

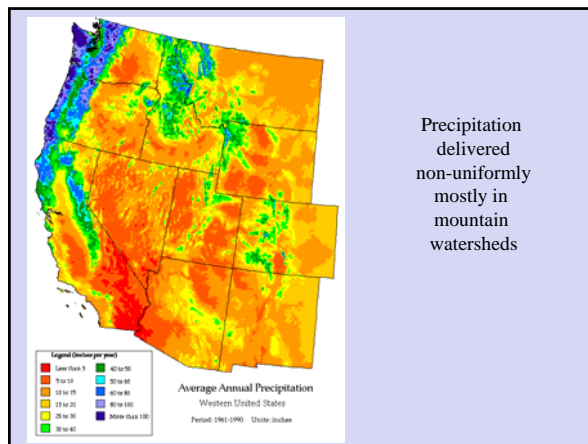
Assessment Science Mtg, SIO 4/20/2009

Climate and Sea Level Scenarios for California: 2008-2009 State Assessment

Dan Cayan SIO and USGS
Alan Sanstad LLNL
Mary Tyree SIO
Ed Maurer Santa Clara University
Mike Dottinger USGS, SIO
Hugo Hidalgo Univ. Costa Rica
Tapash Das SIO
Nick Graham HRC, SIO
Peter Bromirski SIO
Reinhard Flick Ca Boating & Waterways, SIO

sponsors:
 California Energy Commission PIER program
 California Ocean Protection Council
 NOAA OGP RISA element

<http://meteora.ucsd.edu/cap>

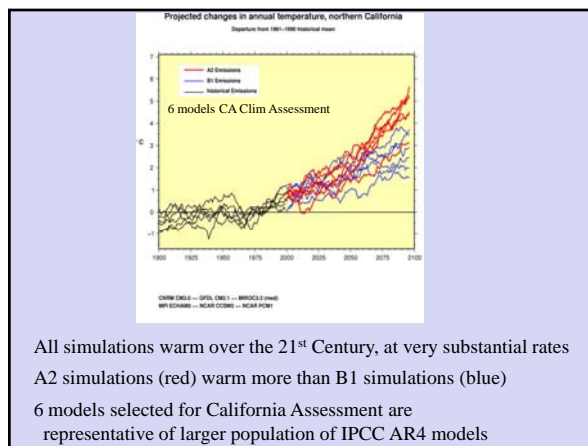
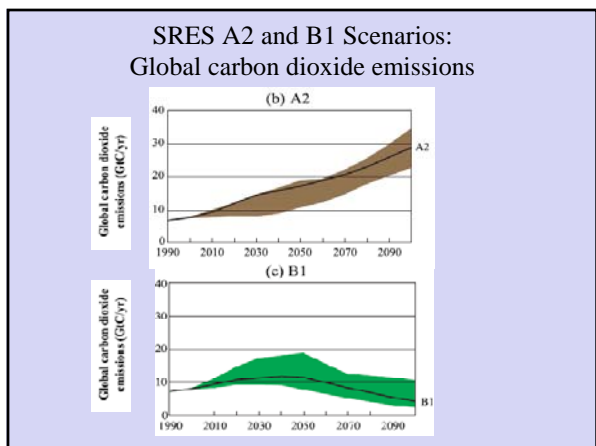
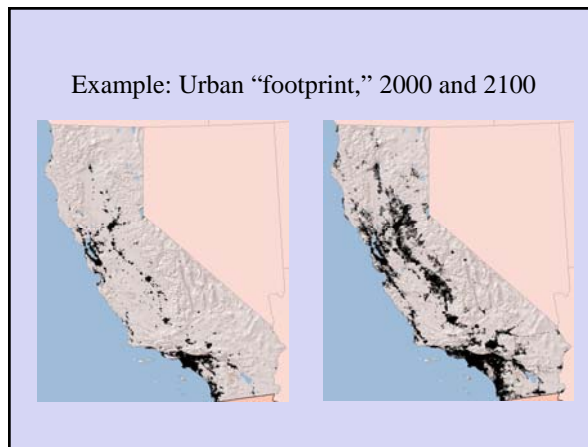


