

STATE OF UTAH GENERAL OUTLOOK

Apr 1, 2004

SUMMARY

Records are made to be broken. March 2004 is one we never want to see again! Recall at the beginning of the month, snowpacks were near average and we were pretty relaxed thinking that even if the worst observed March were to occur, we would still be in reasonable shape. What was the possibility that March 2004 would be worse than the worst? That is precisely what has happened - the worst March non-accumulation ever. Almost all watersheds in Utah have experienced a March where they have lost some snowpack but not like this! Every basin across the state except the Sevier had the worst March snowpack decrease ever, in some cases double and triple the worst ever and the Sevier had its second worst ever with 1972 being the only exception. Actual snowpack losses ranged from -2.4 on the Weber to -5.4 over southwest Utah. All this in what is normally one of the heaviest snowpack accumulation months of the year. Several sites in northern Utah are now at or near record lows for April 1 snowpack including Burts Miller Ranch (first recorded zero on April 1, started in 1937), Stillwater Camp, Blacks Fork Junction and Chalk Creek #3. Having lost a record 25% to 60% of March snowpack, streamflows barely rose in most locations and in fact, the Sevier River at Hatch (USGS data) has yet to come up to average flow conditions and average flows during March are typically pretty small to begin with! The reason for snowmelt not converting to streamflow is primarily due to the soil moisture deficit and snowpack losses to evapotranspiration and sublimation. Most streams have had only marginal responses to the record snowmelt. Snowpacks now range between 56% of average in southern Utah to 75% of average on the Provo/Jordan River watershed. Precipitation for March ranged from an abysmal 20 in southern Utah to a pathetic 45% on the Weber, bringing seasonal precipitation, (Oct-Mar) to 87%. Soil moisture remains a concern as there was very little precipitation accumulation prior to the onset of snowpacks. This condition is, in most watersheds about half the deficit of a month ago. Soil moisture deficits range from 2.5 to 6 inches in the upper 24 inches of soil. Low reservoir storage is also a concern with total reservoir storage at 45% of capacity, down 8% (428,000 Acre-Feet) from last year. 428,000 AF would be the entire reservoir capacity of the Sevier River Basin and then some. Areas of greatest concern are the Bear and Sevier River basins with current storage of 8% and 31% respectively. Streamflow forecasts range from 7% to 71% of average. Surface Water Supply Indexes range from 2% on the Bear River, Sevier and Moab areas to 45% over the western part of the Uintah Basin.

SNOWPACK

April first snowpacks as measured by the NRCS SNOTEL system range from 56% over southwestern and southeastern Utah to 75% on the Jordan River/Utah Lake Watersheds. Most areas are comparable to last year. The bright and optimistic side of the snowpack numbers is that we are not even close to the worst April 1 snowpack ever, with the exception of the upper Bear River Watershed.

PRECIPITATION

Mountain precipitation during March was much below average statewide (33%). In the north it was much below normal (45%) and in the south, only 25%. This brings the seasonal accumulation (Oct-Mar) to 87% of average statewide.

RESERVOIRS

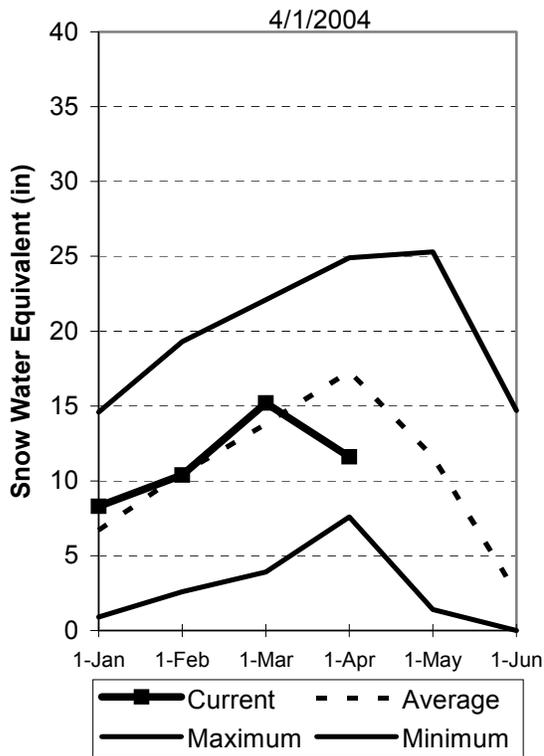
Storage in 41 of Utah's key irrigation reservoirs is at 45% of capacity, up only 4% from last month. This is down substantially (8%) from last year indicating heavy use of reservoir storage to make up

the streamflow deficit. Most reservoir operators are utilizing a conservative strategy, storing as much water as possible.

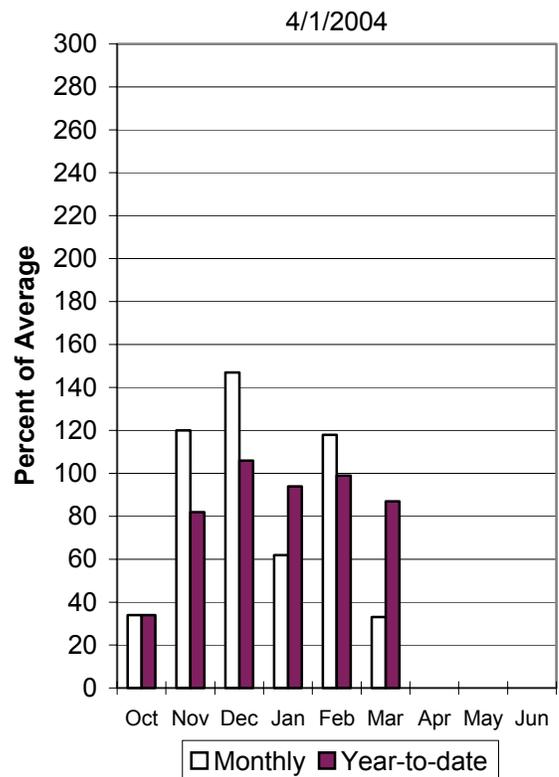
STREAMFLOW

Snowmelt streamflows are expected to be below to much below average across the entire state of Utah this year. Forecast streamflows range from 7% on the Bear at Stewart dam to 71% on Wheeler Creek, a stark contrast from forecasts issued last month. Most flows are forecast to be in the 30% to 60% range. Overall water supply conditions are below to much below normal.

Mountain Snowpack



Precipitation



Statewide Reservoir Storage

4/1/2004

