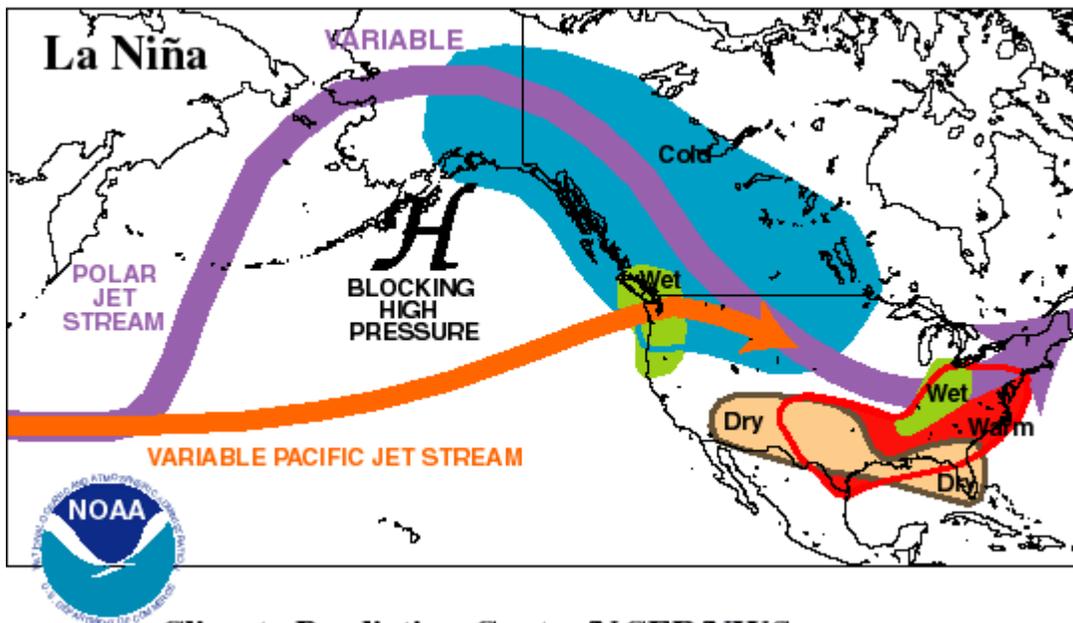


Southern Colorado and La Nina

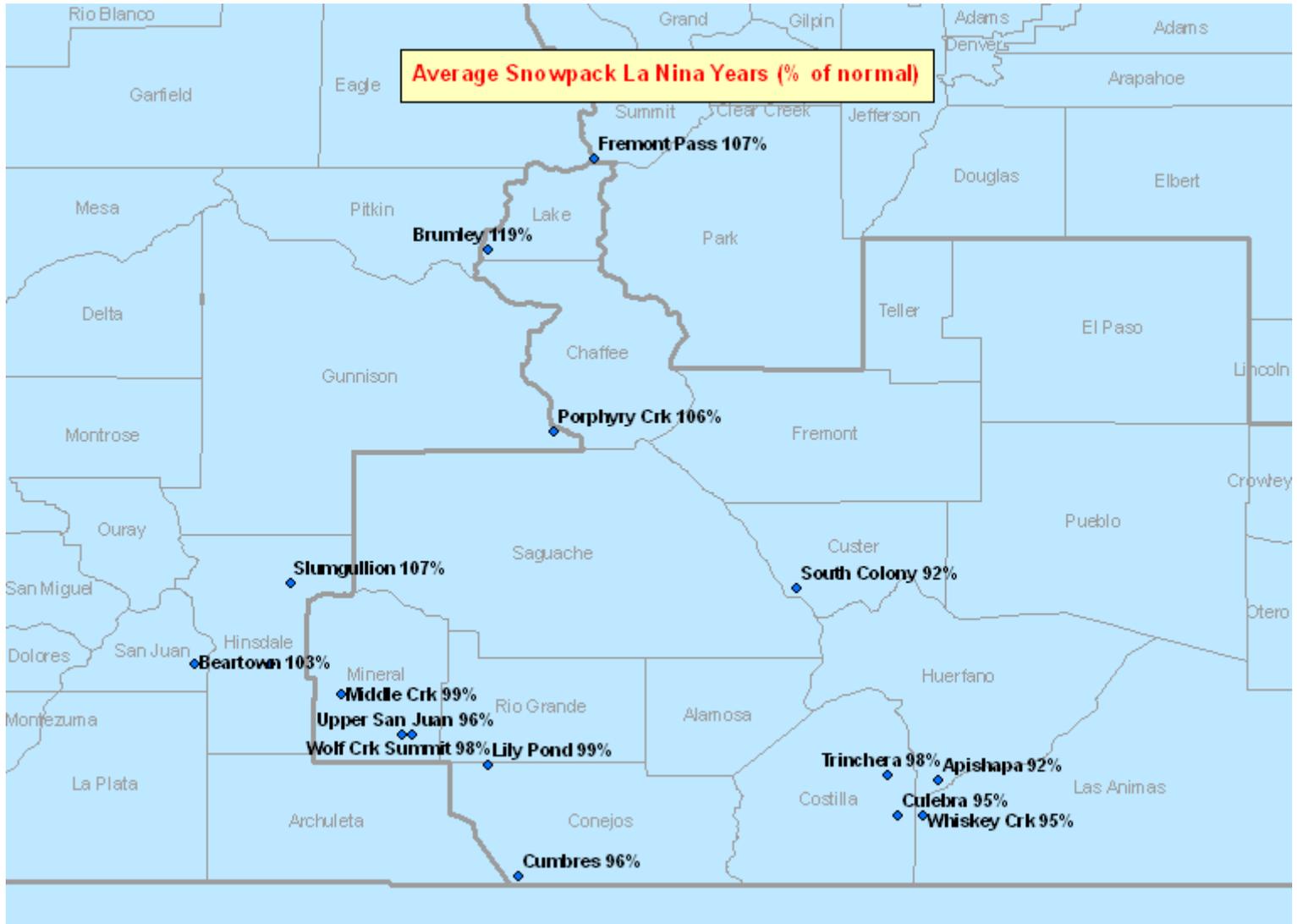
The Climate Prediction Center of NOAA's National Weather Service recently announced the return of La Nina, with a weak to moderate La Nina pattern expected to persist for the next 3 to 6 months. La Nina is the periodic cooling of ocean waters