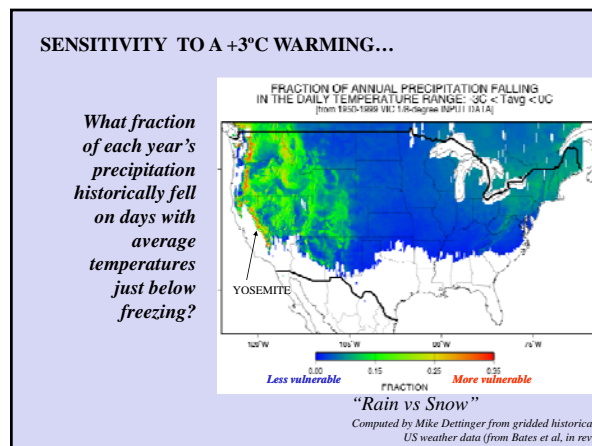
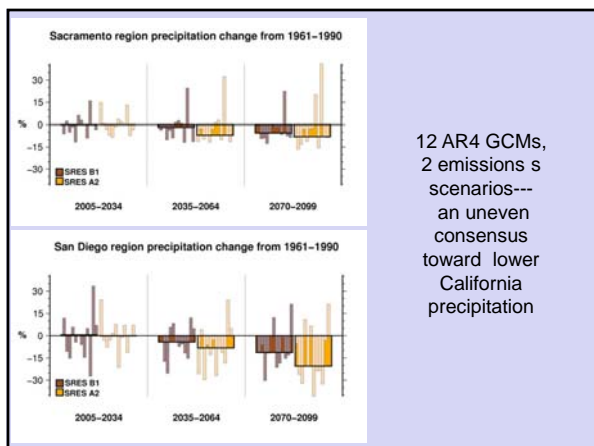
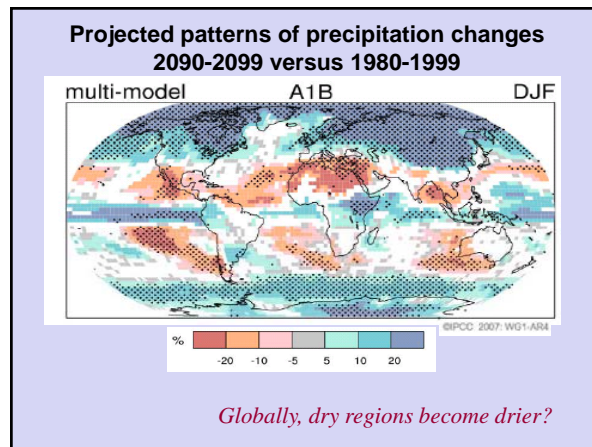
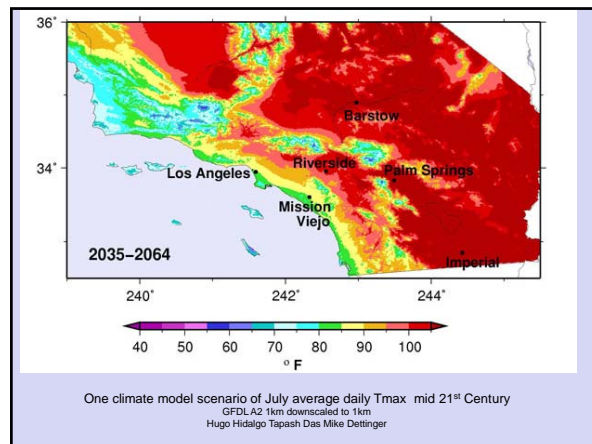
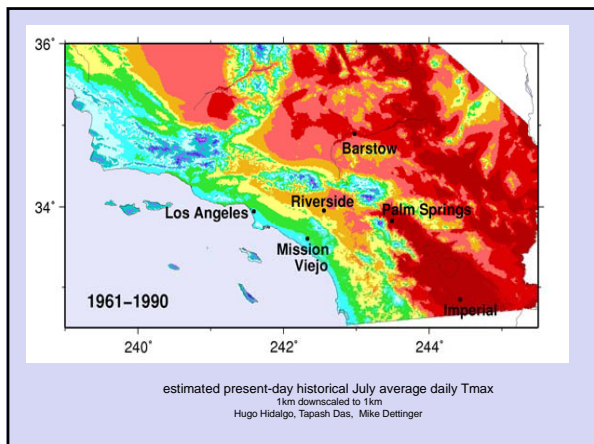
a nested, ongoing evaluation of global regional climate change

