

Study: Retreating snow line will worsen droughts

By Andy Coghlan, New Scientist

The Golden State is baking. After months of drought in California the long-term forecast is ... more drought.

Rising global temperatures will turn much of the snow that currently replenishes the state's reservoirs to rain, according to modelling studies by Dan Cayan at the Scripps Institution of Oceanography in San Diego. Unlike snow, which melts each spring and recharges California's reservoirs, rain evaporates and soaks into the ground – it dwindles away, he says.

Cayan says the Sierra Nevada snowpack could be a third smaller in 2050 than it has been in recent years, and two-thirds smaller by 2100. The snowpack isn't the only source of fresh water in California, but Cayan says it would be "more of a challenge" to manage water as rainfall rather than snow. He presented his findings at the Bay-Delta Science Conference in Sacramento last week.

Cayan's findings emerged as California's Department of Water Resources launched its latest strategic plan to manage the state's water. The future is one of never-ending restraint in water use. "The goals of the plan are to make conservation a way of life," says a department statement.

Read the whole story