Scientist pokes a major hole in state water plan

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AUSTIN — State leaders and planning groups are searching far and wide to find new sources of water for the state's booming population during the next 50 years.

However, they're mostly ignoring potentially devastating effects of global warming in their plans, a leading climate scientist warned Friday.

"This is something that we should think about and worry about," said Gerald North, who holds the Harold J. Haynes Endowed Chair in Geosciences at Texas A&M University. "They completely neglected this whole thing. It is really troubling."

North, who made his remarks during a conference hosted by the Texas State University's Rivers Systems Institute, was referring to the Texas Water Development Board's recently adopted state water plan.

The plan, approved by the Water Development Board on Tuesday, lists 4,500 proposed projects and strategies to meet an estimated 8.8 million acre-feet shortfall by the year 2060. That shortfall is slightly less than half the state's current available water supply.

The shortfall could be even greater when global warming is taken into account, North said, spelling trouble for thirsty communities, industries and ecosystems.

Computer estimates vary, but North said they indicate a warming trend in Texas of roughly 4 to 9 degrees by the end of the century. And although annual rainfall predictions are even less reliable, North said it's unlikely there will be much more rain as the climate changes — possibly less.

The hotter temperatures would increase evaporation "exponentially," North said, which could devastate the state's rivers and cause many of them to dry up before reaching the Gulf of Mexico.

One simulation conducted by the University of Texas more than a decade ago appears plausible, he said.

It shows that an increase in temperature of about 4 degrees coupled with a 5 percent decrease in rain, would reduce runoff in the state by about a quarter and the flow of rivers by a third. During drought years, the same scenario would reduce runoff about 75 percent and river flow about 85 percent.

The state's water plan seeks to find enough supply for a population that will more than double by 2060 — from about 21 million to about 46 million. If the projected shortfall is not made up in the next five decades, as much as 85 percent of the state's populations could face water shortages during a drought, according to the Water Development Board.

Spokeswoman Carla Daws defended the agency, saying the state's water needs are reassessed every five years and based on historic drought conditions. As the climate changes, the drought conditions change and plans will be adjusted.

"We're open to looking at anything that will affect water supplies in Texas," Daws said. "It's a constantly evolving science."

North acknowledges that for many years he was "cautious" about the uncertainties of global warming science, which prompted some leading skeptics, including Rush Limbaugh, to quote him. There's now little doubt among the scientific community that the threat is real, North said.

"I'm not a zealot who is out there hugging trees," he said "But things have changed over the past 10 years."

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