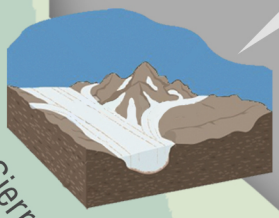
Climate Change in California

From the Sierra snowpack to sea levels along the California coast, climate change is already having a significant impact on our environment. The new "Indicators of Climate Change in California" report tracks 36 indicators of a changing climate across the state. This inforgraphic presents some examples of what the indicators are showing.

AGRICULTURE
Winter chill periods, necessary for the production of fruit and nut crops, are decreasing. Continued warming threatens the production of these high-value crops, which are central to the state's agricultural economy.

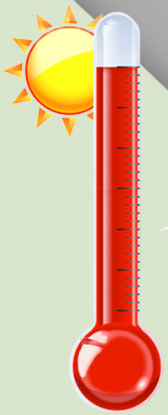
WATER
Spring runoff to the Sacramento River has dropped by 9 percent since 1906. Reduced spring runoff means less water for the environment, agriculture, and a growing population.

GLACIERS
Glaciers have shrunk dramatically. A 2004 study of seven glaciers found that their surface area was only 22 to 69 percent of what it was in 1900.

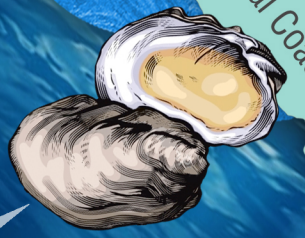


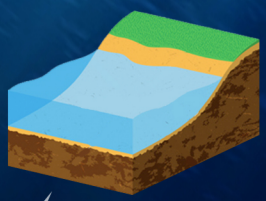
FIRE
Wildfires are getting worse, and California's fire season is starting earlier and lasting longer. The three worst fire years on record have happened since 2002.

EXTREME HEAT
The frequency and intensity of heat waves have increased statewide since 1950, jeopardizing public health and agricultural production and straining our energy supply. An unprecedented heat wave in July 2006 resulted in 140 heat-related deaths.



OCEAN ACIDIFICATION
As carbon dioxide levels increase in the atmosphere, the ocean is absorbing nearly one-quarter of it, changing the chemistry of seawater. This can affect shell-forming organisms, including those at the base of the food chain, upsetting the balance of marine life.





SEA-LEVEL RISE
Along the California coast, sea levels have risen by seven inches over the last century. Future rises increase the threat of flooding in coastal cities, damage the infrastructure and salwater contamination of drinking water.

SEA LIFE
Ocean warming and changes in the distribution and abundance of prey have affected marine populations. For example, exceptionally high sea lion pup mortality in 1998 and 2007 were associated with unusually warm sea surface temperatures.

North Coast

Sierra Nevada

Central Valley

Monterey Bay

Central Coast

South Coast