

Drought Spell Statistics – Ben Harding, AMEC Environment & Infrastructure

Conventional water resources planning has been based on the assumption that the past is a surrogate for the future. Until recently, proposed facilities, operations and agreements have been tested against the historical hydrology. In the last two decades information from tree rings, *paleo-hydrology*, has been used to create reconstructions of prehistoric natural flows. The use of paleo-hydrology expanded the relatively narrow view from the historical record to include longer-duration cycles and trends so that systems can be tested against less frequent and more intense droughts and wet spells. However, a considerable body of scientific evidence and analysis argues that anthropomorphic climate change may lead to conditions that are unprecedented even in the prehistoric record. Many water managers are considering information from all three perspectives and may be suffering from what young people refer to as TMI—“Too Much Information.” This presentation suggests how to combine information from all three sources based on their relative strengths and weaknesses.