

Colorado

Water Supply Outlook Report

June 1, 2014



Pictured is the Cache la Poudre River as it flows through Fort Collins, CO on 5/25/2014. Warm temperatures and thunderstorm activity have combined in recent weeks, accelerating snowmelt runoff and producing heavy rain in the region. The result has been a river that is overflowing its banks, causing flooding in low lying areas, and has contributed to three deaths in the last few weeks.

The stage reading at the gage located in Fort Collins reached 9.5 feet on May 31st which is above the Action Stage (9 feet) but below Minor Flood Stage (10.5 feet). Further upstream however, at the Canyon Mouth, the stage reading reached 8 feet on May 31st which is above the Minor Flood Stage of 7.5 feet.

Photo taken by Mage Hultstrand from the Linden Street Bridge in Fort Collins, CO.

Basin Outlook Reports and Federal - State - Private Cooperative Snow Surveys

For more water supply and resource management information, contact:

Brian Domonkos
Snow Survey Supervisor
USDA, Natural Resources Conservation Service
Denver Federal Center, Bldg 56, Rm 2604
PO Box 25426
Denver, CO 80225-0426
Phone (303) 524-2521

How forecasts are made

Most of the annual streamflow in the western United States originates as snowfall that has accumulated in the mountains during the winter and early spring. As the snowpack accumulates, hydrologists estimate the runoff that will occur when it melts. Measurements of snow water equivalent at selected manual snow courses and automated SNOTEL sites, along with precipitation, antecedent streamflow, and indices of the El Niño / Southern Oscillation are used in computerized statistical and simulation models to prepare runoff forecasts. Unless otherwise specified, all forecasts are for flows that would occur naturally without any upstream influences.

Forecasts of any kind, of course, are not perfect. Streamflow forecast uncertainty arises from three primary sources: (1) uncertain knowledge of future weather conditions, (2) uncertainty in the forecasting procedure, and (3) errors in the data. The forecast, therefore, must be interpreted not as a single value but rather as a range of values with specific probabilities of occurrence. The middle of the range is expressed by the 50% exceedance probability forecast, for which there is a 50% chance that the actual flow will be above, and a 50% chance that the actual flow will be below, this value. To describe the expected range around this 50% value, four other forecasts are provided, two smaller values (90% and 70% exceedance probability) and two larger values (30%, and 10% exceedance probability). For example, there is a 90% chance that the actual flow will be more than the 90% exceedance probability forecast. The others can be interpreted similarly.

The wider the spread among these values, the more uncertain the forecast. As the season progresses, forecasts become more accurate, primarily because a greater portion of the future weather conditions become known; this is reflected by a narrowing of the range around the 50% exceedance probability forecast. Users should take this uncertainty into consideration when making operational decisions by selecting forecasts corresponding to the level of risk they are willing to assume about the amount of water to be expected. If users anticipate receiving a lesser supply of water, or if they wish to increase their chances of having an adequate supply of water for their operations, they may want to base their decisions on the 90% or 70% exceedance probability forecasts, or something in between. On the other hand, if users are concerned about receiving too much water (for example, threat of flooding), they may want to base their decisions on the 30% or 10% exceedance probability forecasts, or something in between. Regardless of the forecast value users choose for operations, they should be prepared to deal with either more or less water. (Users should remember that even if the 90% exceedance probability forecast is used, there is still a 10% chance of receiving less than this amount.) By using the exceedance probability information, users can easily determine the chances of receiving more or less water.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

Colorado Water Supply Outlook Report June 1, 2014

Summary

As is fairly typical during the springtime in Colorado, May weather patterns brought a taste of nearly every season to our great state. A large snow storm over Mother's Day weekend produced significant accumulation in every major river basin and stalled the rapid melt that had begun early in the month due to warm temperatures. Colorado also received significant precipitation in the form of rain during May, in fact for the first time this water year, all basins reported above normal monthly precipitation totals. During the last week of May, temperatures across the state exceeded historical averages for multiple days in a row. In the northern and central mountains, which had significant amounts of snow remaining, the high temperatures accelerated snowmelt. This coupled with heavy rainfall, led to high water levels on many rivers and flooding in some areas. With above average streamflows projected for June and July in the northern and central part of the state, water managers in these regions will have ample opportunities to fill their reservoirs this season. In the southern part of the state storage volumes remain low and with most of the snow already gone hopes are pinned on a good monsoon season.

Snowpack

The statewide snowpack totals this season were a welcome change from the last couple of years. This season began with fairly normal snow accumulation up until early February when a series of large storm systems began to hit the state. The storm systems generally favored the northern and central mountains and for the most part missed the mountains in the Southwest, the Upper Rio Grande and the southern tributaries of the Arkansas. The storm patterns continued until the first week of April when most of the basins in the state reached their peak snow accumulation and melt ensued. April was quite dry across the state and it looked like winter may be over when the entire state received significant snow over Mother's Day weekend. This storm added to the already large snowpack's in the northern and central mountains but most importantly, boosted the snowpack's in the southern river basins and helped to delay the rapid melt that had begun in those regions. As of June 1 the statewide snowpack was 197 percent of the median and around 25 percent of the seasonal snowpack remained on the ground.

Precipitation

For the first month this water year all the major river basins in Colorado reported above average mountain precipitation. Statewide precipitation for May was 135 percent of average; the Arkansas basin reported the lowest percentage at 115 percent of average and the South Platte basin had the highest percentage at 155 percent. As of June 1, water year-to-date precipitation totals across the major river basins were near to above normal. The Upper Rio Grande had the lowest percentage at 84 percent of average for the water year. The South Platte had the highest percentage at 124 percent of average. Year-to-date precipitation for the state was 105 percent of average on June 1.

Reservoir Storage

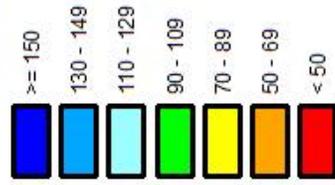
During May Colorado added 419,400 acre-feet of water to its reservoirs. The end of May readings put total storage at 95 percent of average and 62 percent of capacity. Of course storage varies significantly between the major river basins. The South Platte basin has the highest storage totals; with 1,041,600 acre-feet of water, basin wide storage is at 113 percent of average and 94 percent of capacity. The Gunnison basin is not far behind with storage volumes that are 108 percent of average and 80 percent of capacity. The Arkansas basin is storing the lowest volume of water as a percent of average. The basin has 351,100 acre-feet of water stored which is 56 percent of average and 21 percent of capacity. Current reservoir storage mimics the trends in snowpack and spring runoff seen this season across the state. The southern basins have much less water stored than the northern basins. It is important to note that all basins have significantly improved their reservoir storage since last year at this time. Storage in the Upper Rio Grande for example is at just 63 percent of average currently, but this is a great improvement over the 37 percent of average volumes they had last year.

