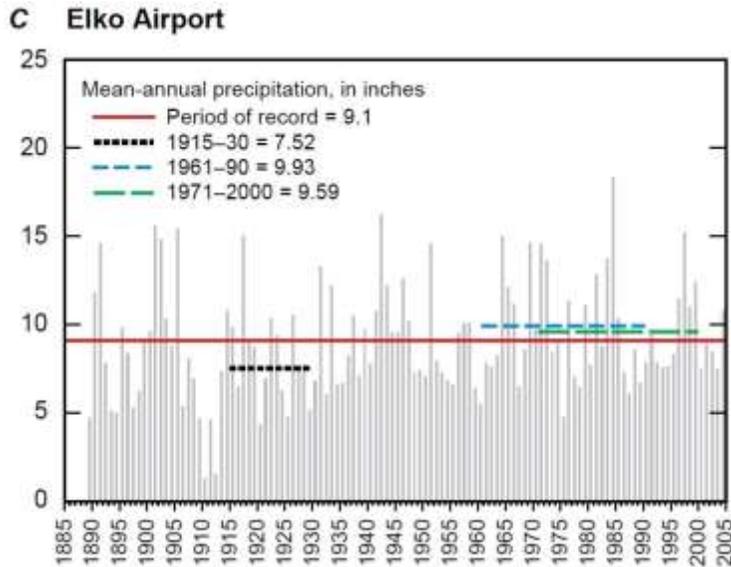


## Nevada's wild extremes in precipitation

By Larry Hyslop



Wide fluctuations in annual precipitation at Elko, USGS table

Ten inches of annual precipitation is the dividing line between a country that is considered semi-arid or desert. Elko's average annual precipitation is 9.59 inches. So in a wet year, we live in semi-arid country and during a dry year, like this year, we live in a desert.

The semi-arid/desert Great Basin has a defining characteristic concerning precipitation; it is highly variable year to year. These wild extremes in climate are more prevalent in semi-arid areas than moist ones. Most years in Nevada produce below average precipitation but those years above average tend to be more extreme, balancing off the more frequent dry years.

Much of the information for this column came from George Gruell and Sherman Swanson's book "Nevada's Changing Wildlife Habitat, an Ecological History", which states "Nevada's climate is uncertain and uneven. There have been irregular periods of drought and wetness over the past several hundred years."

Several years during the 1870s were dry while the year 1873-74 was cold and snowy. The winter of 1875-76 was rainy and snowy. At the end of that decade, the severe winter of 1879-80 killed one-third of Nevada's livestock. The years of 1887-89 were dry and 1889 held the distinction of being the driest in Nevada until 1931. Yet the huge precipitation during the winter of 1889-90 created the most severe winter seen in Nevada.

Very heavy snow buildup occurred in the Ruby Mountains during the winter of 1916-17, followed by three years of drought. The winter of 1923-24 was extremely light, with the precipitation the lowest on record. In 1925, precipitation was heavy. Extreme winters in 1948-49 and 1951-52 were some of the worst seen in recorded time. Yet in 1954, stretches of the lower South Fork of the Humboldt River were dry.

Wet years of 1983-84 saw a large expansion of the Great Salt Lake. Several pluvial lakes in this area filled with water, but were again dry by the dry year of 1992. Yet most of the 1990s were wet years, with a large flood on the Truckee River in 1997. From 1999-2009, most years were dry except for 2005 and 2006.

These large swings in annual precipitation affect plant life. Wet years can produce six times more plant growth than dry years. Because of this, wet years also see an increase in wildlife populations. Wet years also see extensive die-offs of desert shrubs, but dry years produce die-offs of shallow-rooted perennial grasses. George and Sherm's book states "Variability in weather patterns appears to have been more important than climatic averages in influencing regeneration and growth of vegetation."

Elko Daily Free Press, "Nature Notes", 4/20/2013

© Gray Jay Press, Elko, NV

Return to [Elko Nature Notes](#)