

COLORADO Department of Natural Resources

August 2021 Drought Update

As of August 31st, the <u>U.S. Drought Monitor</u> shows improvements over the last month in drought classification categories for western Colorado and spots of degradation for eastern Colorado. Only 4% of Colorado persists in exceptional (D4) conditions across Moffat, Routt, and Rio Blanco counties compared to 18% of the state in D4 in early July. Spring and summer rainfall brought the state down from 100% coverage of D0-D4 conditions (spanning August 2020 to April 2021) to 50.8% in D0-D4 as of August 31, 2021. That accounts to 37 weeks of 100% of the state in D0-D4. Exceptional D4 conditions have now been present for 49 consecutive weeks in western Colorado (Sept. 29, 2020 to August 31, 2021).

The <u>Standardized Precipitation Index</u> (SPI) values over varying timescales (30 days to 24 months) reveal varying chapters in the 2020-2021 drought story. Long term precipitation deficits are most apparent in the 24-month maps whereas 1 to 3 month maps show decent spring and summer moisture scattered statewide. The satellite-derived <u>VegDri Index</u>, partially based on SPI, similarly highlights severe drought stress for vegetation across the northwest U.S. whereas <u>in Colorado</u>, we see a central mountain swath of "unusually moist" and "very moist" conditions.

The observed streamflow screenshot <u>on the right</u> displays the 90-day percentile ranking of observed streamflows from June 1 through August 31. This continues to highlight record low streamflow volumes compared to historical records going back over 100 years. The majority of 10th percentile or lower streamflows are heavily concentrated in the Colorado River Basin.

Statewide <u>reservoir storage</u> was 80% of average and 48% of total capacity at the end August (compared to 85% of average end of August 2021). This ranges from 54% of average in southwestern basins up to 119% of average in the South Platte. Despite D4 drought conditions, the Yampa and White basins sit at 93% of average storage.

The NOAA Climate Prediction Center <u>three month outlook</u> continues to indicate increased chances of above normal temperatures and below normal precipitation in the upcoming months for nearly the entire United States. A recent study, published in the peer-reviewed journal Earth's Future (led by scientists at NASA's Goddard Institute for Space Studies and funded by NOAA's Climate Program Office) found that "the western United States is headed for prolonged drought conditions whether greenhouse gas emissions continue to climb or are aggressively reined in. However, the study also showed that the severity of acute, extreme drought events and the overall severity of prolonged drought conditions can be reduced with emissions-curbing efforts compared to a high-emissions future" (<u>Source</u>).

Next Water Availability Task Force Meeting: SEPTEMBER 23, 2021 9:30 AM

Please note the August 24th WATF meeting was not properly recorded on zoom. Access to meeting recordings will resume next meeting. Co-Chairs: Megan Holcomb, CWCB & Tracy Kosloff, DWR Additional info at cwcb.colorado.gov/water-availability-flood-task-forces