Streamflow

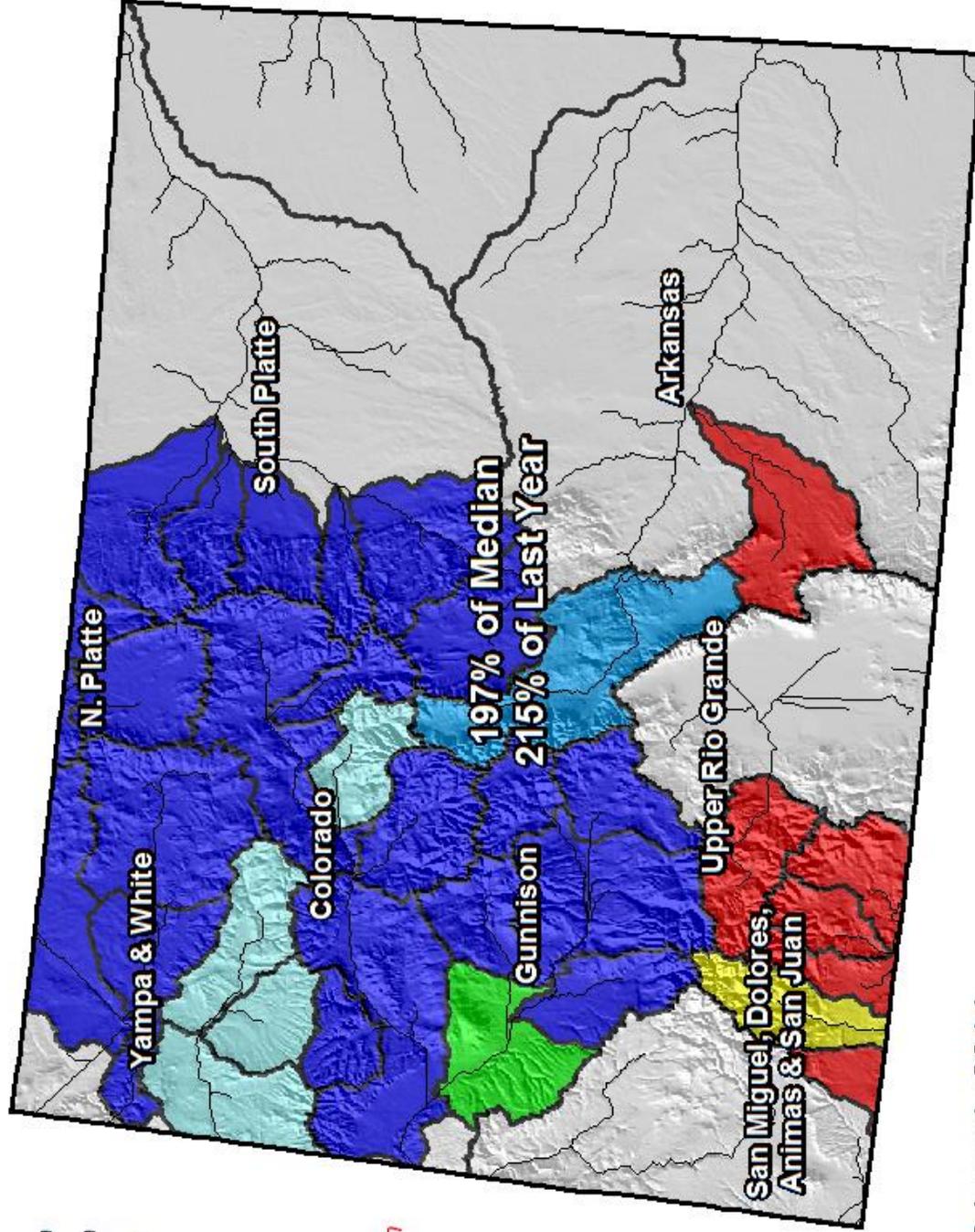
One of the main variables that can influence streamflow forecasts drastically in the spring is how much rain an area receives. For the most part, the streamflow forecasts for Colorado issued on June 1 were very similar to those issued on May 1; the exceptions were forecasts for the South Platte, Colorado and the Yampa and White river basins. These regions received significant amounts of rain throughout May which caused the current forecasts to increase considerably from those issued last month. The South Platte forecasts were the most affected by this; the region was hammered with thunderstorm activity and heavy rains throughout the month. The forecasts for the Cache la Poudre at Canyon Mouth west of Fort Collins, CO saw the most drastic increase this month. April to July forecasts jumped from 122 percent of average predicted on May 1 to 167 percent of average on June 1. June to July forecasts for this gage call for flows at 150 percent of average. In the Colorado basin the forecast for April to July flows into Woford Mountain Reservoir jumped 31 percentage points this month. The current June to July forecast calls for flows to be at 163 percent of average. Forecasts in the remaining basins did not change much from those issued last month. The Upper Rio Grande still has some of the lowest forecasted flows for the remainder of the summer. The southern tributaries of the Arkansas basin are also forecast to see flows that are well below normal for the rest of this runoff season.