in the east-central equatorial Pacific, which can have an impact on the weather patterns across the globe.



Climate Prediction Center/NCEP/NWS

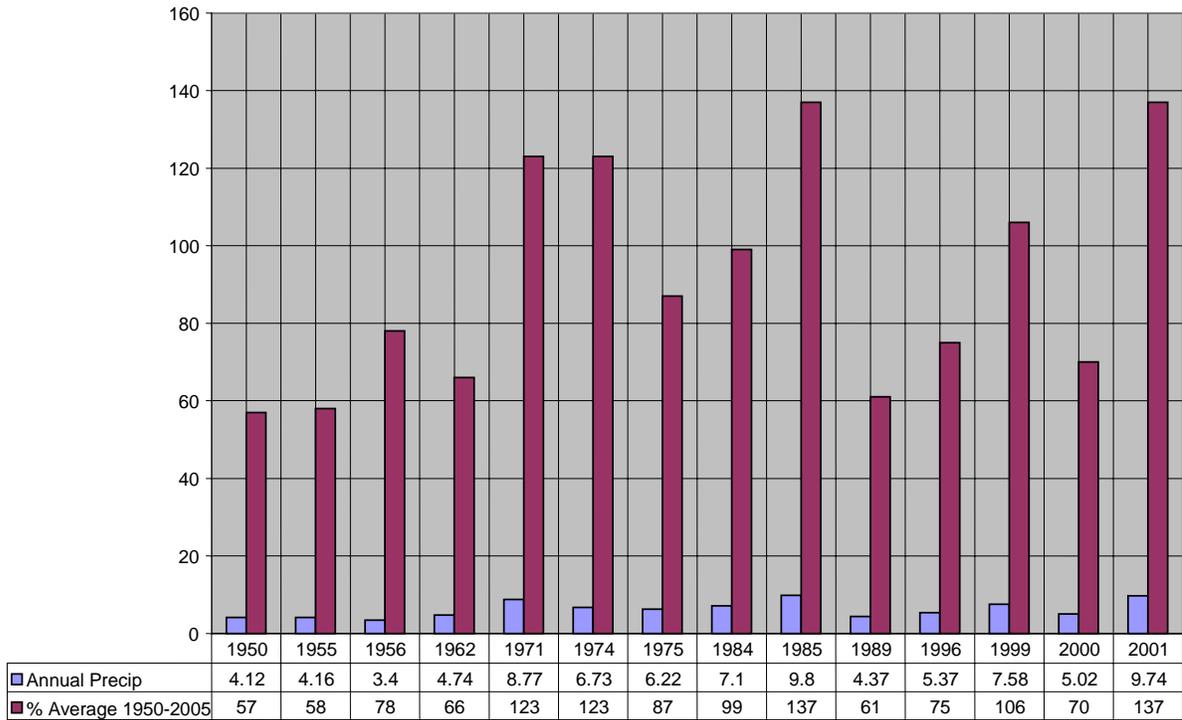
The above graphic illustrates a northern shift in the jet stream and storm track, which are typical effects of La Nina through the winter season across North America.

