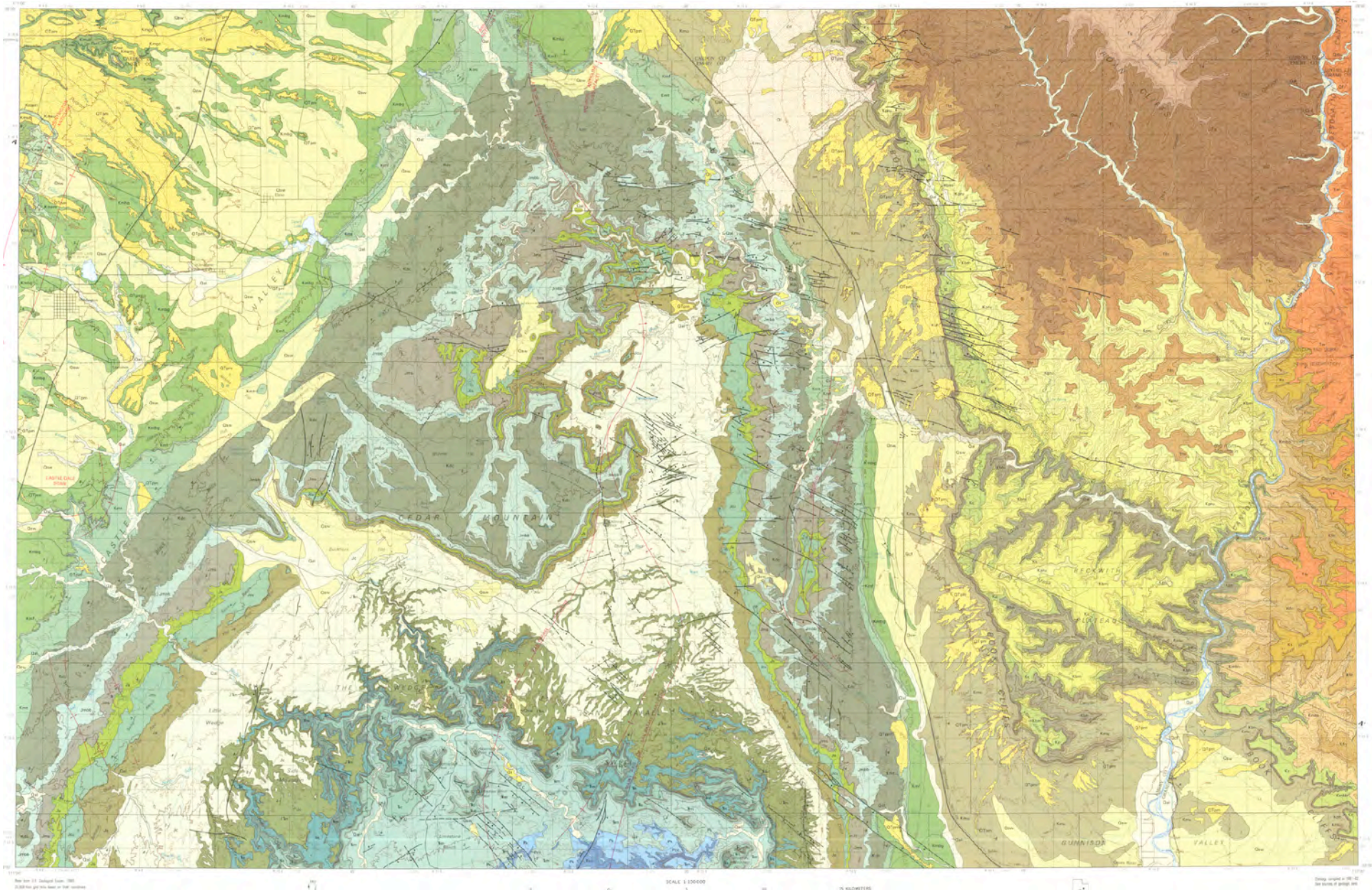
Mancos Shale and deep water sandstones, Unita Basin



MINOR, INTRA-CASTLEGATE TRANSGRESSIVE SYSTEMS TRACT

Inferred Paleogeography (Van Wagoner et al 1995)





Geologic Map of the Huntington, UT Quadrangle



Book Cliffs, east of Woodside, Utah