Colorado Snowpack Map

Percent of Median



*Provisional Data
Subject to Revision*

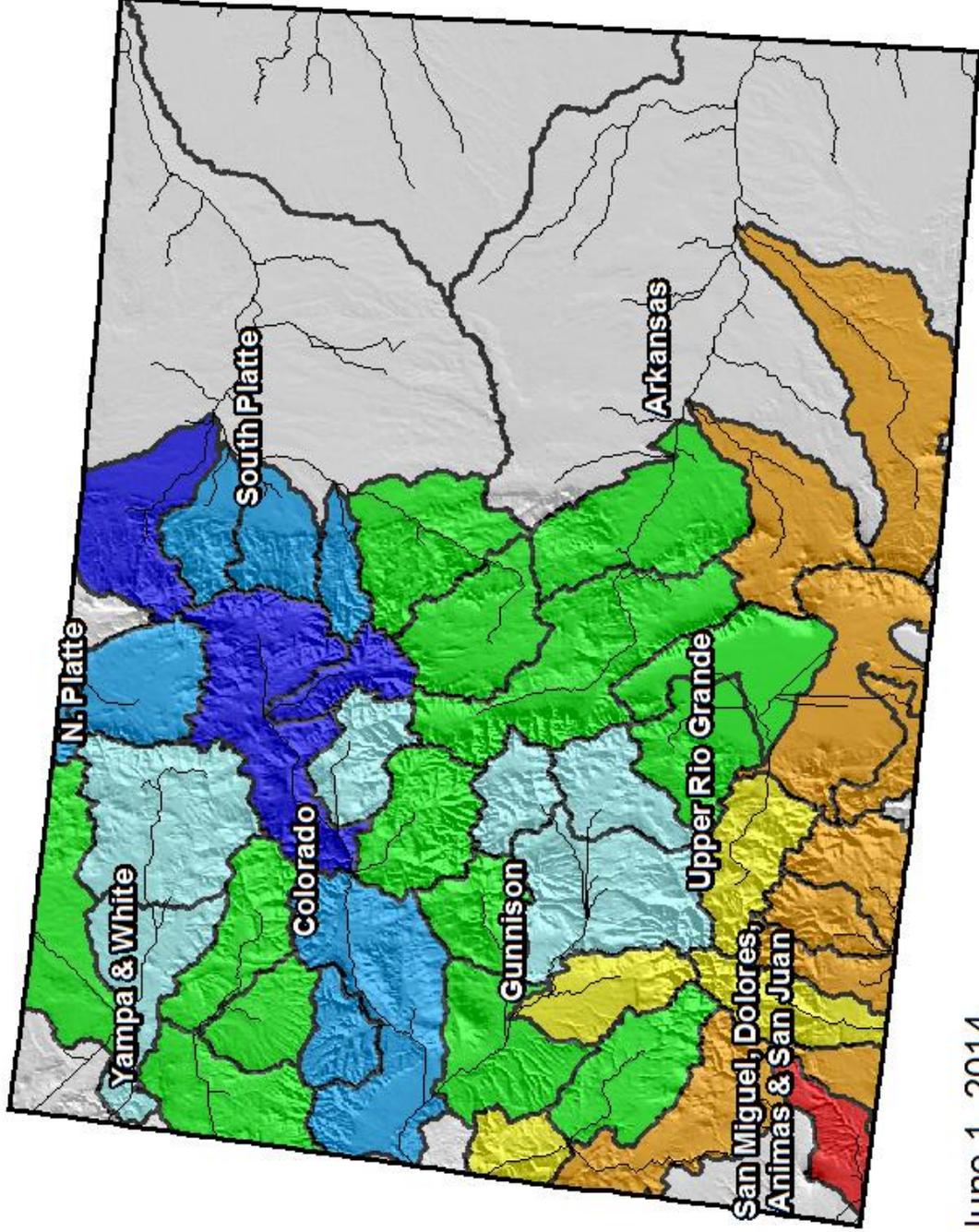
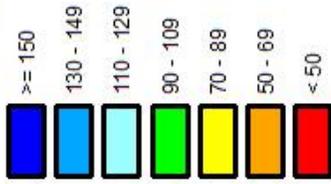


Current as of June 1, 2014

Colorado Streamflow Forecast Map



Percent of Average

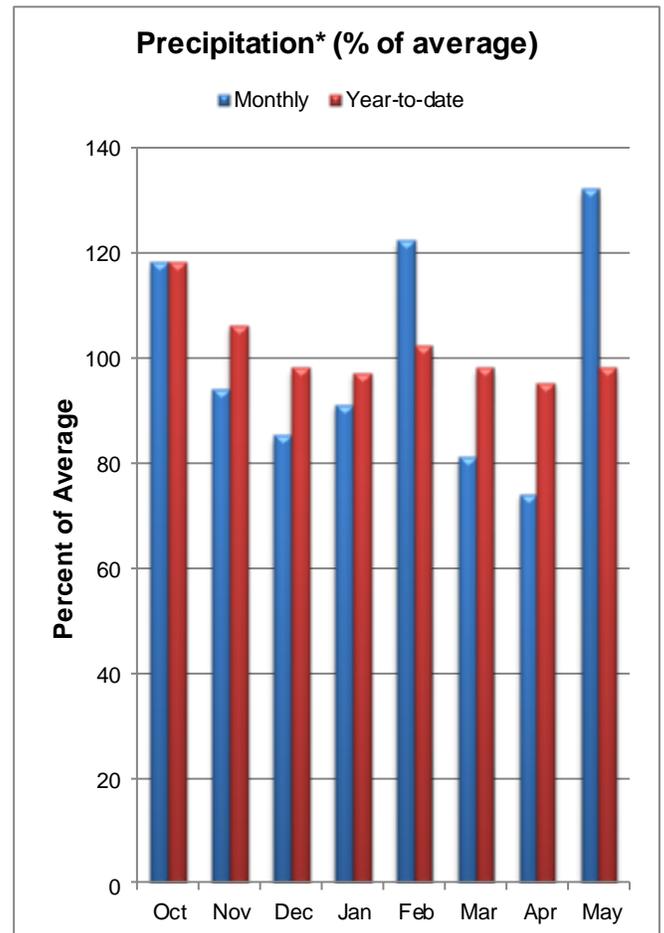
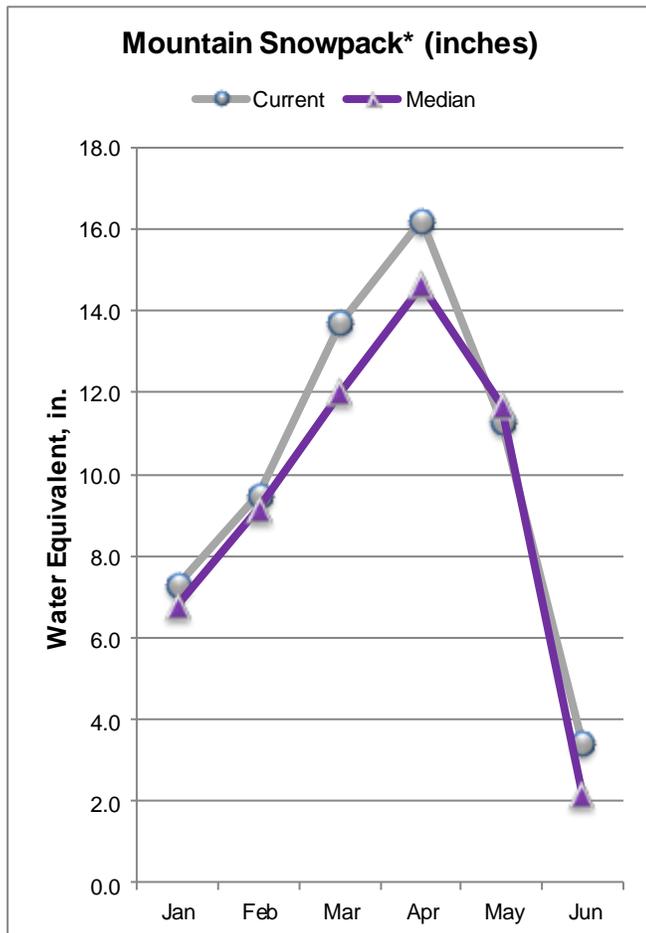


*Provisional Data
Subject to Revision*

Current as of June 1, 2014

GUNNISON RIVER BASIN

as of June 1, 2014



*Based on selected stations

SUMMARY OF WATER SUPPLY CONDITIONS

SNOWPACK

Seasonal snowmelt in the Gunnison River basin continued throughout May. The basin did receive additional snow over Mother's Day weekend which slowed the melt process for a few days. As of June 1, the snowpack was 158 percent of the median and the basin had approximately 19 percent of its snowpack left to melt.

