MARCH 2011 DROUGHT UPDATE

Water Availability Task Force Co-Chairs

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Executive Summary

La Niña conditions continue to persist, influencing Colorado weather with above average moisture in the northern mountains; some regions are reporting snowpack at their highest levels in 14 years. Conversely, the southern portion of the state has seen a reduction in precipitation over the last few months with the Southwest and Rio Grande Basins below average for snowpack. Conditions in these regions will be closely monitored for continued deteriorating conditions. Wildfire potential is highest in the east and southeast parts of the state with abundant fuels from last year's growing season. Statewide reservoir storage is near average and most water providers continue to be in a "wait and see" mode. The next month will give a better indication of what conditions can be expected throughout the spring and early irrigation season. Should April be a wet month, some of the current dryness around the state could be alleviated.

- The eastern plains of Colorado have received below normal precipitation since the beginning of the water year in October 2010. In many communities, conditions continue to deteriorate.

- According to the U.S. Drought Monitor, 58% of the state is now experiencing D0, D1 or D2 status, which represents abnormally dry, drought moderate and drought severe conditions respectively. The drought conditions that have covered the eastern plains of the state throughout the fall have continued to deteriorate with D1 and D2 covering much of Colorado east of the divide. D2 conditions have been expanded across much of the plains.

- The basins in the southwest corner of the state: the San Miguel, Dolores, Animas, and San Juan have received below average precipitation thus far in March and are currently just below average for the water year to date (Oct 2010-present).

- Potential for wildfire is high in the east and southeast parts of the state with abundant fuels from last year's growing season. Early fires can be problematic as limited ground crews are available. This year has already seen larger wildfires than is typical for this time of year. Should current conditions persist, it is likely that Colorado will see more wildfire than was seen last year.

- Statewide snowpack is 111%, with five of eight basins above 100% of average. The North Platte has the highest percent snowpack at 131% of average; the Colorado, Gunnison, Yampa/White and South Platte sit at 120%, 114%, 122%, and 116% of average, respectively. While many of these basins are well above average all but the Yampa White have seen a decline in snowpack as a percentage of normal since previous months. The basins in the southwest corner of the state: the San Miguel, Dolores, Animas, and San Juan, and the Arkansas basin are all near normal at 92% and 98% of average respectively. The Rio Grande remains below normal at 84%.

- The revised SWSI values for the west slope, [1] which rely on stream flow forecasts and a smaller spatial scale, show a range of values -0.08 in the southwestern part of the state to +2.67 in the Yampa/ White river basin and represent near normal to abundant supplies.

[1] Colorado was the first state to develop a methodology for calculating the Surface Water Supply Index (SWSI) in the 1980's but in the early 1990s the Natural Resource Conservation Service (NRCS) refined the SWSI calculation to address the subjectivity of the original computation. The use of streamflow forecasts in the NRCS updated SWSI is an objective, statistical assessment of the data relating to snowmelt runoff. Additionally, the revised methodology provides a more stable month to month transition and utilizes a higher spatial resolution improving from four digit hydrologic units (seven values statewide) to eight digit hydrologic units (37 values statewide). This shift enables more detailed evaluation of the regions that are most effected by drought at any given time. The revised SWSI calculations are now available for western Colorado and will be presented in drought updates. Statewide figures will be available on a monthly basis beginning in the summer 2011, when the State of Colorado will fully adopt the new methodology. The scale of +4.0, which indicates an abundant supply to a low of -4.0, which indicates severe drought will remain the same.

