Extended drought conditions across the western half of Colorado are best understood in context of the larger, regional drought across the western U.S. as a whole. While spring 2021 was a true “drought buster” in eastern Colorado, western Colorado remains on the fringes of one of the most widespread, sustained droughts in the country’s history. To review drought monitor progressions and improvements since January 2020, check out this animation by the Colorado Climate Center. The impacts of multi-year drought in western Colorado, where three of the last four snowpacks and four of the last four monsoons have been dry, are apparent in near record low streamflows and well below average reservoir storage. For up to date fishing closures, please visit CO Parks and Wildlife (CPW) condition reports. CPW continues to monitor impacts to native fish species which may experience significant population-level impacts in the Dolores and San Miguel basins this year.

July was a very active flooding month, including multiple days with numerous flash flood warnings both in and out of wildfire scars. The burn scars received the brunt of the flooding, especially in the Grizzly Creek, Cameron Peak, East Troublesome, and Spring burn scars. This flooding turned deadly on July 20, with multiple homes destroyed and multiple deaths in the Cameron Peak scar in the Poudre Canyon.

The July 20th U.S. Drought Monitor continues to record 54% of the state free from active drought, with 46% of Colorado in the following drought conditions: 18% exceptional (D4); 10% extreme (D3); 8% severe (D2); 5% moderate (D1); and 5% abnormally dry (D0). This ratio of drought severity conditions on the west slope has held near-constant for 8 weeks. Exceptional D4 conditions have now been present for 43 consecutive weeks in western Colorado (Sept. 29, 2020 to July 20, 2021).

The Standardized Precipitation Index (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. The satellite-derived VegDri Index, partially based on SPI, similarly highlights severe drought stress for vegetation across the west and northern U.S.

The map on the right displays the percentile ranking of observed streamflows for the April through June time period. This reveals strikingly low streamflow volumes compared to periods of record going back over 100 years for many rivers. Observations show 30 percent of streamflow forecast points in the state being in the bottom 10th percentile of streamflow volumes resulting from snowmelt runoff.

Statewide reservoir storage was 83% of average and 59% of total capacity at the end June (compared to 93% of average end of June 2020).

The NOAA Climate Prediction Center three month outlook continues to indicate increased chances of above normal temperatures and below normal precipitation in the upcoming months, with a higher probability over Utah and western Colorado.

Next Water Availability Task Force Meeting:
AUGUST 24, 2021 9:30 AM
Co-Chairs: Megan Holcomb, CWCB & Tracy Kosloff, DWR
Additional info at cwcb.colorado.gov/water-availability-flood-task-forces