PRECIPITATION

Precipitation in the basin during May was well above normal. SNOTEL sites recorded totals at 132 percent of average for the month. Year-to-date precipitation rose to 98 percent of average as of June 1.

RESERVOIR

Storage in the basin increased by 179,800 acre-feet this past month. Current storage is 109 percent of average and 80 percent of capacity.

STREAMFLOW FORECASTS

This month's streamflow forecasts are fairly consistent with those issued last month. The June to July forecasts range from 119 percent of average for the Slate River near Crested Butte to 61 percent of average for Surface Creek at Cedaredge.

Gunnison River Basin Streamflow Forecasts - June 1, 2014

 Forecast Exceedance Probabilities for Risk Assessment
 Chance that actual volume will exceed forecast

GUNNISON RIVER BASIN	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avg (KAF)
Taylor Park Reservoir Inflow	APR-JUL	96	105	112	113%	119	130	99
	JUN-JUL	54	63	70	113%	77	88	62
Slate R nr Crested Butte	APR-JUL	86	92	96	116%	101	108	83
	JUN-JUL	40	46	50	119%	55	62	42
East R at Almont	APR-JUL	192	200	210	115%	215	225	182
	JUN-JUL	92	102	109	103%	116	127	106
Gunnison R near Gunnison ²	APR-JUL	385	420	445	120%	470	510	370
	JUN-JUL	192	225	250	116%	275	315	215
Tomichi Ck at Sargents	APR-JUL	30	33	36	120%	38	42	30
	JUN-JUL	7.1	10.1	12.4	90%	15	19.1	13.8
Cochetopa Ck bl Rock Ck nr Parlin	APR-JUL	13.9	15.6	17	113%	18.6	21	15
	JUN-JUL	2.8	4.5	5.9	82%	7.5	10.2	7.2
Tomichi Ck at Gunnison	APR-JUL	75	82	87	118%	93	102	74
	JUN-JUL	17.9	25	30	81%	36	45	37
Lake Fk at Gateview	APR-JUL	115	127	135	110%	144	157	123
	JUN-JUL	65	77	85	105%	94	107	81
Blue Mesa Reservoir Inflow ²	APR-JUL	725	760	790	117%	820	865	675
	JUN-JUL	355	390	420	111%	450	495	380
Paonia Reservoir Inflow	MAR-JUN	54	54	73	76%	92	119	96
	APR-JUL	52	58	74	76%	90	115	97
	JUN	1	1.34	20	87%	39	66	23
	JUN-JUL	3	8.6	25	86%	41	66	29
NF Gunnison R nr Somerset ²	APR-JUL	245	260	275	95%	285	310	290
	JUN-JUL	80	97	110	96%	123	145	114
Surface Ck at Cedaredge	APR-JUL	11.3	12.3	13	77%	13.8	15.1	16.8
	JUN-JUL	2.9	3.9	4.6	61%	5.4	6.7	7.6
Ridgway Reservoir Inflow	APR-JUL	81	88	93	92%	98	106	101
	JUN-JUL	47	54	59	91%	64	72	65
Uncompahgre R at Colona ²	APR-JUL	90	103	113	82%	123	140	137
	JUN-JUL	49	62	72	89%	82	99	81
Gunnison R nr Grand Junction ²	APR-JUL	1330	1400	1440	97%	1490	1560	1480
	JUN-JUL	595	660	705	101%	750	820	695

1) 90% and 10% exceedance probabilities are actually 95% and 5%

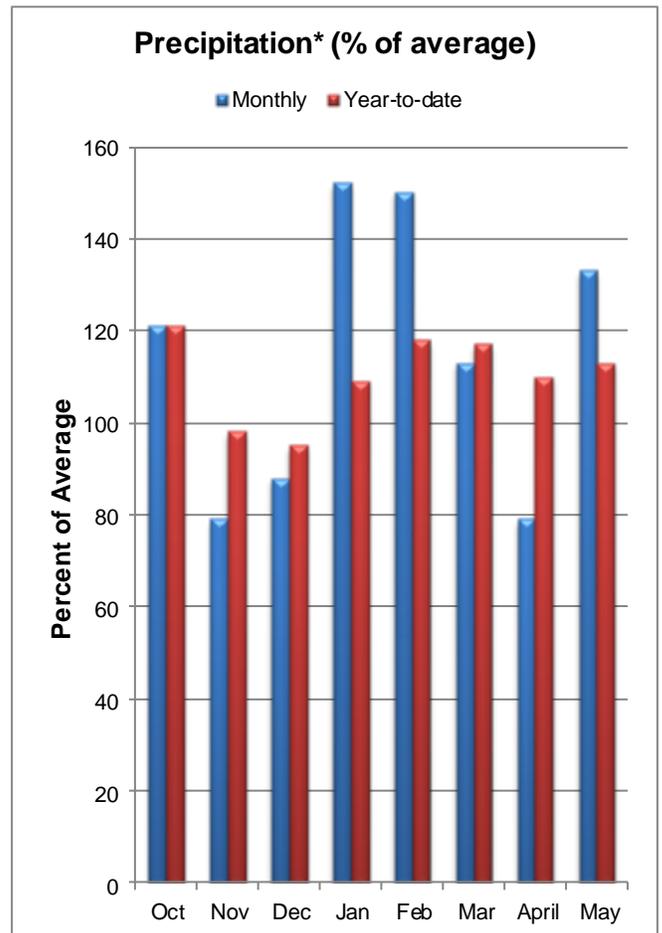
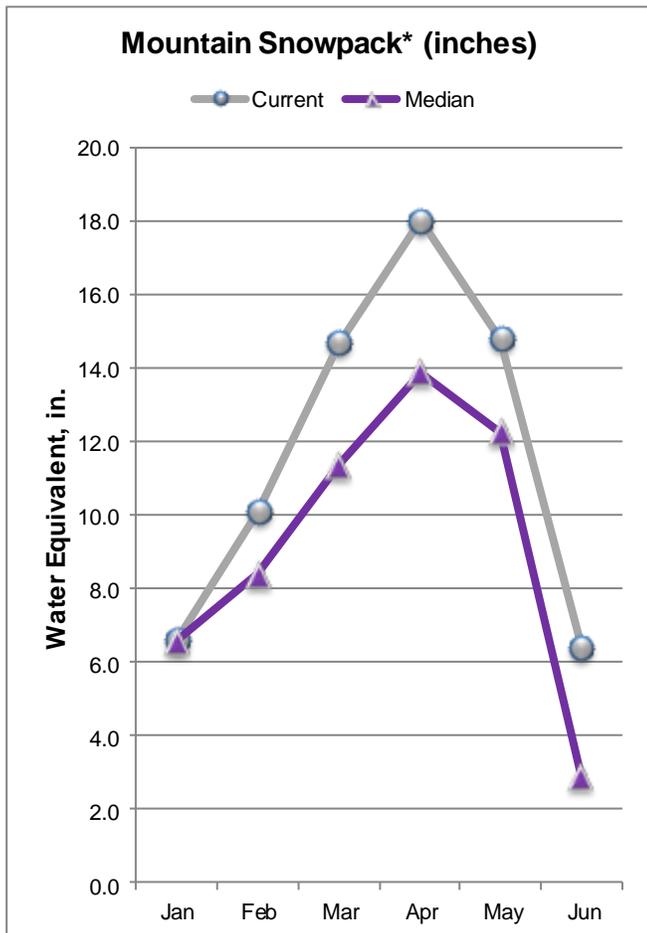
2) Forecasts are for unimpaired flows. Actual flow will be dependent on management of upstream reservoirs and diversions

