

# STATE OF UTAH GENERAL OUTLOOK

Jan 1, 2003

## SUMMARY

The current water supply outlook is a continuation of the past four years – below average. Snowpacks across the state range from a low of 66% on the Provo/Jordan River watersheds, closely followed by the Virgin and southwest Utah at 68% to a high of only 85% across southeast Utah. Snowpacks across the rest of the state are close to 75% of normal. Most watersheds have only a 20% to 35% probability of getting sufficient snowpack over the next three months to return to average conditions by April 1. A poor beginning to what could easily be a fifth consecutive year of drought for most of the state. Warm temperatures have also impacted low elevation snowpacks, with many of these in the 50% range. Statewide precipitation in October, November and December were below average. Early season precipitation has improved soil moisture values substantially over much of the state. This should improve snowmelt runoff efficiency over what we have seen the past few years, where much of the snowpack has been lost to soil moisture replacement. The improvement in soil moisture is really the only positive aspect to current water supply conditions. Reservoir storage in 41 major reservoirs across the state is down almost 650,000 acre feet from last year, out of a total capacity of 5, 470,000; or about 12 %. The amount of water represented by 650,000 acre feet is a little more than 2 completely full Jordanelle reservoirs, a substantial deficit of reservoir storage. Some larger reservoirs, such as Bear Lake and Utah Lake would take several years of at least average runoff to fill to capacity. Streamflow continues to be much below average over most of the state, and won't improve significantly until snowmelt season. Thus there will be little reservoir recharge over the winter months.

## SNOWPACK

January first snowpacks as measured by the NRCS SNOTEL system are near 75% of average on the Bear, Weber, Uintahs and Sevier River Watersheds. The Provo and the Virgin/southwest Utah are the lowest at 66% and 68% respectively. Southeast Utah, particularly the Price/San Rafael and the Dirty Devil drainages are the highest at 85% of normal. Low elevation snowpacks have been impacted by warmer than normal temperatures of the past few weeks and some are 50% of average and below. Higher elevation snowpacks have simply not materialized with one area of particular concern. Snowpack at the headwaters of the Bear, Weber, Provo and Duchesne Rivers near Trial Lake is at only 59% of average. A substantial amount of water is generated from this area and a snowpack this low is of concern.

## PRECIPITATION

Mountain precipitation during December was much below to below normal (55%-75%) in the north and below normal (80%-85%) in southern Utah. This brings the seasonal accumulation (Oct-Apr) to 78% of average statewide.

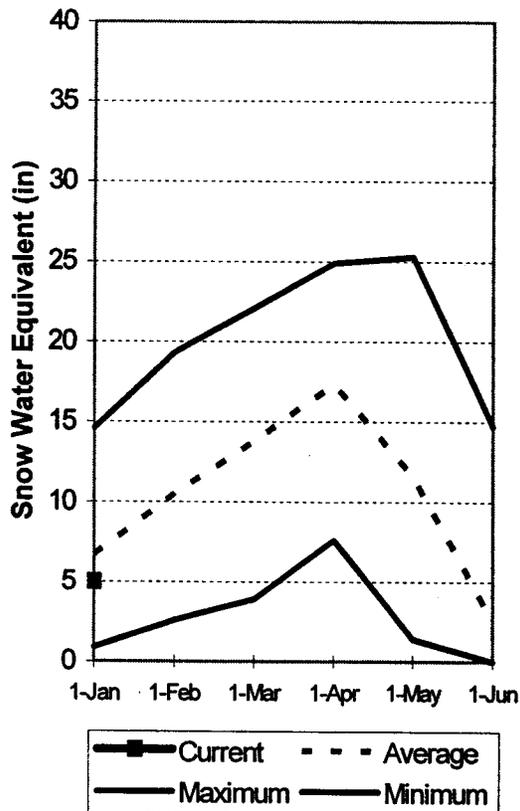
## RESERVOIRS

Storage in 41 of Utah's key irrigation reservoirs is at 47% of capacity. This is down substantially 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 average across the entire state of Utah this year. Low snowpacks tend to melt earlier and produce proportionately less runoff. Streams may peak early, have significantly less volume and have short recessions back to base flow. Overall water supply conditions are below normal.

**Mountain Snowpack**  
1/1/2003



**Precipitation**  
1/1/2003

