

# STATE OF UTAH GENERAL OUTLOOK

March 1, 2010

## SUMMARY

February was not nearly the month we had hoped for but was pretty much what we expected given the current El Nino conditions – dry in the north, wetter in the south. Snowpacks on the Bear are the lowest since 1992. The probability of having March snow accumulation big enough to bring snowpacks close to average in northern Utah by April 1 is close to zero, and in fact on the Bear, Weber, Provo and Uintah Basins, we have not had such a March snow accumulation in the period of record. The lackluster storms in the north this past month have barely kept up with average. Not surprisingly, snowpacks in southern Utah have declined as a percentage but are still much above average. Like a long distance race, it's very hard to keep up with a 200% of average pace for the duration and the south was due for a more normal month. Currently snowpacks are much below average in northern Utah and near to much above average in southern Utah. February precipitation was much below average (47%-51%) in northern Utah and below to near normal (83%-105%) in the south which brings the year to date precipitation to much below to below normal in the north and below to above average in the south. Current soil moisture saturation levels in runoff producing areas are: Bear – 51%, Weber – 50%, Provo – 32%, Uintah Basin – 16%, SE Utah – 34%, Sevier – 33% and SW Utah – 30%, up generally 2% to 6 % from last month. Drier soils typically mean less runoff from snowmelt and with low snowpacks to begin with, runoff may be severely impacted this season. Reservoir storage is currently at 69% of capacity statewide compared to 62% last year. General water supply conditions are much below to below average in northern Utah, near average on the Sevier and above average on the Virgin. Streamflow forecasts range from 15% for the Bear River at Stewart Dam to 133% of average on the Sevier River nr Kingston. Surface Water Supply Indices range from 21% on Ferron Creek to 80% for the Virgin.

## SNOWPACK

March first snowpacks as measured by the NRCS SNOTEL system are as follows: Bear – 59%, Weber – 63%, Provo – 66%, Uintah Basin – 71%, SE Utah – 88%, Sevier – 108% and SW Utah – 150% and the statewide figure is 78% of average. With only March remaining in the snow accumulation season, the range of potential outcomes is small and the probability of significant improvement in northern Utah snowpacks is declining. If drought prevails, snowpacks could range between 37% and 87% of average. Given maximum accumulations, April 1 snowpacks could range between 82% and 202% of average. With normal accumulations, April 1 snowpacks will be between 66% and 145% of average.

## PRECIPITATION

Mountain precipitation during February was: Bear – 51%, Weber – 48%, Provo – 51%, Uintahs – 47%, SE Utah – 83%, Sevier – 105%, SW Utah – 93% and the statewide figure is 65% of average. This brings the seasonal accumulation (Oct-Feb) to 80% of average statewide.

## RESERVOIRS

Storage in 41 of Utah's key irrigation reservoirs is at 69% of capacity up 7% compared to March of last year. Storage by basin is: Bear – 36%, Weber 74%, Provo – 90%, Uintah Basin – 85%, SE Utah – 54%, Sevier – 47%, SW Utah – 63% of capacity. Reservoir storage is the bright spot in an otherwise dismal water supply outlook for northern Utah.

## STREAMFLOW

Snowmelt streamflows are expected to have a wide range from much below average in the north to near and above average in southern areas of Utah this year. Forecast streamflows range from 15% on the Bear River at Stewart Dam to 133% on the Sevier River nr Kingston. Most flows are forecast to be in the 40% to 80% range.

