Title: California's Future – Warmer, Drier, and Wetter

Climate models project higher variability of precipitation in California over the coming decades, both within seasons and across years. Increased wetness, when it occurs, will be due to more frequent, more intense precipitation events. Increased dry days will lead to more dry years, and more dry years will lead to more dry decades. The substantial warming that is projected in virtually all climate model simulations results in diminished spring snow pack, which becomes extremely low during drier years.

Presenter: Dan Cayan, University of California, San Diego

Daniel R. Cayan is a research meteorologist in the Climate Research Division of Scripps Institution of Oceanography, University of California, San Diego. Cayan studies climatic influences on the transfer of heat and moisture between the ocean and atmosphere, and the impacts of atmospheric circulation and precipitation on the surface hydrology over North America. Regionally, Cayan is studying climate variations over the West Coast and in particular over California. Cayan directs the California Applications Program, a National Atmospheric and Oceanic Administration-sponsored effort to improve climate information for decision makers in the California region. He also directs the Scripps component of California Climate Change Center (CCCC), a multi-investigator effort sponsored by the California Energy Commission to assess potential climate change effects in California. Cayan is also a researcher with the Water Resources Division of the U.S. Geological Survey.