3) Median value used in place of average

Reservoir Storage End of May, 2014	Current (KAF)	Last Year (KAF)	Average (KAF)	Capacity (KAF)
BLUE MESA RESERVOIR	675.1	397.9	575.3	830.0
CRAWFORD RESERVOIR	1.4	8.5	12.5	14.0
CRYSTAL RESERVOIR	11.0	4.9	9.0	17.5
FRUITGROWERS RESERVOIR	3.5	3.1	4.0	3.6
FRUITLAND RESERVOIR	7.8	8.4	6.2	9.2
MORROW POINT RESERVOIR	111.1	112.2	113.2	121.0
PAONIA RESERVOIR	14.3	15.4	14.9	15.4
RIDGEWAY RESERVOIR	60.8	72.7	70.6	83.0
SILVERJACK RESERVOIR	12.8	12.4	11.8	12.8
TAYLOR PARK RESERVOIR	74.0	73.5	74.7	106.0
VOUGA RESERVOIR	0.9	0.8	0.9	0.0
Basin-wide Total	972.7	709.8	893.1	1212.5
# of reservoirs	11	11	11	11

Watershed Snowpack Analysis June 1, 2014	# of Sites	% Median	Last Year % Median
UPPER GUNNISON BASIN	10	153%	59%
SURFACE CREEK BASIN	2	96%	43%
UNCOMPAGHRE BASIN	3	171%	0%
GUNNISON RIVER BASIN	13	158%	46%

UPPER COLORADO RIVER BASIN as of June 1, 2014



*Based on selected stations

SUMMARY OF WATER SUPPLY CONDITIONS

SNOWPACK

The Colorado River basin accumulated a banner snowpack this season. The snowpack as of June 1 was 223 percent of median and the eighth largest June 1 snowpack in the last 33 years. The basin had around 19 percent of the peak snowpack left to melt as of June 1.

PRECIPITATION

The basin also received well above normal precipitation for the month of May. May precipitation was 133 percent of average which left year-to-date precipitation at 113 percent of average as of June 1.

RESERVOIR

Reservoirs in the basin are storing 125,600 more acre-feet than they were last month. Current storage is at 95 percent of average.

STREAMFLOW FORECASTS

The majority of the current forecasts for the basin are significantly greater than those issued previously. June to July forecasts range from 167 percent of average for the Inflow to Dillon Reservoir to 103 percent of average for the Inflow to Ruedi Reservoir.

Upper Colorado River Basin Streamflow Forecasts - June 1, 2014

Forecast Exceedance Probabilities for Risk Assessment
Chance that actual volume will exceed forecast

