

APRIL 2010 DROUGHT UPDATE

Water Availability Task Force Co-Chairs

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Executive Summary

Below average precipitation conditions exist across the state in six out of the seven basins. The only exception is the Arkansas Basin, which has experienced normal precipitation for the water year. The Yampa/White & North Platte and Colorado experienced minor improvements in terms of precipitation, but they are only tracking slightly ahead of 2002 precipitation levels. The Water Availability Task Force (WATF) has been monitoring conditions in these basins very closely. Snow melting has begun in most mountain areas except for higher elevations. Cooler temperatures and the chance for precipitation in the form of snow at the end of April and beginning of May may slow the melt.

- As of April 20, the statewide snowpack is 75% of average. The basin with the highest snowpack average is the Rio Grande at 93% of average. The Colorado and Yampa/White & North Platte basins reported the lowest snowpack at 66% and 75% of average respectively. A below average snowpack is a concern for the Yampa/White & North Platte basins as there is limited reservoir storage compared to other basins in the state.
- Current water year precipitation levels for the Yampa/White & North Platte and Colorado basins are at 85% and 80% of average respectively and only slightly ahead of what they experienced at this time in 2002. The Rio Grande basin is the only basin that has received normal precipitation, 100% of average, during the water year.
- Statewide reservoir storage was 106% of average at the end of March, a one percent increase over the previous month. Individually, five of seven basins are at or above 100% of average storage. The Upper Rio Grande is at 90% and the San Miguel/Dolores basin is the lowest in the state at 87% of average, a slight decrease from last month.
- Statewide, streamflow forecasts range broadly from 54-133% of average. The highest anticipated streamflow is in the Arkansas basin with a forecast of 94-133% of average. Not surprisingly, the Colorado and Yampa/White basins continue to have the lowest forecasted streamflow in the state at 67%-80% and 54%-71% of average respectively.
- Surface Water Supply Index (SWSI*) values, as of April 1, for the seven basins range from -3.5 to +1.8. The Rio Grande had the highest value at +1.8. The Yampa/White/North Platte basin recorded the lowest value, of -3.5. However, this Basin has experienced moderate precipitation event since April 1, so the SWSI value should be improved.
- * SWSI values are based on snowpack, reservoir storage and precipitation for the winter period (November-April). The values range from a high of +4.0, which indicates an abundant supply to a low of -4.0, which indicates severe drought. A value of 0.0 indicates a near normal supply.

Long Term Forecast Summary

Forecasters expect El Niño conditions to continue through May and are predicting a possible transition to neutral conditions by summer and a shift to La Niña conditions by the fall. Most of Colorado is forecasted to experience wet conditions through June, except in the Southwest region of Colorado. Forecasters also predict a wet monsoon season for the Eastern Plains from July through September.

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Upper Colorado River Basin High/Low Monthly Precipitation Summary Based on Provisional SNOTEL data as of Apr 20, 2010

> The graph to the left shows the precipitation the Colorado Basin has received since the beginning of the 2010 water year. The second bar from the left represents the current water year. The precipitation levels are slightly ahead of where the basin was at this time in 2002, which is represented by the far right bar. November, January and March were drier than normal, contributing to the precipitation deficit the basin faces.



The adjacent map shows the U.S. Drought Monitor as of April 13, 2010. The northwest region of Colorado continues to experience drought conditions. A majority of the northwestern part of the state is categorized as D0, "Abnormally Dry" drought conditions with a smaller portion of the area categorized as D1, "Moderate" drought conditions. The Water Availability Task Force continues to closely monitor this situation.



Current as of April 1, 2010

The Colorado streamflow forecast as of April 1 shows streamflow forecast for each of the seven basins. Streamflow levels are forecasted to be below average for much of the state this spring. The Yampa/White & North Platte and Colorado basins streamflow forecasts are of particular concern. The Arkansas basin has received a higher snowpack this winter and therefore, is forecasted to experience near to above average streamflow. El Niño winters typically result in more precipitation for southern Colorado and decrease precipitation chances in the northern half of the state.

NOTE: The maps and graphics depicted in this report were those presented at the April 20, 2010 meeting and may have been updated since the meeting. All presentations are available at the CWCB website – <u>www.cwcb.state.co.us</u>

The next WATF meeting will be on May 20, 2010. The meeting will be held at the Colorado Division of Wildlife, 6060 Broadway Denver, CO.