

STATE OF UTAH GENERAL OUTLOOK

January 1, 2011

SUMMARY

Wow! Does not begin to describe the snowpack and general watershed runoff conditions of water year 2011. Not even with double or triple exclamation points. As of January 1 there were 18 Utah SNOTEL sites with new record high snow water equivalent values and an additional 17 sites that have second place high values. 27 sites across the state are above 200% of average and nearly all sites are above 150% of average. Many sites in the Uintah Basin are near their April 1 average peak values with several months of winter accumulation yet to come. Some will remember the dismal snowpack start to last year, 2010 – to give some context to how poor that year was compared to current conditions – we have 258% more snow statewide than in 2010. Some basins like the Provo have 350% more snow. While these conditions raise the excitement level of Water Managers across the state, there is still a significant portion of winter yet to come and current conditions will change over that period of time. La Nina conditions generally favor northern Utah with greater snowpacks whereas southern Utah normally goes dry. Water managers across the state will need to continually monitor snowpack conditions as winter progresses as the potential for very high streamflows this spring is currently quite high. December precipitation was much above normal (176%-220%) in northern Utah and much above normal (279%-520%) in the south which brings the year to date precipitation much above normal statewide at 197%. Current soil moisture saturation levels in runoff producing areas are: Bear – 72% (new high), Weber – 67% (new high), Provo – 57%, Uintah Basin – 57% (new high), SE Utah – 62% (new high), Sevier – 64% (new high) and SW Utah – 61%, in most cases nearly double soil moisture values of last year and only 10% to 20% lower than *maximum values observed during snowmelt*. Wetter soils mean that watersheds are primed and ready for runoff. High snowpacks and high soil moisture have the potential for extremely high flows. Reservoir storage is currently at 66% of capacity statewide compared to 66% last year. General water supply conditions are much above average across the state. Streamflow forecasts range from 115% for Ashley Creek nr Vernal to 222% of average for Chicken Creek Nr Levan. Surface Water Supply Indices range from 39% on the Bear River to 91% for the Weber Watershed.

SNOWPACK

January first snowpacks as measured by the NRCS SNOTEL system are as follows: Bear - 165%, Weber - 181%, Provo - 201%, Uintahs - 200%, southeast Utah - 187%, Sevier - 222%, southwest Utah - 274% and the statewide figure is 193% of average. With January, February and March remaining in the snow accumulation season, the range of potential outcomes is still reasonably large and any outcome is possible depending on future climatic conditions. If drought prevails, snowpacks could range between 63% (Sevier) and 90% (Weber) of average. Given maximum accumulations, April 1 snowpacks could range between 171% (Bear) and 295% (SW Utah) of average. With normal accumulations, April 1 snowpacks will be between 126% (Bear) and 166% (SW Utah) of average.

PRECIPITATION

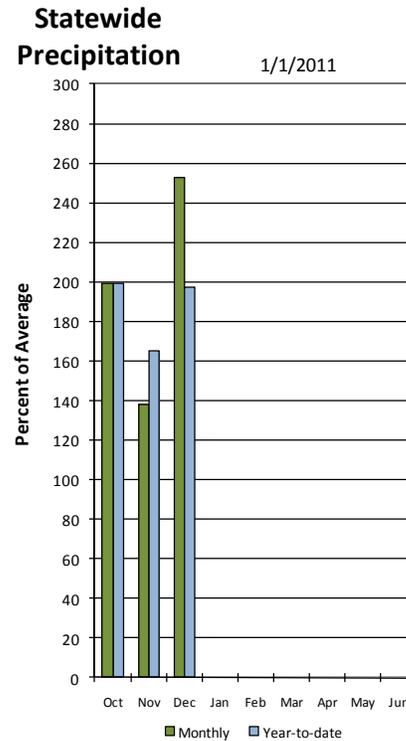
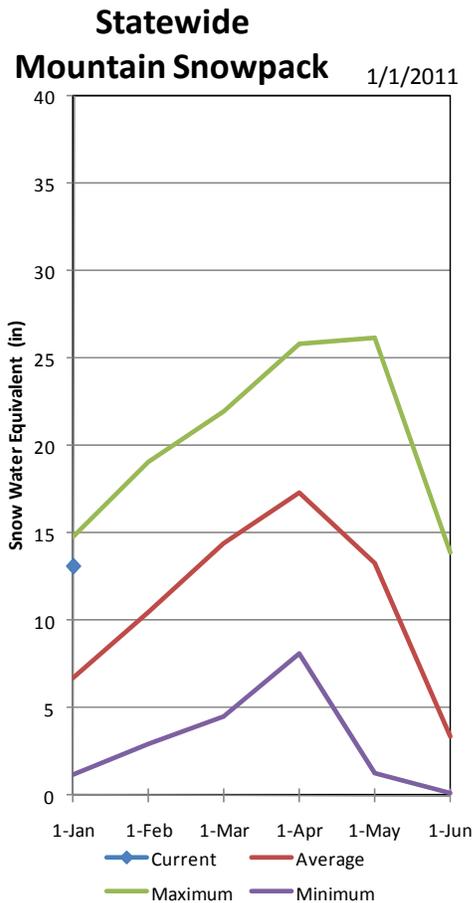
Mountain precipitation during December was: Bear – 176%, Weber – 220%, Provo – 252%, Uintahs – 270%, SE Utah – 279%, Sevier – 338%, SW Utah – 520% and the statewide figure is 253% of average. This brings the seasonal accumulation (Oct-Dec) to 197% of average statewide.

RESERVOIRS

Storage in 41 of Utah's key irrigation reservoirs is at 66% of capacity the same as last year. Reservoir storage by Basin: Bear – 33%, Weber – 70%, Provo – 87%, Uintah Basin – 84%, SE Utah – 51%, Sevier – 43%, SW Utah – 78% of capacity.

STREAMFLOW

Snowmelt streamflows are expected to be above to much above average across the state this year. Forecast streamflows range from 115% Ashley Creek nr Vernal to 222% on Chicken Creek nr Levan. Most flows are forecast to be in the 130% to 160% range.



January Statewide Reservoir Storage