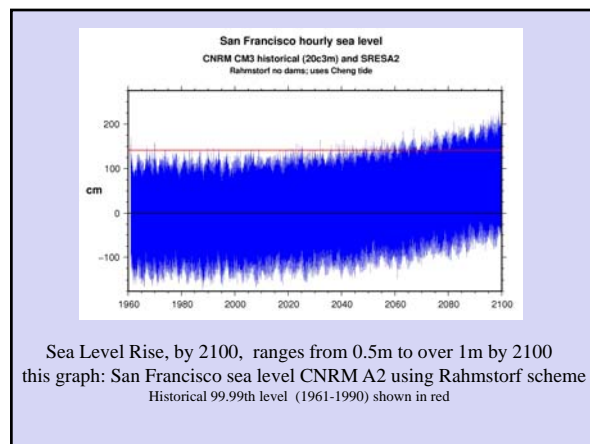
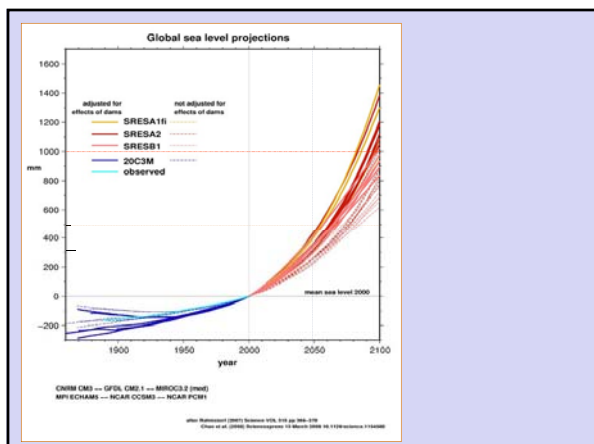
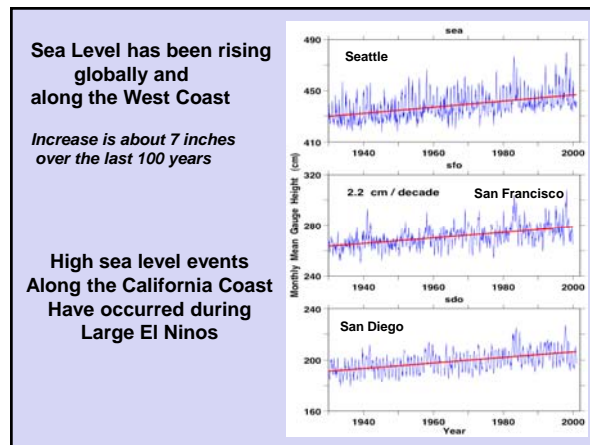
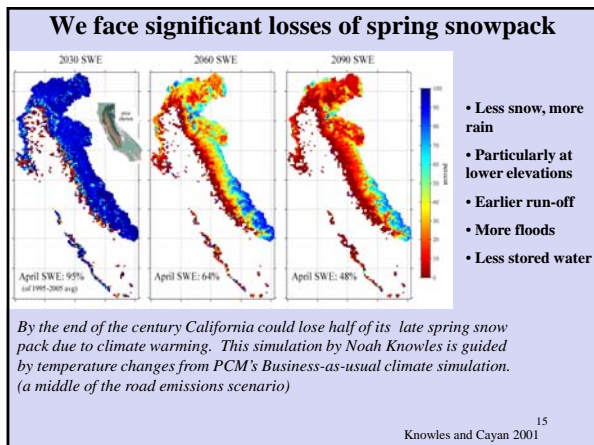
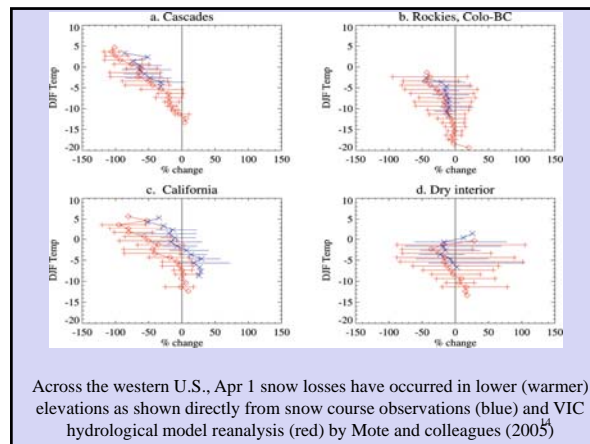
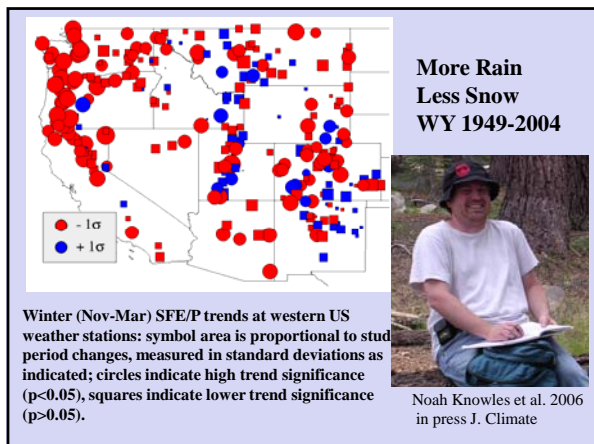
IPCC 4th Assessment, 2007

