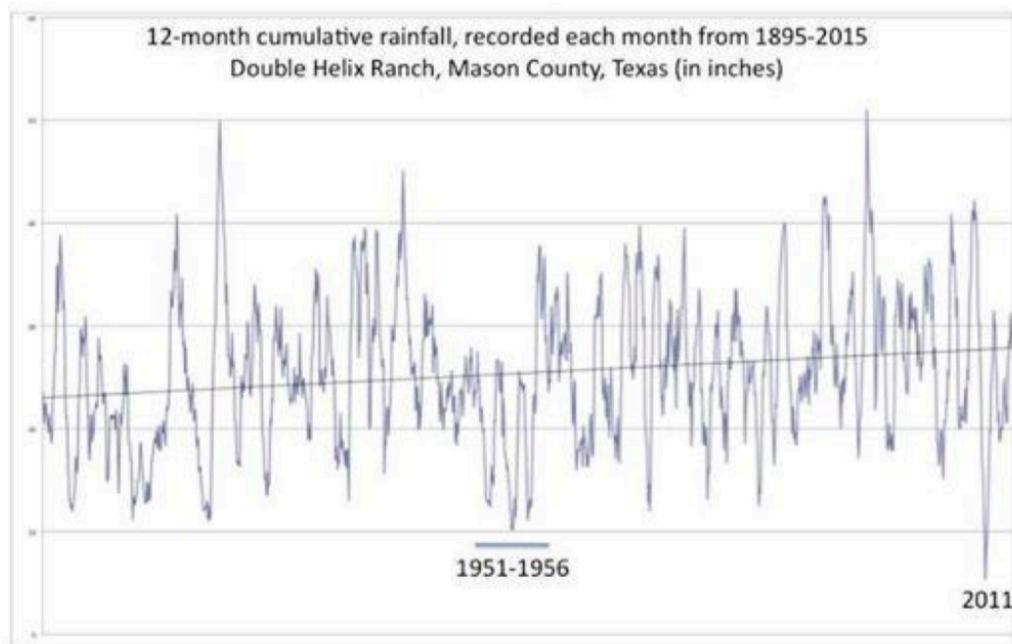


...the new Drought of Record?



David Hillis, a Mason County rancher and also a biology professor at UT, provided us with rainfall records from his Double Helix Ranch (see graph above). As Dr. Hillis notes, “*The graph shows the running 12-month cumulative rainfall, sampled monthly (so every point represents a full year of rainfall, thus eliminating any yearly seasonal effect).*”

Hillis observes, “*First, the trend line shows that average rainfall has actually increased over this time period, from about 23"/year to 28"/year. Second, note the three consecutive major droughts from 1951-1956. That drought was far worse (in terms of rainfall) than any other five-year period in recorded history, and certainly much worse than the past five years. Our 2011 drought was indeed the worst one-year drought on record, but rainfall has not been unusually low (compared to the historical average) since then.*

In further discussion with Dr. Hillis, we both

agree that paucity of rainfall isn't the only likely reason for the drought. In all likelihood there are at least two other reasons.

One is increased water use. There are more straws in the river and the ground than there were in the 50s.

And if you saw [last week's newsletter](#), you probably know the other: during the 50s, the watershed had a lot less vegetation due to both the drought and land management practices. Today, the landscape is in better shape, and consequently, retains more moisture. Some of this retained moisture evaporates through the vegetation, but some of it also seeps into the soil and the aquifers. The increased vegetation also prevents devastating erosive events like the one in 1952.