The effects of La Nina can vary widely across south central and southeast Colorado, with the following graphics illustrating annual precipitation data collected from SNOTEL and other observation sites across the mountains and eastern plains of southern Colorado during the previous weak to strong La Nina years of 1950, 1955, 1956, 1962, 1971, 1974, 1975, 1984, 1985, 1989, 1996, 1999, 2000 and 2001. The last weak to moderate La Nina phase occurred from 2000 through early 2001.

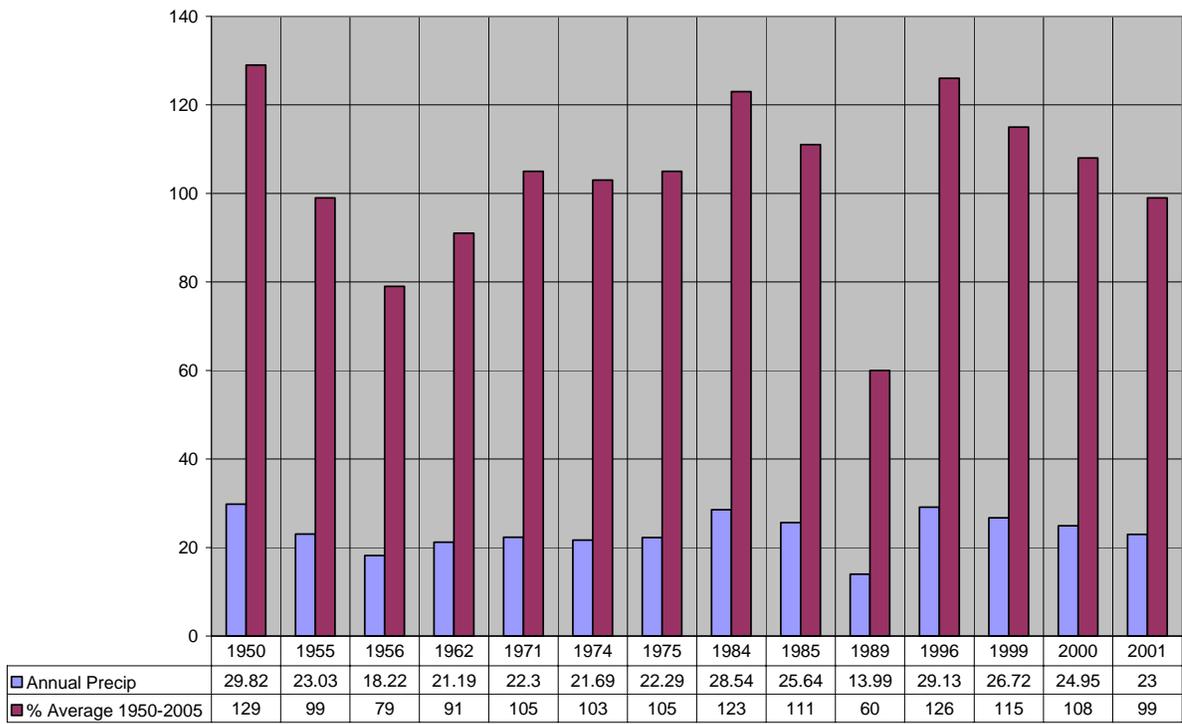


The data above collected from SNOTEL sites indicate a general trend of above average snowpack across the upper Arkansas River basin in La Nina years. A trend of near or below average snowpack can also be seen across the Upper Rio Grande and San Juan River basins, with generally below average snowpack across the Sangre de Cristo mountains in La Nina years.

