

A Review of the 2016 Water Year in Colorado

Nolan Doesken, Rebecca Bolinger and Peter Goble

Colorado Climate Center, Department of Atmospheric Science, Colorado State University

Abstract. The “water year”, often used in Colorado to track climate and hydrologic variables, runs from October 1 through September 30th and encompasses the winter snow accumulation season, the spring/early summer snow melt period and the summer irrigation and growing season. The 2016 water year picked up where 2015 let off with warm autumn temperatures but with several wet storms. Winter snow accumulation also got off to a good start with a timely series of storms in late November and December. Storms were few in mid winter, but the Ground Hog Day storm (1-2 February 2016) gave snowpack a boost and closed several colleges and universities on the Front Range. Dry weather prevailed for the rest of February and parts of March before storms returned. For the second year in a row, water supplies were boosted by late winter storms. Runoff from snow melt brought near to above average seasonal streamflow volumes. Reservoir levels in most of the state remained near or above average for the third year in a row. Summer temperatures were warmer than average, especially in June. Precipitation was highly variable ranging from much less than average along the northern Front Range to near or wetter than average in portions of eastern Colorado. By late summer, however, thunderstorms diminished statewide and temperatures returned to near or below average. The water year ended with a very dry and warm September with steadily depleting soil moisture reserves.