

## Below average snowpack may cause irrigation shortfall

by Bend\_Weekly\_News\_Sources

The availability of water for irrigation this summer will be a challenge for some farmers and ranchers as a below average winter snowpack has left many areas of Oregon -- especially east of the Cascades -- a bit on the short side. Perhaps a greater concern is the carryover effect into 2008 and the need for a good wet winter with heavy mountain snowfall this upcoming year. "Our water year started out fairly well with heavy rain in November and some early winter snow in the mountains," says Jim Johnson, land use and water planning coordinator for the Oregon Department of Agriculture. "But the water situation has ended up problematic for parts of the state, especially for those who depend on irrigation. We are already hearing concerns in northeast and southeast Oregon. That is an early sign we are in for a dry summer in terms of irrigation." Most of the indicators used to forecast summer water availability are below average this year, including precipitation. The much-needed winter accumulation of snow in the higher elevations never built up to desirable levels. By the first of May, statewide snowpack was only about 61 percent of normal. An additional problem was the early and rapid melting of that snowpack. Many basins in the state lost their snowpack at all but the highest elevations. While that replenished most of Oregon's 27 major irrigation reservoirs around the state, those reservoirs are expected to be drawn down early and often this summer. A slow, steady snow melt is preferred in a state that depends on summer irrigation. "Oregon is a big irrigation state," says Johnson. "We may be wet a majority of the time in any given year, we are a dry state in the summer months. Of course, that's also our primary growing season." Oregon ranks third in the nation in the number of agricultural operations utilizing irrigation. Nearly 45 percent of all farms and ranches in Oregon do some type of irrigation totaling about 1.9 million acres. The current water conditions have resulted in some less-than-ideal stream flow forecasts for the months ahead. While current conditions appear close to average, much of the annual runoff has already occurred. The forecasts for this irrigation season range from a high of 92 percent of normal in the Willamette Basin to a low of 39 percent of normal in the Owyhee Basin. The problems are especially acute the farther east you go. "Our maximum snowpack normally takes place around April 1 and this year that snowpack was down to about 40 percent of average in the Owyhee and Malheur basins on that date," says Jon Lea, hydrologist with the U.S. Department of Agriculture's Natural Resources Conservation Service (NRCS) in Portland. "Our snowpack then melted two weeks to a month early and is pretty much gone by now." Even on the west side of the state, the snow has disappeared. Usually by the first of June, the measuring site at McKenzie Pass- located at an elevation of 4,800 feet- has about 40 inches of snow on the ground. Right now, there is none. The four key components of a strong water year include snowpack, soil moisture, stream flows, and reservoir storage. Of the four, soil moisture appears to be decent, which has allowed the melting snow to go directly into the streams and reservoirs. "Our reservoir storage situation is not great, but it's not real bad either," says Lea. "Statewide, our irrigation reservoirs are currently 85 percent of average with reservoirs in eastern Oregon a bit lower. However, the drafting of water from these reservoirs began early this year to meet immediate irrigation needs." Again, even in western Oregon, there are indications of a dry upcoming summer. Scoggins Reservoir near Forest Grove has had the earliest draft to meet area water needs since 1985, with the exception of an early draft in 2001. Normally, that reservoir has excess water this early. Conservation measures and appropriate planting decisions have been made by farmers this spring in response to the expected challenges of a below normal water year. "We saw this shaping up in February," says Lea. "Back then, it looked like it was not going to be a real promising snow season. We told irrigators to be alert and plan accordingly. Water shortages may exist in different areas of the state. No matter where you are, chances are the warning is still valid." It's not too late to get the kind of weather that will help farmers in Oregon. May was a relatively dry month with rainfall about 42 percent of average statewide. But cooler weather this week and a little bit of precipitation has bought some time for water that might be used later in the summer. Many producers are getting to the point where significant rain might hamper the crop or operation. The best recipe for June and early July would be cooler weather but not necessarily rainy conditions. "You don't want a lot of wet weather because of the impact on agriculture," says Lea. "If rain falls in tiny shots -- maybe a half inch here and a half inch there -- it would be okay. It's always a tightrope walk between having just enough wet cool weather and not having enough." With one eye on this upcoming summer, officials are already looking ahead to the summer of 2008. Back-to-back years of a below average snowpack and precipitation is a recipe for drought. Irrigation reservoirs

need to be replenished annually."I believe that the current conditions set up a situation in which a good winter snowpack is badly needed this next year," says ODA's Johnson. "We not only need a good year, we could use a couple of good years."Until then, Oregon irrigators will try to squeeze all they can out of every drop this summer.

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