U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY
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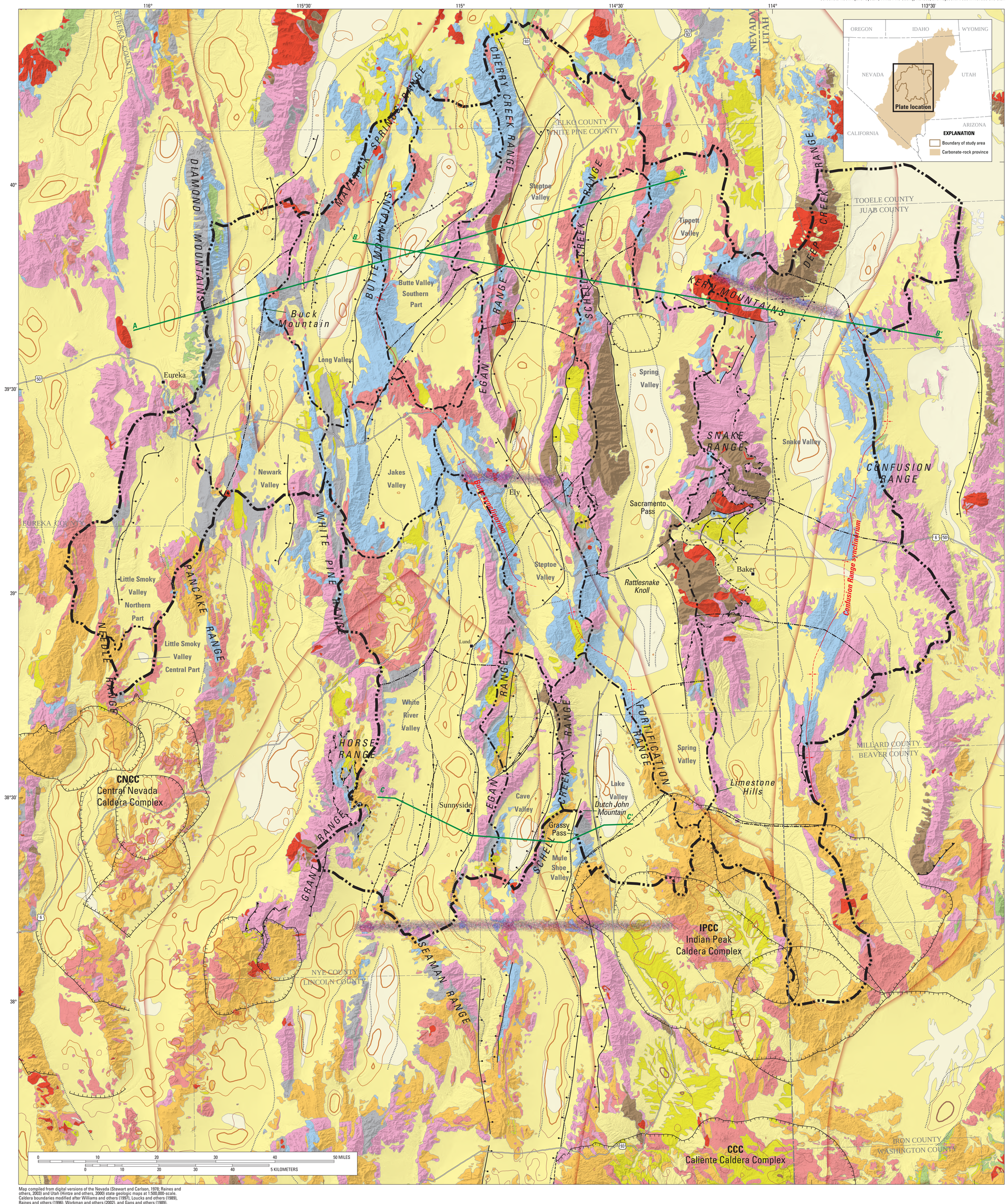
BUREAU OF LAND MANAGEMENT

SCIENTIFIC INVESTIGATIONS REPORT 2007-5261
Hydrogeologic map and cross sections—PLATE 1
Welch, A.H., Bright, D.J., Knochenmus, L.A., Editors, 2008, Water Resources of the Basin and Range Carbonate-Rock Aquifer System, White Pine County, Nevada, and Adjacent Areas in Nevada and Utah



Map compiled from digital versions of the Nevada (Stewart and Carlson, 1978; Raines and others, 2003) and Utah (Hintze and others, 2000) state geologic maps at 1:500,000-scale. Caldera boundaries modified after Williams and others (1997), Loucks and others (1989), Raines and others (1996), Workman and others (2002), and Gans and others (1989). Boundaries of highly extended terrains modified after Wernicke. Base from U.S. Geological Survey digital data 1:100,000, 1978-1989; Universal Transverse Mercator projection, Zone 11. Shaded relief base from 1:250,000-scale Digital Elevation Model; sun illumination from northwest at 30 degrees above horizon.

