Note on reporting error: The 7 degrees temperature rise stated in the second paragraph is expected by the end of the 21st century, not within the next 5 decades. Mid-century temperature change is projected to be 4 degrees, on average.

Scientist: Climate changes could hurt Idaho's farms, fish
Resources panel considers what expert has to say

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The Idaho Statesman | Edition Date: 06-04-2004

Idaho's snowpack could drop by 35 percent over the next 50 years, worsening the state water shortage, one of the nation's top climate scientists told a legislative committee Thursday.

Temperatures that are expected to rise, on average, 7 degrees over those five decades will reduce the amount of snow in lower elevations, including the mountain ranges around Boise, said Philip Mote, a University of Washington climate scientist.

That could make it harder to store water in reservoirs and reduce the natural recharge of the expansive Snake River Plain Aquifer that provides water for much of southern Idaho. In a state where dairies, fish farmers and cities are fighting over limited water supplies, the changes could hurt Idaho's economy. Salmon also could face more challenges.

Some changes, predicted by models accepted by a consensus of scientists, are already apparent, Mote said.

"Most of the West has seen an increase in March flows just as the models predict," Mote told the Idaho Legislature's 36-member Expanded Resources Interim Committee looking at water issues statewide.

Mote spoke to an audience of lawmakers, water experts and lawyers that was largely skeptical about human-caused global warming. The consensus of scientists, Mote said, is that humans are changing the global climate by dramatically increasing the concentration of carbon dioxide and other gases in the atmosphere.

These gases trap the heat of the earth like a greenhouse.

"I've never really bought on big to the whole global warming theory," said Sen. Dean Cameron, R-Rupert. "But I was impressed by the way he laid out the evidence."

Mote said allowing more flexibility in spring river management could aid Idaho and other Northwest states in addressing the changing snowfall and rain patterns he predicts. "We'd have less concern for flood control and more concern on keeping reservoirs full in the summer," he said.

Rep. Scott Bedke, R-Oakley, a cattle rancher, said Mote's predictions support farmers' call for building more reservoirs and raising the level of existing dams.

"If indeed these changes are in our future, then I think it speaks for increased storage," Bedke said.

Rep. Doug Jones, R-Filer, said the early snow melt this year was largely lost. "We look at this year, we thought we were in good shape until March," Jones said.

Mote said the current drought can't be tied by the data to global warming. But the trends show that the human-caused warming has changed nature since 1960.

Several lawmakers asked about the impact on endangered stocks of salmon in the Northwest. Mote said it would affect salmon differently during their life cycle. In some streams, flooding will increase, scouring out eggs at critical times.

In other places, high temperatures and lower stream levels will hurt fish in the summer.

"There will be some stocks of salmon that will have a difficult time with global warming," Mote said.