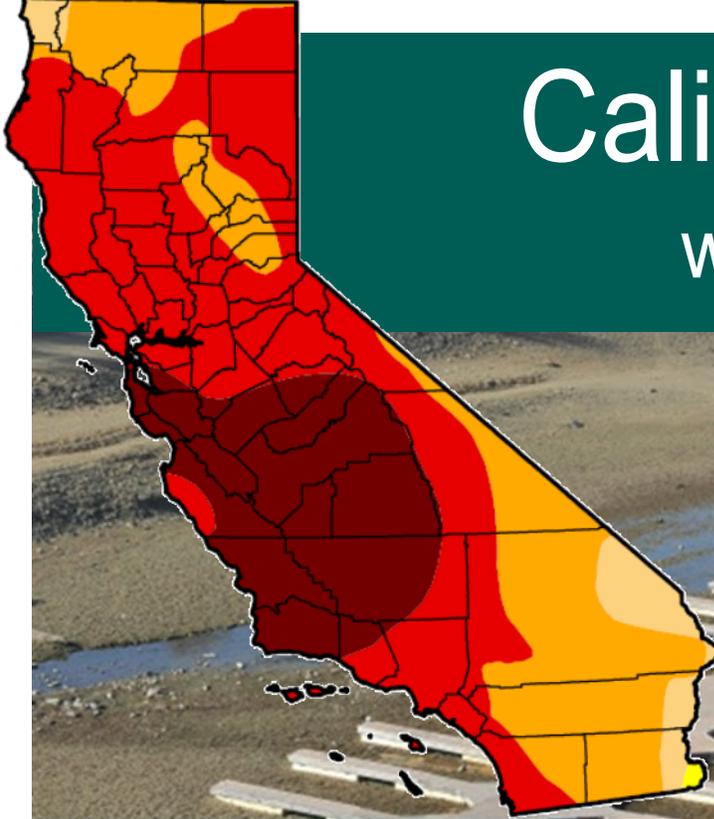


# California's Drought: why, when and how long?



## Dr. William (Bill) Patzert



Often called the "Prophet of California climate," Patzert is a scientist at the California Institute of Technology's NASA Jet Propulsion Laboratory (JPL) in Pasadena, California.

His research is focused on the application of NASA satellite data to improving our understanding of our planet's climate and important environmental problems ranging from developing El Niño, La Niña and longer-term climate forecasts to monitoring the health of coral reefs. The author of many scientific and popular articles, Bill works with undergraduate and graduate students from all over the world, and lectures at many local universities. A media favorite, he is often sought out by reporters and is regularly seen on local and national television representing NASA and JPL. In a recent article, he was named as one of the West's most influential individuals in dealing with water issues.

He is a graduate of Purdue University and went on to earn a Ph.D. in oceanography at the University of Hawaii. Bill began his career on the research faculty of the University of California's Scripps Institution of Oceanography in La Jolla, Calif., and then moved to JPL, where he has been employed since 1983. During his career, he has served as a consultant to many respected organizations including NASA, the U.S. Department of Commerce, United Nations and many scientific and environmental groups. He has received many awards for scientific accomplishments, as well as communicating science to the public, including 4 NASA Exceptional Service Medals and the Medal of the Centre National d'Etudes Spatiales (highest award of the French Space Agency).

## Caltech Earth Week Speaker Series

**TUESDAY, APRIL 22, 2014**

The ongoing California drought has turned more serious. After three consecutive years of below-normal rainfall, California faces its most severe drought emergency in decades. Governor Jerry Brown has called for Californians to voluntarily reduce water use by 20 percent. Mandatory rationing could be ordered soon so that homes, businesses and farms don't run dry over the summer. Wildfire danger is unusually high. How did we get into this drought? In part, blame it on the Pacific Decadal Oscillation, or "PDO", a slowly oscillating pattern of sea surface temperatures in the Pacific Ocean. At the moment, the PDO is in its negative phase—a condition historically linked to extreme high-pressure ridges that block West Coast storms and give the Midwest and East Coast punishing winters. "California's history is written in great droughts," Patzert says. To find out how long this drought will last, attend his talk!

**12:00 pm — 1:00 pm | Noyes 153**

**lunch provided**