

# Climatologist: Still a lot of winter left for needed moisture

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Though the state is off to a good start this winter, there's still plenty of winter left, according to the state climatologist.

Even if the state gets a good amount of snow from December through February, Steve Gray said, many areas, such as those around the Big Horn and Wind River ranges, have historically received a large percentage of their water in the spring in the form of wet, heavy snowfalls in April, May and even June.

"If you look at how much snow you have on the ground April 1st, that's some indication," Gray said. "But if you don't get any after that, you could still be in trouble. That time period from April and into May can be when you get those make-or-break snow events."

Jim Fahey, a hydrologist with the National Weather Service in Riverton, said the majority of the state east of the Continental Divide gets about 40 to 50 percent of its precipitation in April, May and June.

"The good news right now is we've got better snowpack than we've had for many years at this point," Fahey said.

For the past two years, however, most of the state didn't get significant spring precipitation, and if that trend continues it could lead to another dry summer, he said.

"Looking at the short range (forecast), for the rest of March, I see some chances for storms in the next couple weeks," Fahey said. "However for April, May and June - in the long range - they're calling for above-normal temperatures for the area."

The National Weather Service's long-range climate prediction center is calling for a warmer than normal spring, he said, and if that happens, the snowpack could melt quickly. A rapid melt would result in a significant amount of early runoff, he said, and the water supply for grazing lands, rivers and irrigated farms, in that type of scenario, might not last through the summer.

A relatively cool spring, however, which maintains the snowpack on the mountains longer, could help heal some of the damage done by years of nonstop drought, Fahey said.

"I don't think we really know about the drought conditions and the water supply conditions until we get that runoff," Fahey said. "Right now we've got a good base, a good snowpack going, but we're just coming into our peak precipitation period for most of the state."

Looking at long-range climate predictions, Fahey said there is a 50-50 chance this spring the state will receive its customary heavy snowfalls.

Even if the state receives an average amount of precipitation, he said, its lands and reservoirs will still be experiencing overall water deficits, because of the long-term drought.

"The Pathfinder and Seminoe reservoirs are only 15 to 20 percent full right now," he said. "For them, it's going to take more than one good year to recharge. It would take at least two or three years of above average runoff to recover from the drought."