NEW MEXICO BUREAU OF GEOLOGY AND MINERAL RESOURCES

Representative Hydrographs and Groundwater Surface of Union County and the Clayton Underground Water Basin, northeast New Mexico

Open-file Report 570
Plate 2
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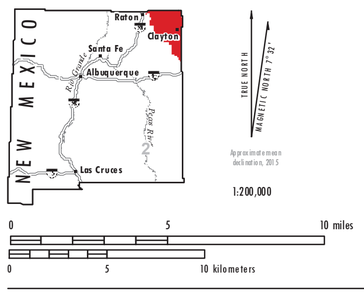
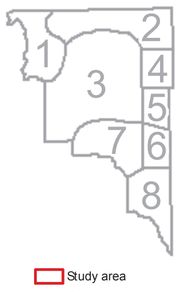




Well with hydrograph

Well Information

- Well ID
  Water level elevation
  Date of measurement

Hydrograph Regions

1. Capulin Basin and Northwest
2. Dry Cimmaron River drainage
3. Central Uplands
4. 5, & 6. East-Central irrigated regions
7. South Central
8. Southeast panhandle.

Study area
County boundary

NMBGMR / NESWCD wells

- Ogallala Fm/Upland deposits/Basalt
- Ogallala Fm
- Dakota Fm
- Lower Cretaceous Sandstone
- Morrison Fm or Entrada Fm
- Entrada Fm
- Triassic undiv

OSE NMWRRS wells

- Ogallala Fm/Upland deposits/Basalt
- Ogallala Fm
- Cretaceous Shale above Dakota Fm
- Dakota Fm
- Lower Cretaceous Sandstone
- Morrison Fm or Entrada Fm
- Entrada Fm
- Triassic undiv

Water Level Contours

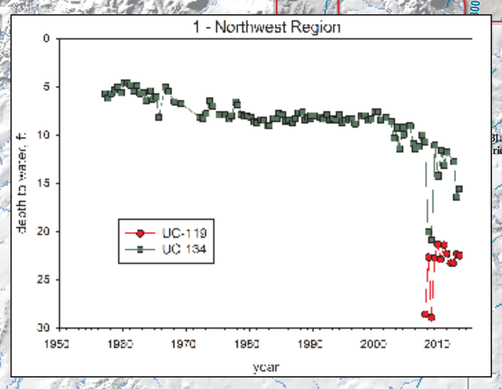
- approximate
- certain

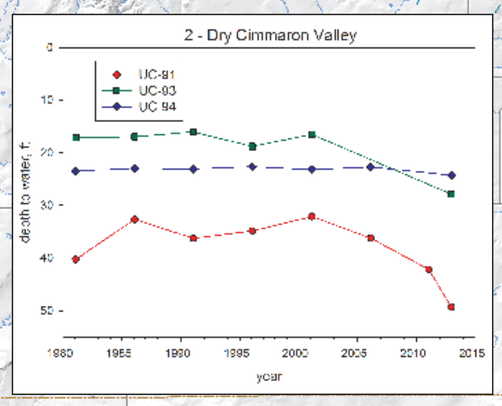
Hydrology

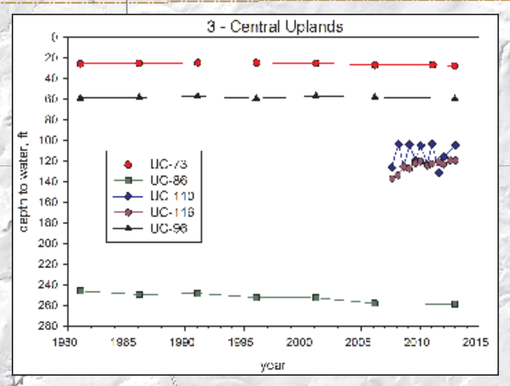
- Spring with elevation
- Perennial stream reaches
- Other drainages