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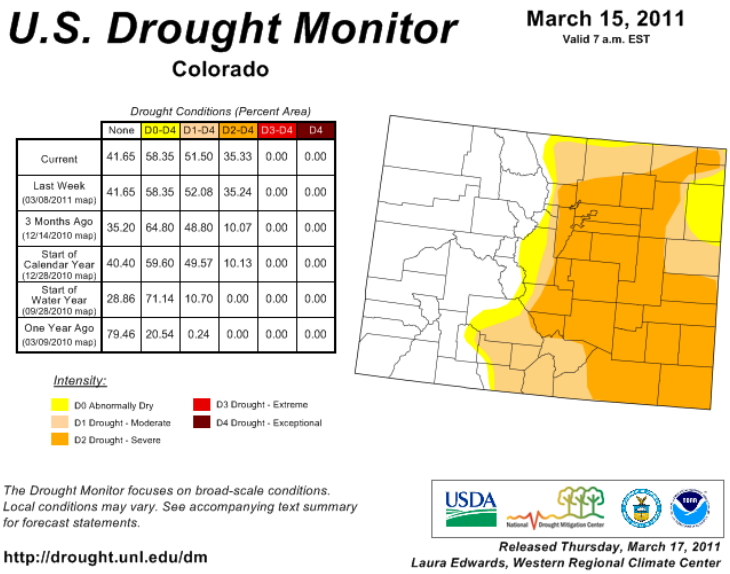
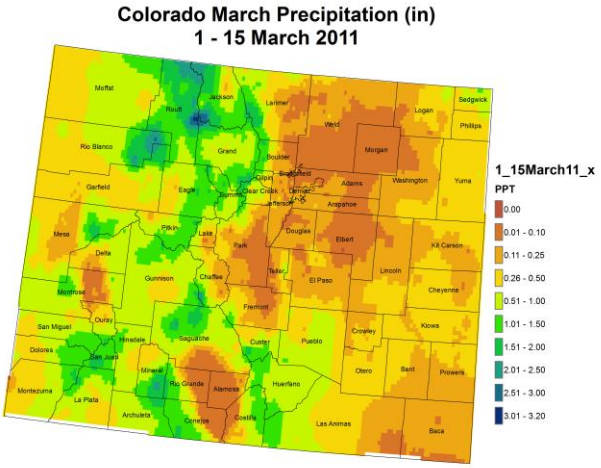
The adjacent map shows the U.S. Drought Monitor for Colorado as of March 15, 2011. The plains region of Colorado continues to experience sustained D0- D1 (abnormally dry – drought severe) drought conditions, with D2 conditions now expanded over much of the eastern plains.

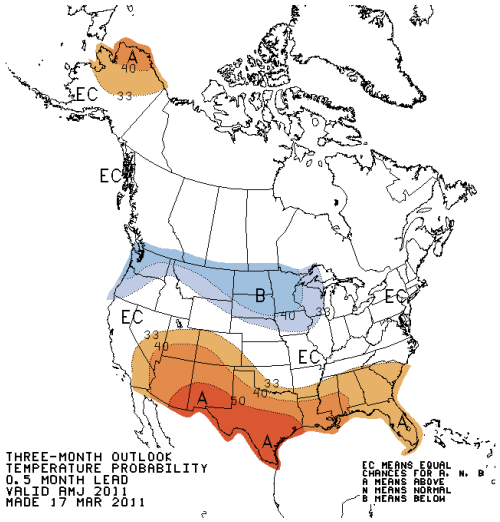
The experimental long term forecast calls for continued dry conditions across much of Colorado through June. The northwest corner of the State continues to have the best chance for average or above average precipitation.

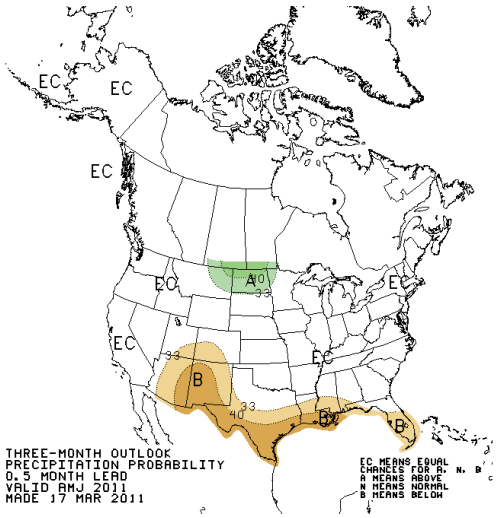




The adjacent map shows precipitation for the month of March through the 15th. The eastern plains of Colorado remain well below normal as does the Upper Rio Grande basin. Continued monitoring of this region will be critical as irrigation season approaches.

The map to the right shows that April-June (left) precipitation and temperature forecasts show typical La Niña-based expectations, leaving southwestern Colorado with higher than average chances for a dry and warm spring.





NOTE:
The next WATF meeting is scheduled for April 14, 9:30-11:30am at the Colorado Division of Wildlife, 6060 Broadway, Denver.