

A Review of the 2013 Water Year in Colorado

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Abstract. Drought, wildfires, floods, dust storms and large urban snowfalls were just a few of the feature of Water Year 2013 in Colorado. Precipitation got off to a slow start for Colorado's moisture wringing mountains, with much below average accumulations observed by January. This dryness brought with it fears of another catastrophic fire season and threat of a dwindling water supply. After lagging behind normal conditions for much of the snow accumulation season, the Yampa, Colorado and South Platte basins made a remarkable comeback with cold spring temperatures and late season snowstorms in April and May which brought peak snow water equivalent to near normal conditions and in some cases slightly above normal. Those spring storms also hit the Front Range urban corridor and northeast plains relieving some drought and water supply concerns moving into the irrigation demand season. The southern basins of the state did not have nearly the recovery that the northern basins did. The summer started off hot and dry contributing to major wild fires in June. By July the Southwest Monsoon was in full swing bringing moisture into the entire state which continued through August. One area of the state remained dry however -- the drought-stricken lower Arkansas valley. This area has been subject to home-burying tumbleweed piles and large dust storms stemming from 3 consecutive years of extreme drought reminiscent of the Dust Bowl era of the 1930's. September brought a tumultuous end to the water year in Colorado with a widespread, multi-day precipitation event that led to large floods on many tributaries to the South Platte River as well as parts of El Paso County. The cumulative effect from flooding on multiple tributaries was exceptional main stem flood on the South Platte all the way to Nebraska. This precipitation event, while catastrophic for those along the river, brought the majority of northeastern and central Colorado out of drought to close out the 2013 water year.