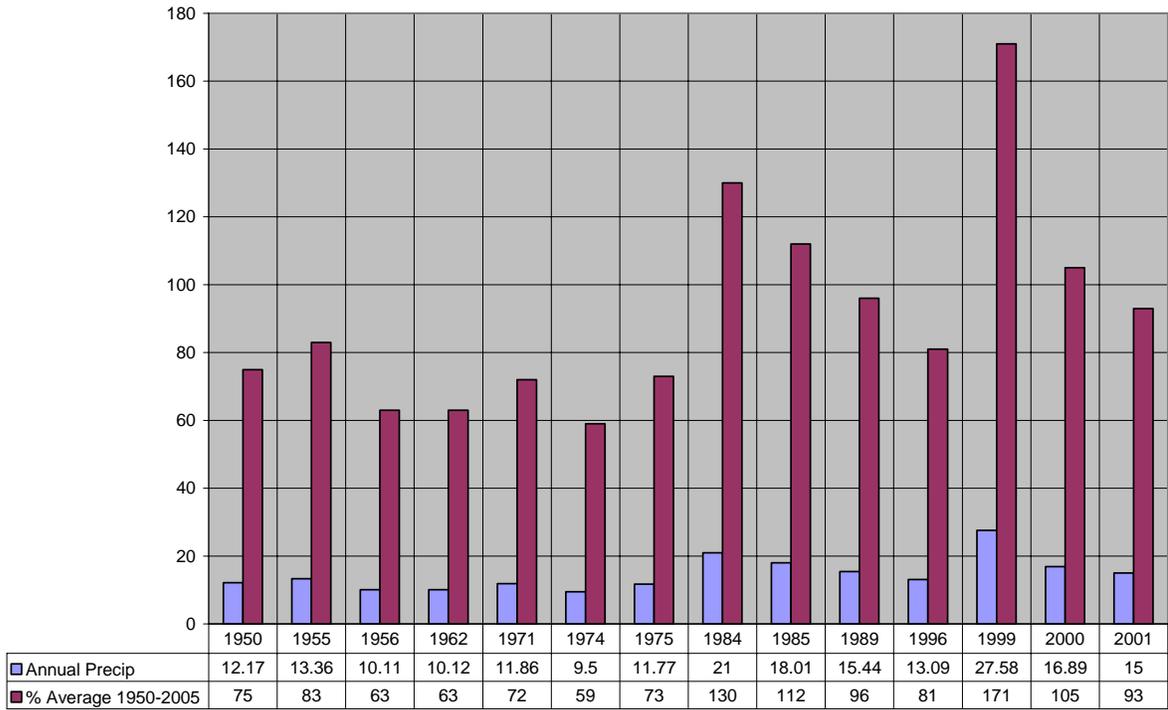
Alamosa, CO Airport Precipitation



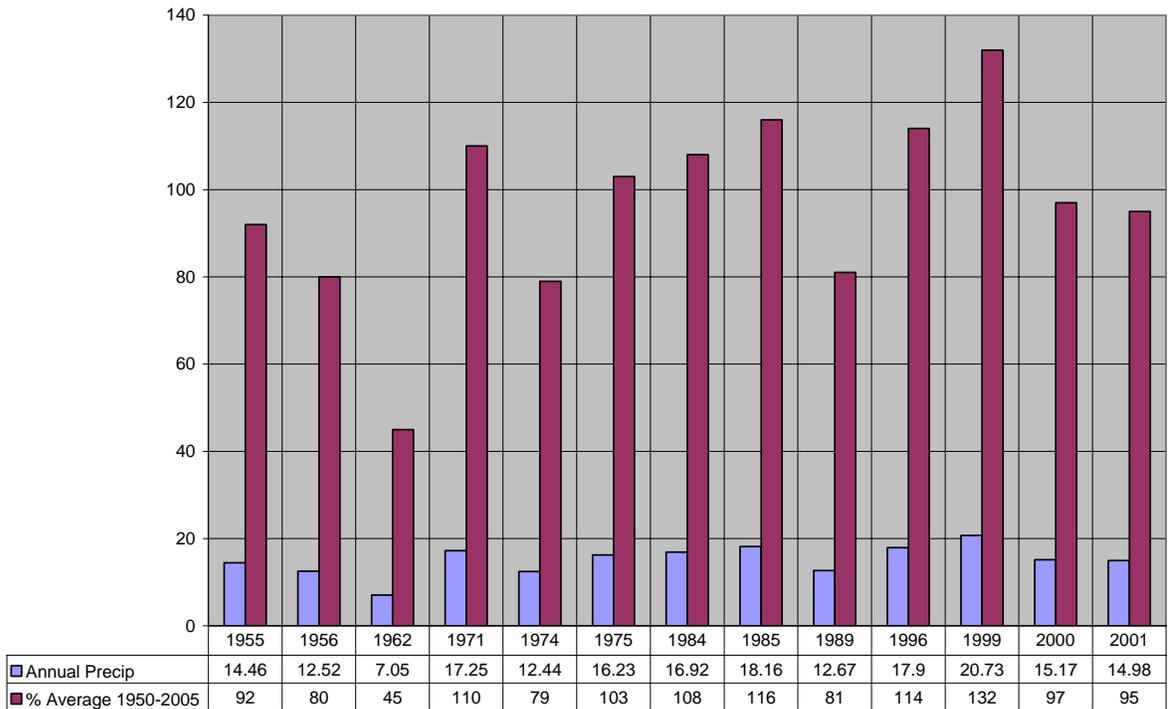