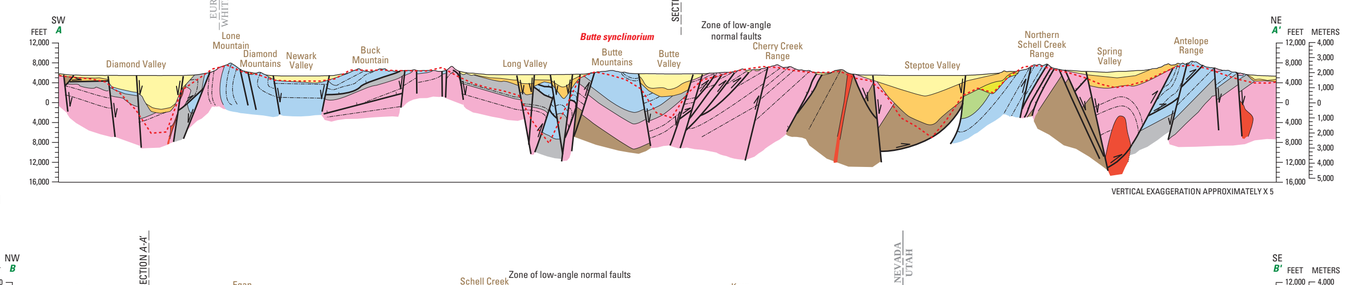
EXPLANATION

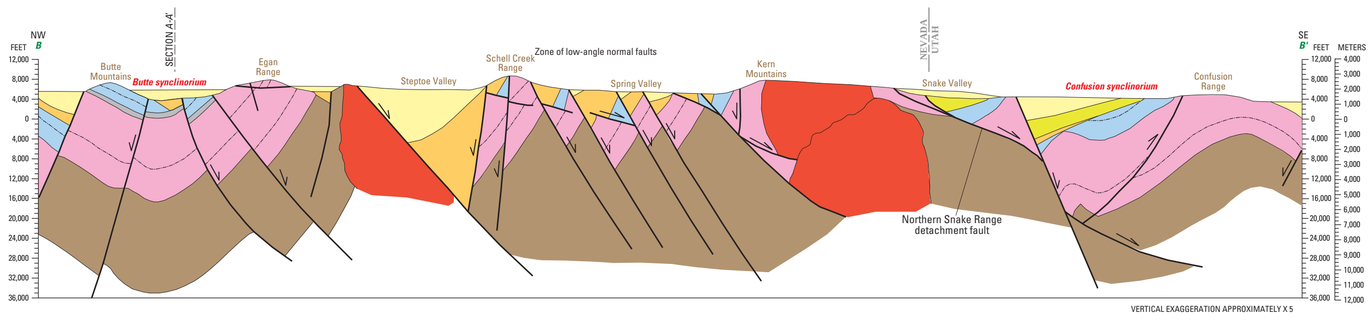
Hydrogeologic unit

- Fine-grained younger sedimentary rock unit (primarily lacustrine and playa deposits); FYSU
- Coarse-grained younger sedimentary rock unit(alluvial and fluvial deposits); CYSU
- Older sedimentary rock unit (consolidated Cenozoic rocks, variety of grain sizes and depositional environments); OSU
- Volcanic flow unit (basalt, andesite, dacite and rhyolite lava flows); VFU
- Volcanic tuff unit (ash-flow tuffs); VTU
- Mesozoic sedimentary rock unit (limestones, sandstones and siltstones); MSU
- Upper carbonate rock unit (Mississippian to Permian carbonate rocks); UCU
- Upper siliciclastic rock unit (Mississippian siliciclastic rocks); USCU
- Lower carbonate rock unit (Cambrian to Devonian predominantly carbonate rocks); LCU
- Lower siliciclastic rock unit (Early Cambrian and older siliciclastic rocks); LSCU
- Intrusive unit (Jurassic to Tertiary granitic rocks); IU

Structural features

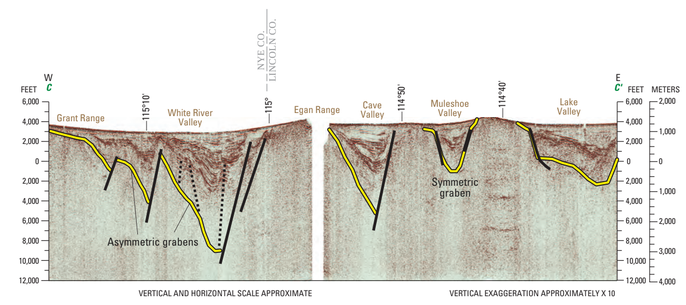
- Normal fault
- Inferred normal fault
- Low angle normal or detachment fault
- Low angle normal or detachment fault, inferred
- Thrust fault
- Syncline
- Inferred syncline
- Caldera boundaries
- Highly extended terranes
- Transverse zones
- A A' Line of hydrogeologic section
- Boundary of study area
- Jakes Valley Boundary of hydrographic area and name
- Boundary of subbasin
- Thickness of Cenozoic deposits: 1 mile; 2 mile
- Geophysically determined faults





Symbols that appear on hydrogeologic and seismic cross sections

- Contact between hydrogeologic units
- Form line indicating general attitude of bedding within hydrogeologic unit
- Elevation of pre-Cenozoic rocks; modeled from gravity data (section *A-A'*)
- Fault (sections *A-A'* and *B-B'*); arrow shows relative sense of offset
- Fault (section *C-C'*)
- Fault, inferred (section *C-C'*)
- Interpreted base of the Cenozoic basin fill (section *C-C'*)



HYDROGEOLOGIC MAP AND CROSS SECTIONS, WHITE PINE COUNTY, NEVADA, AND ADJACENT AREAS IN NEVADA AND UTAH

By
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