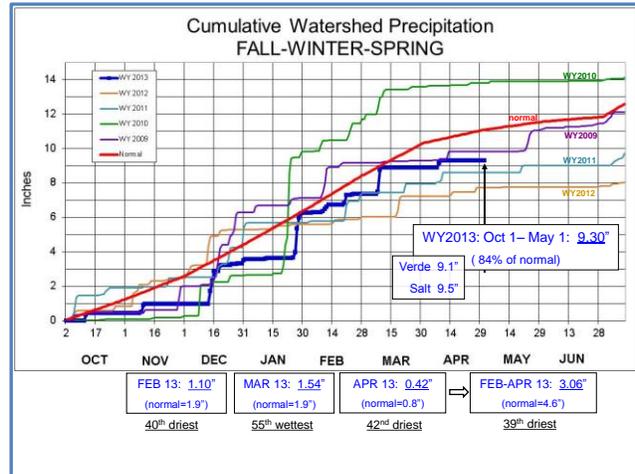


# SRP Water Supply / Watershed Condition

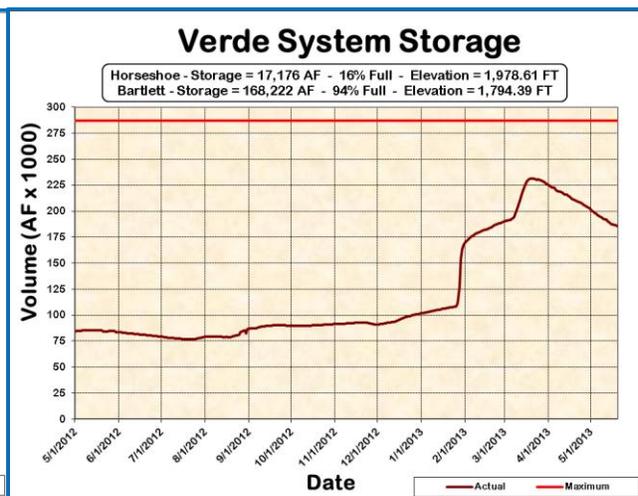
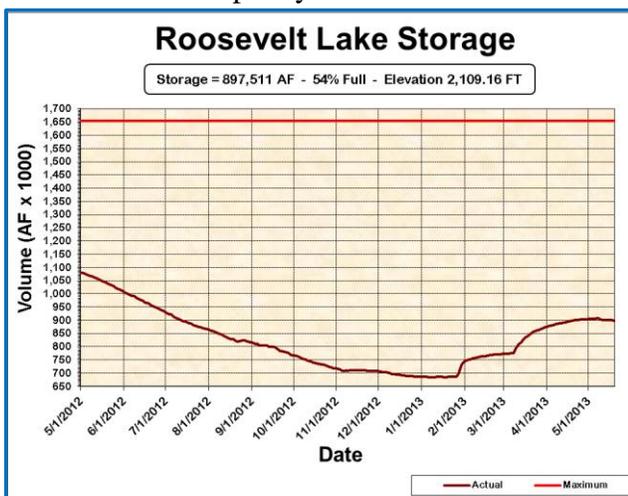
May 20, 2013

**Arizona-Drought?:** The reservoir system declined 37% of capacity since January 2011 due to below median runoff from the 2011 and 2012 winter seasons. The past three winter seasons began favorably with December 2010 and 2011 precipitation measuring 188% and 150% of normal respectively. This December produced 2.61” which is 137% of normal. In water year 2013, Dec-Mar precipitation was 6.40” which is the 37<sup>th</sup> wettest in 113 years of record. Water year 2013 has produced 9.30” (through May 1) which is 84% of normal. Unfortunately, the near normal precipitation did not translating to near normal runoff making this season the third consecutive winter with below median runoff.