Climax, Colorado Precipitation



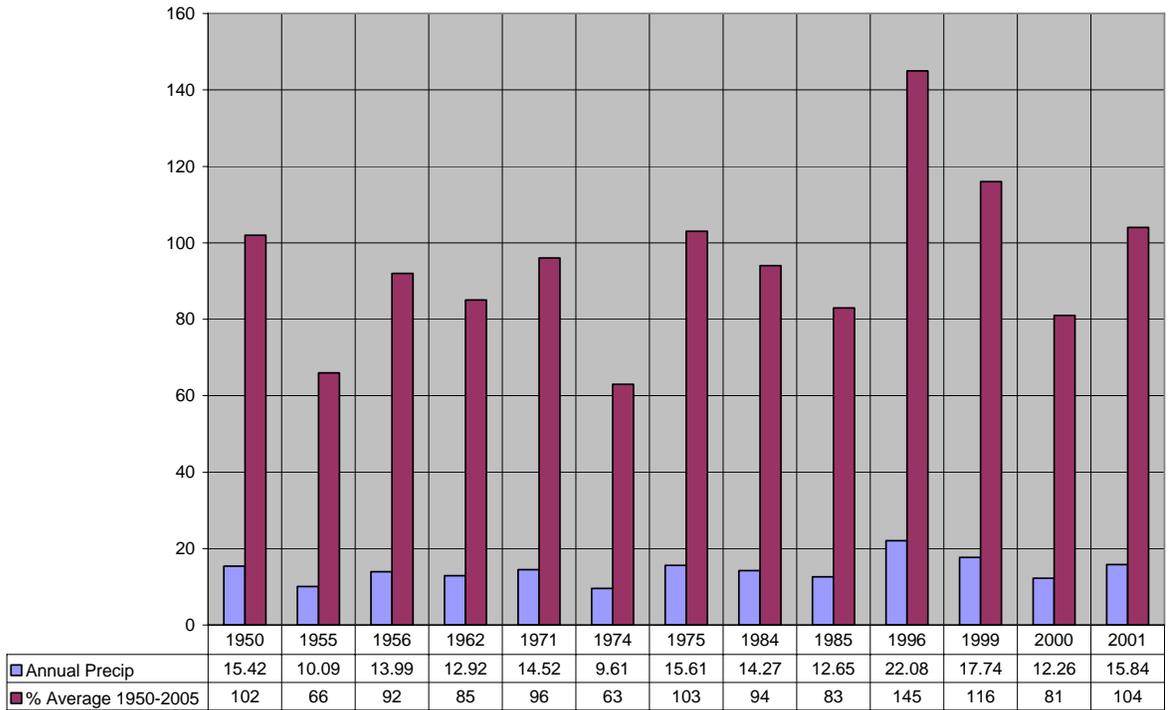
Colorado Springs, CO Airport Precipitation



