Groundwater level and storage changes for regions of New Mexico with USGS, NMOSE, NMBGMR

Water level change may indicate depletion of the aquifer, variations in nearby surface water, fluctuations in recharge amounts, and changes in the total water remaining in storage for future use.

- Step 1: Compile water level data
- Step 2: Select basins/regions
- Step 3: Contour changes in groundwater levels over regionally-appropriate time interval (i.e. 5-10 years)
- Step 4: Calculate changes in water storage over relevant time intervals (where possible)

Map compiled in 1974 with a similar idea
Datasets and Products

- **Datasets:** USGS/OSE networks, NMBGMR studies, and others
  - Data coverage is NOT evenly distributed statewide
  - Intervals of measurement are variable (most are every 5 years)
  - Identification of data gaps

- **Products:**
  - Compiled water level database (ArcGIS friendly)
  - Mapped region of water level changes (ArcGIS)
  - Estimate of change in groundwater storage
  - Technical report describing methodology*
    * This can be used on other regions of the state, pending future funding.

From Falk et al., 2011, USGS