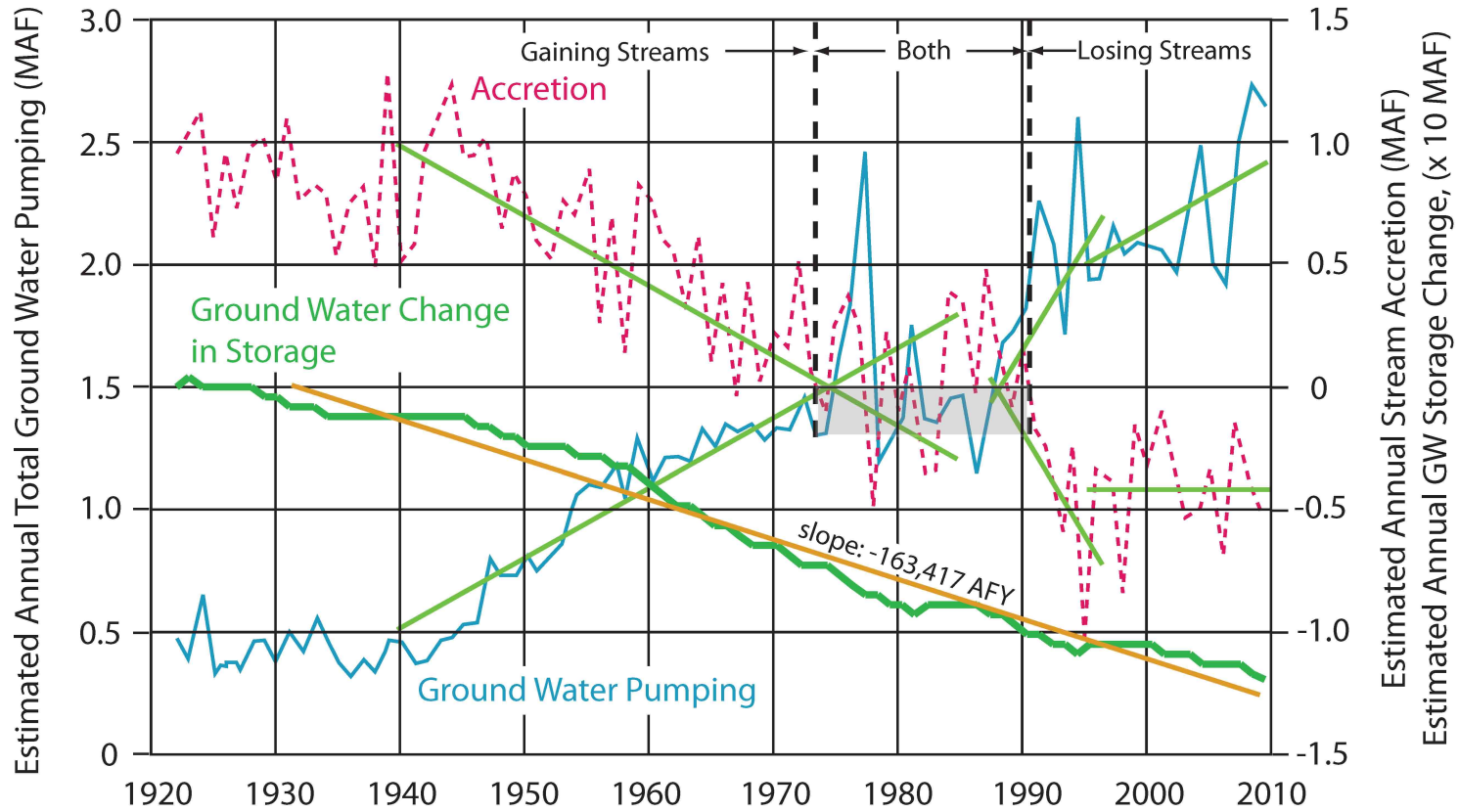


Comparison of Ground Water Pumping and Accretion
 Sacramento Valley
 1920's to 2009



Changes in Accretion, Ground Water Pumping and Ground Water Storage

1. 1920's: ~+953 TAFY accretion with ~+451 TAFY gw pumping = ~ 1,400 TAFY loss in gw storage
2. Late 1960's to Early 1970's: first zero accretion occurs with ~1,300 to ~1,500 TAFY gw pumping
3. 1920' to 2009: ~ +953 TAFY accretion to ~ - 445 TAFY accretion = ~ 1,400 TAFY difference
4. Slope of Accretion 1940 to mid-1970's ~ -27,000 AFY; late 1980's to mid-1990's ~ - 85,000 AFY; ratio ~ 3X
5. 1940 to mid-1970's' and late 1980's to mid 1990's slopes of ground water pumping increases are mirror images of losses
6. Mid -1990's to 2010 groundwater pumping slope is similar to 1940 to mid-1970's, but accretion slope is flat.
7. Ground water change in storage ~ 12 to 14 MAF 1922 to 2009 (Figure 35, C2VSim User's Manual v. 3.02-CG, v. R374, June 2013, and Table 10 C2VSim Final Report 3.02-CG, v. R374, June 2013)