

Snowpack and Water Supply Conditions for the Arkansas Basin as of April 1, 2011

The Arkansas River Basin snowpack continued the same pattern it has exhibited every month since January 1, managing to just stay slightly above average. April 1 measurements indicate the basin is at 103 percent of average, down 5 percentage points from last month, and 99 percent of the snowpack measured a year ago. Projections based on SNOTEL data indicate about a 30 percent chance that the snowpack will reach the average peak, however, with that peak usually occurring on April 13, time may be running out. As has been the case all year, sub-basin snowpack conditions tend to favor the upper portion of the basin. The Upper Arkansas Watershed snowpack is 120 percent of average while the Purgatoire and the combined Cucharas and Huerfano drainages are 52 and 60 percent of average, respectively. March precipitation at the higher elevations was below normal at 81 percent of average. This dropped the total precipitation figures from 96 percent of average last month to 93 percent of average currently. Reservoir storage conditions remained unchanged from last month with storage levels at 90 percent of average and 87 percent of last year. The biggest change in the forecasts from last month occurred in the southern tributaries which saw some significant drops in percentages. April-September volumes along the mainstem of the Arkansas are expected to be above average. Chalk Creek at Nathrop is expected to produce 141 percent of average flows while Grape Creek near Westcliffe is slated to generate only 51 percent of average runoff.

ARKANSAS RIVER BASIN

Forecast Point	period	50% (KAF)	% of avg	max (KAF)	min (KAF)	30-yr avg
Chalk Ck at Nathrop	APR-JUL	32.0	139	45.0	21.0	23.0
	APR-SEP	38.0	141	53.0	25.0	27.0
Arkansas R at Salida (1)	APR-JUL	330	129	355	305	255
	APR-SEP	400	129	445	360	310
Grape Ck nr Westcliffe	APR-JUL	8.0	50	11.2	5.30	16.1
	APR-SEP	9.9	51	12.4	7.70	19.6
Pueblo Res Inflow (1)	APR-JUL	430	112	440	420	385
	APR-SEP	540	111	555	525	485
Huerfano R nr Redwing	APR-JUL	7.7	63	12.7	3.90	12.3
	APR-SEP	9.9	64	16.0	5.30	15.5
Cucharas R nr La Veta	APR-JUL	6.0	53	11.8	2.20	11.3
	APR-SEP	7.1	55	12.8	3.00	13.0
Trinidad Lk Inflow (1)	MAR-JUL	19.0	56	42.0	4.90	34.0
	APR-JUL	17.6	55	40.0	4.20	32.0
	APR-SEP	25.0	57	36.0	16.3	44.0

Max is 90 percentile and min is 10 percentile.  
 Averages are for the 1971-2000 period.  
 All volumes are in KAF.

footnotes:

1) streamflow is adjusted for upstream storage