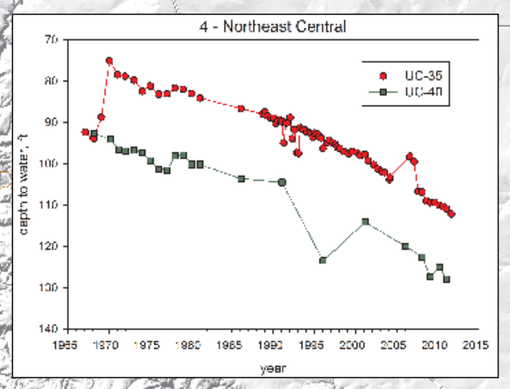
Surface Elevation

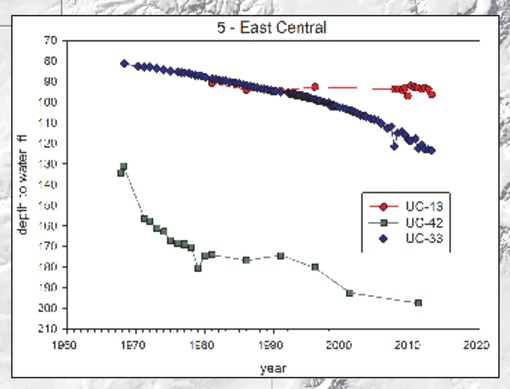
- 8813 feet
- 3779 feet

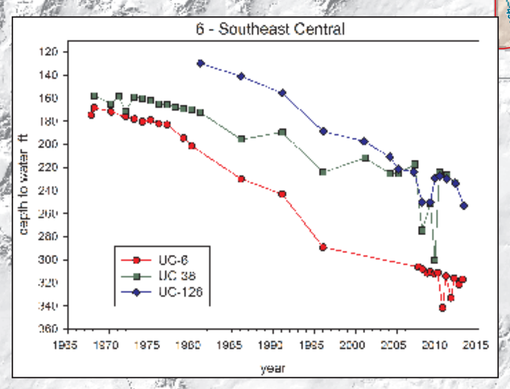


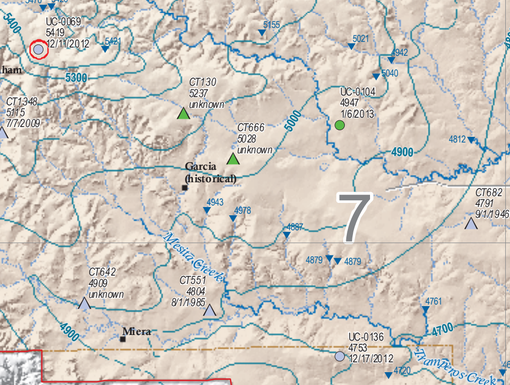


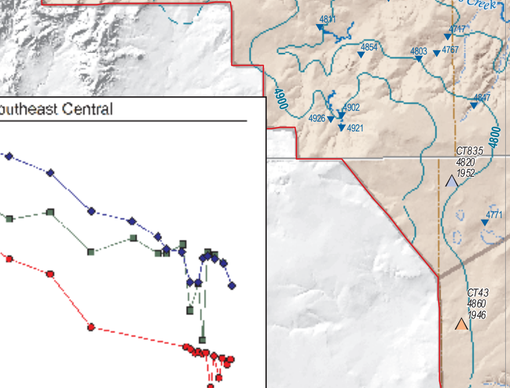












Comments to Map Users

The purpose of this map is to illustrate important aspects of regional groundwater conditions. Groundwater elevation data depicted herein were derived primarily from depth-to-water measurements taken between December 2012 and March 2013 by the New Mexico Bureau of Geology and Mineral Resources (NMBGMR) at New Mexico Tech, the Northeast Soil and Water Conservation District, and the US Geological Survey. In locations where these recent data were not available, static water levels were used from selected well records on file at the New Mexico Office of the State Engineer. Land surface elevations used to derive groundwater elevation values originated from a 10-m digital elevation model (DEM). Groundwater levels in the vicinity of wells may fluctuate significantly with pumping. The user should be aware that the groundwater elevation surface reflects conditions during the winter of 2012–2013. Current groundwater conditions may differ from those shown. Site- and time-specific conditions should be verified by the user. All additional information contained on this map, other than groundwater elevation data, are interpretations by the author. The groundwater elevation contours were drawn by hand based on the author's interpretation of water level data.