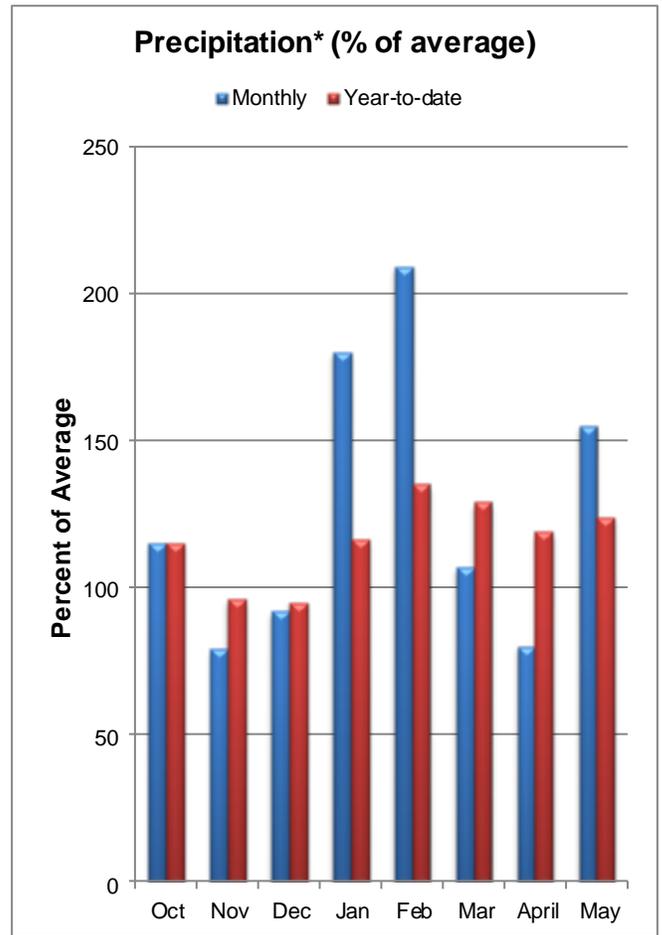
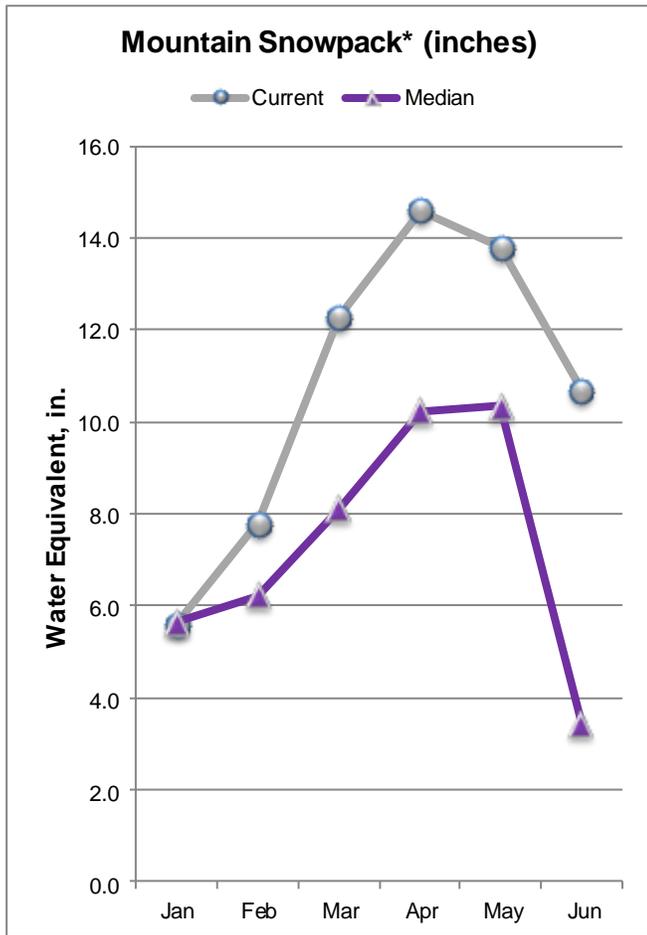
UPPER COLORADO RIVER BASIN	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avg (KAF)
Lake Granby Inflow ²	APR-JUL	305	325	340	155%	355	380	220
	JUN-JUL	190	210	225	156%	240	265	144
Willow Ck Reservoir Inflow	APR-JUL	72	76	79	168%	82	87	47
	JUN-JUL	21	25	28	133%	31	36	21
Williams Fk bl Williams Fk Reservoir ²	APR-JUL	127	136	142	146%	148	158	97
	JUN-JUL	81	90	96	145%	102	112	66
Wolford Mtn Reservoir Inflow	APR-JUL	90	95	99	183%	103	110	54
	JUN-JUL	21	26	30	163%	34	41	18.4
Dillon Reservoir Inflow ²	APR-JUL	235	250	260	160%	270	285	163
	JUN-JUL	158	173	184	167%	195	210	110
Green Mountain Reservoir Inflow ²	APR-JUL	380	415	435	158%	460	490	275
	JUN-JUL	250	285	305	165%	330	360	185
Eagle R bl Gypsum ²	APR-JUL	350	390	415	124%	445	485	335
	JUN-JUL	183	220	245	117%	275	315	210
Colorado R nr Dotsero ²	APR-JUL	1940	2070	2170	155%	2270	2430	1400
	JUN-JUL	1050	1180	1280	152%	1380	1540	840
Ruedi Reservoir Inflow ²	APR-JUL	124	139	150	108%	162	181	139
	JUN-JUL	66	81	92	103%	104	123	89
Roaring Fk at Glenwood Springs ²	APR-JUL	645	690	720	104%	755	805	690
	JUN-JUL	405	450	480	105%	515	565	455
Colorado R nr Cameo ²	APR-JUL	2890	3090	3230	137%	3380	3600	2350
	JUN-JUL	1600	1800	1940	137%	2090	2310	1420

- 1) 90% and 10% exceedance probabilities are actually 95% and 5%
- 2) Forecasts are for unimpaired flows. Actual flow will be dependent on management of upstream reservoirs and diversions
- 3) Median value used in place of average

Reservoir Storage End of May, 2014	Current (KAF)	Last Year (KAF)	Average (KAF)	Capacity (KAF)
DILLON RESERVOIR	203.0	193.8	232.7	254.0
GREEN MOUNTAIN RESERVOIR	86.5	87.5	84.9	146.8
HOMESTAKE RESERVOIR	1.1	5.4	24.7	43.0
LAKE GRANBY	292.4	195.7	313.6	465.6
RUEDI RESERVOIR	80.9	74.6	78.0	102.0
SHADOW MOUNTAIN RESERVOIR	16.1	16.9	16.9	18.4
VEGA RESERVOIR		28.2	31.3	32.9
WILLIAMS FORK RESERVOIR	91.9	71.1	73.0	97.0
WILLOW CREEK RESERVOIR	8.6	8.6	7.9	9.1
WOLFORD MOUNTAIN RESERVOIR	68.3	49.4	59.9	65.9
Basin-wide Total	848.8	731.2	922.9	1234.7
# of reservoirs	9	10	10	10

Watershed Snowpack Analysis June 1, 2014	# of Sites	% Median	Last Year % Median
BLUE RIVER BASIN	5	339%	178%
HEADWATERS COLORADO RIVER	18	278%	147%
MUDDY CREEK BASIN	3	399%	136%
EAGLE RIVER BASIN	3	114%	76%
PLATEAU CREEK BASIN	2	96%	43%
ROARING FORK BASIN	7	213%	105%
WILLIAMS FORK BASIN	3	270%	202%
WILLOW CREEK BASIN	2		
UPPER COLORADO RIVER BASIN	27	223%	119%

SOUTH PLATTE RIVER BASIN as of June 1, 2014



*Based on selected stations

SUMMARY OF WATER SUPPLY CONDITIONS

SNOWPACK

The snowpack on June 1 in the South Platte basin was 311 percent of median. This total ranked as the fourth highest June 1 snowpack in the last 34 years. The peak snowpack reading for the basin this season ended up ranking as the sixth largest peak in the past 34 years. On June 1 the basin still had about 58 percent of its snowpack remaining.

PRECIPITATION

The basin received 155 percent of normal precipitation during May. This was the highest percentage recorded this month across the state. Year-to-date precipitation was at 124 percent of average on June 1.

RESERVOIR

Reservoir storage benefited from snowmelt and precipitation this month. Current volumes are at 113 percent of average and 94 percent of capacity.

STREAMFLOW FORECASTS

Heavy May precipitation caused the forecasts for the northern tributaries to increase substantially this month. June to July forecasts range from 150 percent of average for the Cache la Poudre at Canyon Mouth to 100 percent of average for the South Platte River at South Platte.