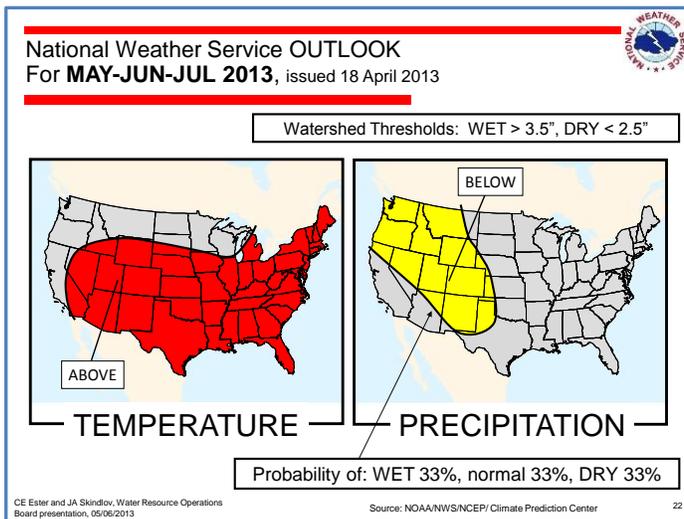
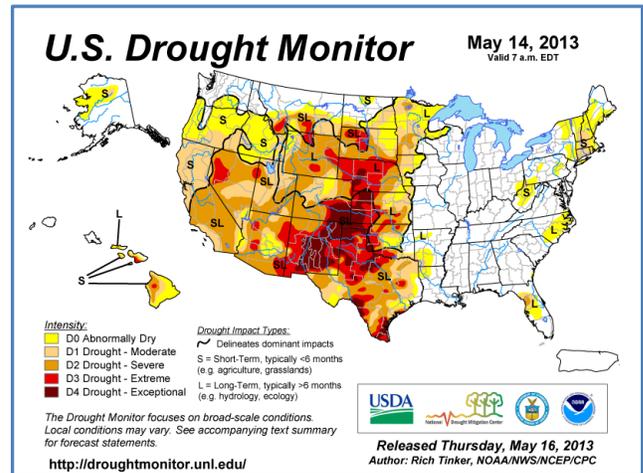
**When Might Conditions Reverse?:** Arizona depends upon wet winters to reverse drought conditions. Unfortunately, winter 2012 was the 2<sup>nd</sup> consecutive winter with La Niña conditions. Since 1950, there have been twenty La Niña winters. The majority of those twenty winters have been dry. Eight La Niña winters have been normal and three have been wet. Unfortunately, the potential El Niño conditions (warmer than normal sea surface temperatures in the equatorial Eastern Pacific Ocean) desired this winter did not develop. Current sea surface temperatures in the equatorial Pacific are in a neutral El Niño Southern Oscillation (ENSO) state and forecasted to remain neutral through summer and fall.

**Runoff and Reservoir Storage:** The 2012 winter produced just 197 KAF of runoff which is the 16<sup>th</sup> lowest in SRP’s historical record. This follows 2011 winter runoff which was the 23<sup>rd</sup> lowest. The most recent forecast suggests below median winter runoff for the third consecutive year. SRP’s Board has approved a full 3.0 acre feet per acre allocation for 2013, comprised of 2.2 AF/AC of surface water and 0.8 AF/AC of groundwater. The total system is currently 63% of capacity compared to 66% a year ago. C. C. Cragin filled on March 20, 2013 and currently has 13,931 acre-feet in storage which is 93% of capacity.



## What Is The Current Drought Situation?:

According to the latest Drought Monitor, all of Arizona is exhibiting some impact ranging from abnormally dry to extreme drought conditions. In the Colorado River basin, current system storage is 52% full, which is 10% less than last year at this time. Observed inflow for water year 2011 was 16.8 million acre-feet which is 139% of normal. Unfortunately, water year 2012 was dry with only 4.9 million acre-feet which is 45% of normal. Water year 2013 is also forecasted to be dry. Precipitation in the Colorado Basin for water year 2013 is currently at 81% of normal with a projected inflow of 4.8 million acre-feet which is 45% of normal. The level of storage and inflow will allow the Colorado River reservoirs to provide full allocations to the lower basin states for several more years. Recent history on the Salt and Verde watersheds and results from tree-ring research with the University of Arizona indicate that a wet year, like 2005 and 2010, in the midst of an extended drought is not unusual. Furthermore, a wet year in the midst of a severe drought does not relieve the cumulative harm to our forests, range, wildlife, and surface and groundwater supplies. Yet another result of the tree ring research indicates that the current drought is about as severe to date as the drought of the 1950's, and that droughts as severe or worse occurred eight times in the last 800-years. This evidence simply reinforces SRP's drought management philosophy.



## Drought Management Philosophy:

Provide an adequate and reliable supply of water to our shareholders by managing our water resources in the most prudent and effective manner. The management goal is to reduce the probability of having to cut the allocation of water to 2.0 AF/AC to less than a 1% chance two years out into the future. SRP assumes that the end of every runoff season is the start of the next severe sustained drought period. SRP will continue to manage the water supplies of the Valley to provide a reliable and adequate supply necessary for maintaining the economy and lifestyle we enjoy in the Valley of the Sun.

**Spring/Summer Forecast:** The weather forecast for Arizona shows equal chances of wet, normal or dry conditions during the months of May through July for all but the north east corner of the state. Temperatures are forecast to be above normal for the same time period. The Drought Outlook for Arizona suggests drought conditions will persist or intensify and in most of the state with drought conditions developing in central Arizona and along the Colorado River through August of 2013.