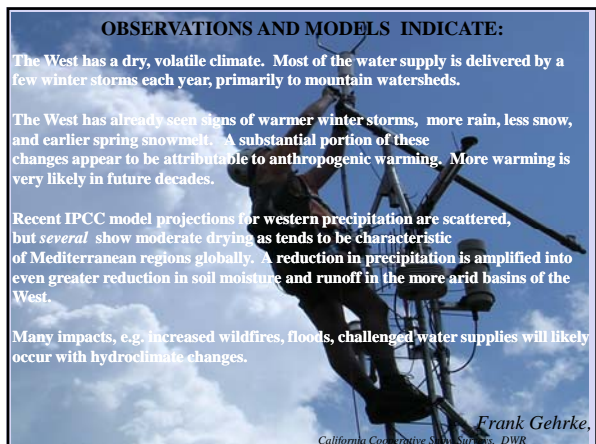
California Climate Scenarios Assessment 2005-06 and 2008-09

San Diego Focus 2050 2008









OBSERVATIONS AND MODELS INDICATE:

The West has a dry, volatile climate. Most of the water supply is delivered by a few winter storms each year, primarily to mountain watersheds.

The West has already seen signs of warmer winter storms, more rain, less snow, and earlier spring snowmelt. A substantial portion of these changes appear to be attributable to anthropogenic warming. More warming is very likely in future decades.

Recent IPCC model projections for western precipitation are scattered, but *several* show moderate drying as tends to be characteristic of Mediterranean regions globally. A reduction in precipitation is amplified into even greater reduction in soil moisture and runoff in the more arid basins of the West.

Many impacts, e.g. increased wildfires, floods, challenged water supplies will likely occur with hydroclimate changes.

Frank Gehrke,
California Cooperative Snow Surveys, DWR