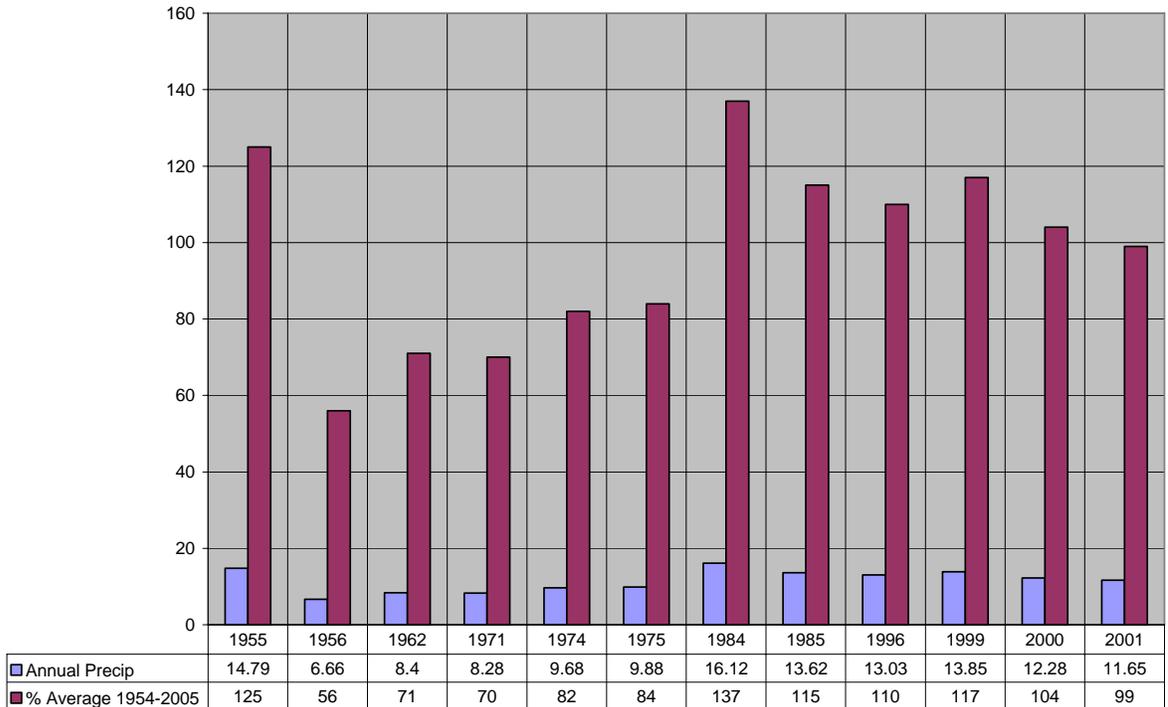
10 SE Guffey, CO Precipitation



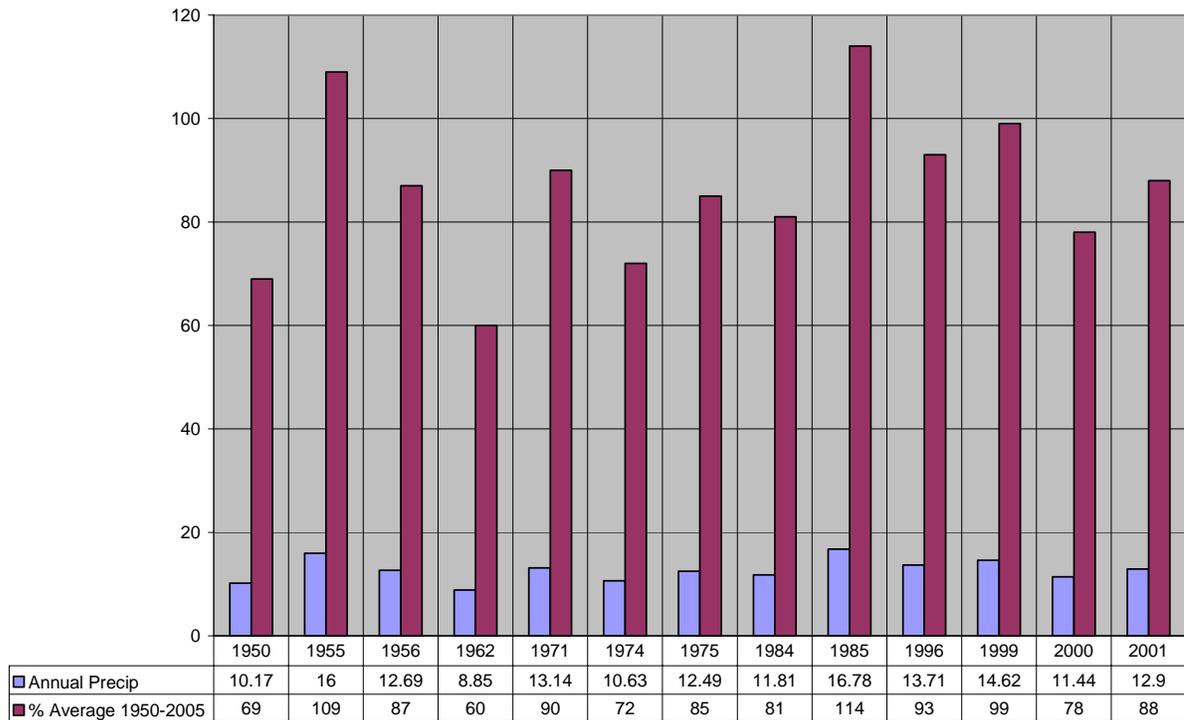
Lamar, CO Precipitation



Pueblo, CO Airport Precipitation



Westcliffe, CO Precipitation



Trends found in the data above collected from observation sites and COOP stations across south central and southeast Colorado are more subtle and varied, especially across the southeast plains. Colorado Springs, for example, received its greatest annual precipitation during the strong La Nina episode of 1999. The data from Climax and Westcliffe however, seemingly supports the trend of wetter than average conditions across the Upper Arkansas River basin and drier than average conditions across the Sangre de Cristo Mountains in La Nina years.

With a weak to moderate La Nina phase expected to continue through the late winter and spring of 2006, along with Natural Resources Conservation Service (NRCS) snowpack data just released on February 1st, some forecast trends can be made across portions of south central and southeast Colorado. At or above average snowpack looks to persist across the Upper Arkansas River Basin, with well below average snowpack expected across the Sangre de Cristo and Wet Mountains, as well as across the Rampart Range. Well below average snowpack also looks to be in the offing across the Upper Rio Grande and San Juan River basins.

The effects of a weak to moderate La Nina phase, along with the current forecast persistence through the spring or summer, are not certain. However, with the widespread effects snowpack has across the state; from water storage and river and stream flows, to soil moisture and wildfire potential, there should be some increased concern on the potential effects La Nina may have across southern Colorado this year.