**South Platte River Basin
Streamflow Forecasts - June 1, 2014**

Forecast Exceedance Probabilities for Risk Assessment
Chance that actual volume will exceed forecast

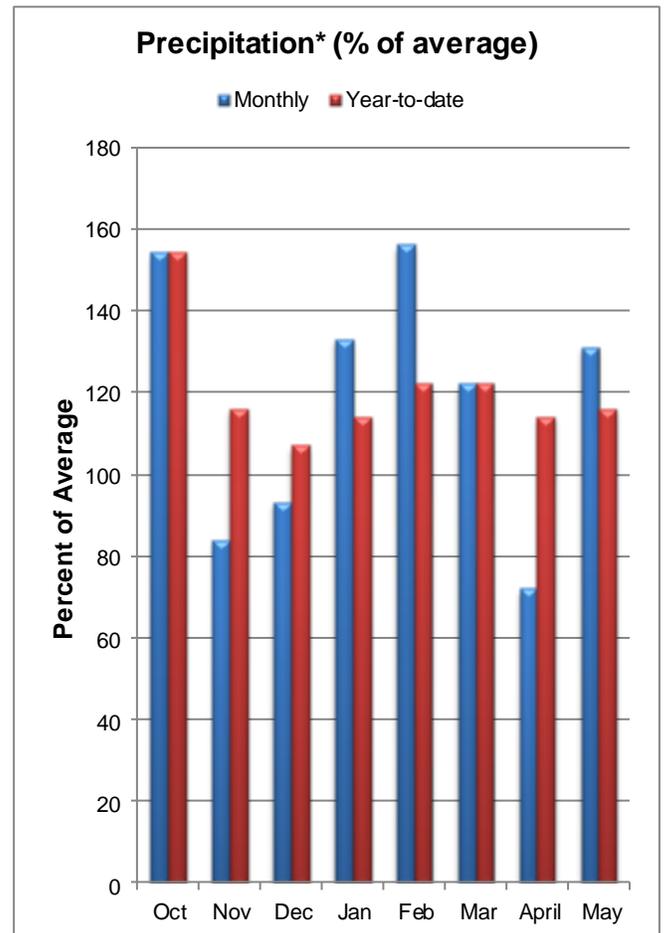
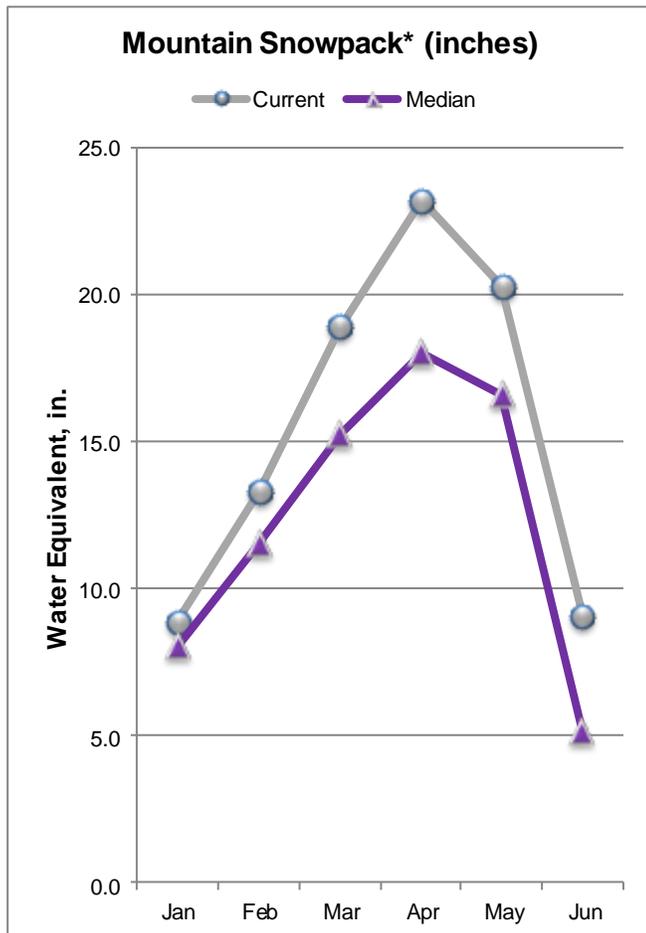
SOUTH PLATTE RIVER BASIN	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avg (KAF)
Antero Reservoir Inflow ²	APR-JUL	15.6	17	18	124%	19	20	14.5
	APR-SEP	18.3	20	22	124%	23	26	17.8
	JUN-JUL	9.6	11	12	120%	13	14.4	10
	JUN-SEP	12.3	14.4	15.9	120%	17.4	19.5	13.2
Spinney Mountain Reservoir Inflow ²	APR-JUL	44	52	58	121%	65	76	48
	APR-SEP	52	64	73	120%	83	99	61
	JUN-JUL	26	34	40	118%	47	58	34
	JUN-SEP	34	46	55	120%	65	81	46
Elevenmile Canyon Reservoir Inflow ²	APR-JUL	45	54	60	120%	67	78	50
	APR-SEP	53	65	75	117%	86	103	64
	JUN-JUL	26	35	41	117%	48	59	35
	JUN-SEP	34	46	56	117%	67	84	48
Cheesman Lake Inflow ²	APR-JUL	79	94	105	105%	117	137	100
	APR-SEP	93	115	133	106%	152	184	126
	JUN-JUL	40	55	66	108%	78	98	61
	JUN-SEP	54	76	94	107%	113	145	88
South Platte R at South Platte ²	APR-JUL	130	153	171	95%	190	220	180
	APR-SEP	156	192	220	98%	250	300	225
	JUN-JUL	65	88	106	100%	125	157	106
	JUN-SEP	91	127	155	101%	185	235	153
Bear Ck ab Evergreen	APR-JUL	12.6	14.7	16.3	99%	18.1	21	16.4
	APR-SEP	16	19	21	100%	24	28	21
	JUN-JUL	5.5	7.6	9.2	105%	11	13.9	8.8
	JUN-SEP	8.9	11.9	14.2	105%	16.7	21	13.5
Clear Ck at Golden	APR-JUL	119	132	141	134%	151	166	105
	APR-SEP	140	157	170	133%	183	205	128
	JUN-JUL	78	91	100	132%	110	125	76
	JUN-SEP	99	116	129	129%	142	164	100
St. Vrain Ck at Lyons ²	APR-JUL	122	132	138	157%	144	154	88
	APR-SEP	138	150	158	153%	168	180	103
	JUN-JUL	69	78	84	145%	90	100	58
	JUN-SEP	85	97	105	144%	114	127	73
Boulder Ck nr Orodell ²	APR-JUL	67	71	74	137%	77	82	54
	APR-SEP	76	82	86	137%	90	97	63
	JUN-JUL	41	45	48	133%	51	56	36
	JUN-SEP	50	56	60	133%	64	71	45
South Boulder Ck nr Eldorado Springs ²	APR-JUL	46	53	58	149%	64	73	39
	APR-SEP	49	57	64	149%	71	83	43
	JUN-JUL	18.9	26	31	135%	37	46	23
	JUN-SEP	22	30	37	137%	44	56	27
Big Thompson R at Canyon Mouth ²	APR-JUL	104	112	120	133%	126	138	90
	APR-SEP	116	128	138	129%	146	162	107
	JUN-JUL	61	70	77	122%	84	95	63
	JUN-SEP	74	86	95	119%	104	119	80
Cache La Poudre at Canyon Mouth ²	APR-JUL	320	355	375	167%	400	435	225
	APR-SEP	340	375	400	160%	430	470	250
	JUN-JUL	162	193	215	150%	240	275	143
	JUN-SEP	181	215	240	145%	270	310	165

