

# Sensors in snow country help predict water levels

By Neetu Puranikmath, Daily Cal

UC Merced Professor Roger Bales realizes that California has a dire problem: a water problem.

According to Bales, California is currently in a drought. But with 70 to 90 percent of the state's water supply coming from snow in the state's mountains, Bales said scientists have traditionally been unable to accurately and precisely measure this potential water source – until now.

Bales has been collaborating with UC Berkeley professor in the Department of civil and environmental engineering Steven Glaser for the past several years on CITRIS MOTES – a joint UC Merced-UC Berkeley project that has developed a network of computers and radios that can measure the amount of water in snow atop the Sierra Nevada and other Californian mountain ranges.

“From a scientific perspective, our goal is to figure out what is going on in hydrology,” said Branko Kerkez, a UC Berkeley civil engineering graduate student working with Glaser and Bales. “From an engineering perspective, it is to get as much data as possible.”

Bales said the research team currently has several papers based on their findings in review by academic journals and are hoping their research will get published in the summer or fall.

Currently, the project has two wireless networks that were fully established last year: one in Shaver Lake – with around 300 sensors and measuring a square kilometer in area – and a second in Lake Tahoe with around 25 sensors.

**Read the whole story**