1) 90% and 10% exceedance probabilities are actually 95% and 5%
 2) Forecasts are for unimpaired flows. Actual flow will be dependent on management of upstream reservoirs and diversions
 3) Median value used in place of average

Reservoir Storage End of May, 2014	Current (KAF)	Last Year (KAF)	Average (KAF)	Capacity (KAF)
ANTERO RESERVOIR	16.2	17.9	15.2	19.9
BARR LAKE	28.8	26.7	28.2	30.1
BLACK HOLLOW RESERVOIR	4.6	2.9	3.6	6.5
BOYD LAKE	42.5	21.6	35.4	48.4
CACHE LA POUFRE	10.6	9.8	8.8	10.1
CARTER LAKE	106.1	94.7	95.2	108.9
CHAMBERS LAKE	7.9	4.9	5.5	8.8
CHEESMAN LAKE	79.6	57.5	70.3	79.0
COBB LAKE	22.0	11.7	12.6	22.3
ELEVENMILE CANYON RESERVOIR	99.7	97.2	97.3	98.0
EMPIRE RESERVOIR	36.5	30.3	29.4	36.5
FOSSIL CREEK RESERVOIR	9.8	10.7	8.3	11.1
GROSS RESERVOIR	38.7	29.8	29.6	41.8
HALLIGAN RESERVOIR	6.4	6.4	6.0	6.4
HORSECREEK RESERVOIR	11.4	4.6	12.9	14.7
HORSE CREEK RESERVOIR	147.4	119.0	114.2	149.7
JACKSON LAKE RESERVOIR	26.1	25.0	26.1	26.1
JULESBURG RESERVOIR	19.3	19.3	19.0	20.5
LAKE LOVELAND RESERVOIR	10.1	9.8	8.5	10.3
LONE TREE RESERVOIR	8.6	8.2	8.1	8.7
MARIANO RESERVOIR	5.2	5.0	4.7	5.4
MARSHALL RESERVOIR	9.6	9.5	8.8	10.0
MARSTON RESERVOIR	0.1	11.5	9.7	13.0
MILTON RESERVOIR	22.7	21.4	23.4	23.5
POINT OF ROCKS RESERVOIR	68.7	62.0	63.2	70.6
PREWITT RESERVOIR	24.0	20.9	22.0	28.2
RALPH PRICE RESERVOIR	12.1	15.4	16.2	16.2
RIVERSIDE RESERVOIR	52.8	50.0	48.5	55.8
SPINNEY MOUNTAIN RESERVOIR	38.3	28.9	33.1	49.0
STANDLEY RESERVOIR	41.2	36.5	39.1	42.0
TERRY RESERVOIR	7.2	7.8	4.9	8.0
UNION RESERVOIR	12.5	8.5	11.7	13.0
WINDSOR RESERVOIR	14.9	14.1	12.5	15.2
Basin-wide Total	1041.6	899.5	912.2	1107.7
# of reservoirs	33	33	32	33

Watershed Snowpack Analysis June 1, 2014	# of Sites	% Median	Last Year % Median
BIG THOMPSON BASIN	3	257%	104%
BOULDER CREEK BASIN	3	290%	146%
CACHE LA POUFRE BASIN	2	211%	96%
CLEAR CREEK BASIN	2	287%	178%
SAINT VRAIN BASIN	2		
UPPER SOUTH PLATTE BASIN	6	8900%	4325%
SOUTH PLATTE RIVER BASIN	18	311%	153%

YAMPA, WHITE, NORTH PLATTE AND LARAMIE RIVER BASINS as of June 1, 2014



*Based on selected stations

SUMMARY OF WATER SUPPLY CONDITIONS

SNOWPACK

June 1 snowpack readings in these basins were 176 percent of the median. With the exception of a large storm that dumped snow on the region over Mother's Day weekend, snowmelt dominated during the month of May. On June 1 the basins still had approximately 38 percent of their seasonal snowpack remaining.

PRECIPITATION

Precipitation recorded in the mountains during May was 131 percent of average and year-to-date precipitation remains above normal at 116 percent of average.

RESERVOIR

Storage volumes in these basins increased to 114 percent of average this month. Last year at this time storage was 105 percent of average.

STREAMFLOW FORECASTS

Current predictions for June to July runoff range from 151 percent of average for the Laramie River near Woods Landing to 83 percent of average for the White River near Meeker.

Yampa-White-North Platte River Basins Streamflow Forecasts - June 1, 2014

Forecast Exceedance Probabilities for Risk Assessment Chance that actual volume will exceed forecast

YAMPA-WHITE-NORTH PLATTE RIVER BASINS	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avg (KAF)
North Platte R nr Northgate	JUN-JUL	123	149	167	136%	185	210	123
	JUN-SEP	146	178	200	137%	220	255	146
Laramie R nr Woods ²	JUN-JUL	85	98	107	151%	116	129	71
	JUN-SEP	98	113	123	150%	133	148	82
Yampa R ab Stagecoach Reservoir ²	APR-JUL	31	33	34	148%	36	39	23
	JUN-JUL	5.1	7.3	9	105%	10.9	13.9	8.6
Yampa R at Steamboat Springs ²	APR-JUL	300	320	340	131%	360	390	260
	JUN-JUL	99	122	140	118%	159	188	119
Elk R nr Milner	APR-JUL	390	425	450	141%	475	515	320
	JUN-JUL	172	205	230	145%	255	295	159
Elkhead Ck ab Long Gulch	APR-JUL	69	73	76	104%	80	87	73
	JUN-JUL	4.6	8.6	12	115%	16	23	10.4
Yampa R nr Maybell ²	APR-JUL	1030	1110	1160	124%	1220	1310	935
	JUN-JUL	390	465	520	133%	575	665	390
Little Snake R nr Slater ²	APR-JUL	182	195	205	131%	215	230	156
	JUN-JUL	52	65	75	114%	86	102	66
Little Snake R nr Dixon ²	APR-JUL	310	345	370	107%	395	440	345
	JUN-JUL	83	115	140	104%	167	210	135
Little Snake R nr Lily ²	APR-JUL	285	325	360	104%	395	460	345
	JUN-JUL	81	122	155	116%	192	255	134
White R nr Meeker	APR-JUL	245	265	280	100%	295	315	280
	JUN-JUL	88	106	120	83%	135	158	144

1) 90% and 10% exceedance probabilities are actually 95% and 5%

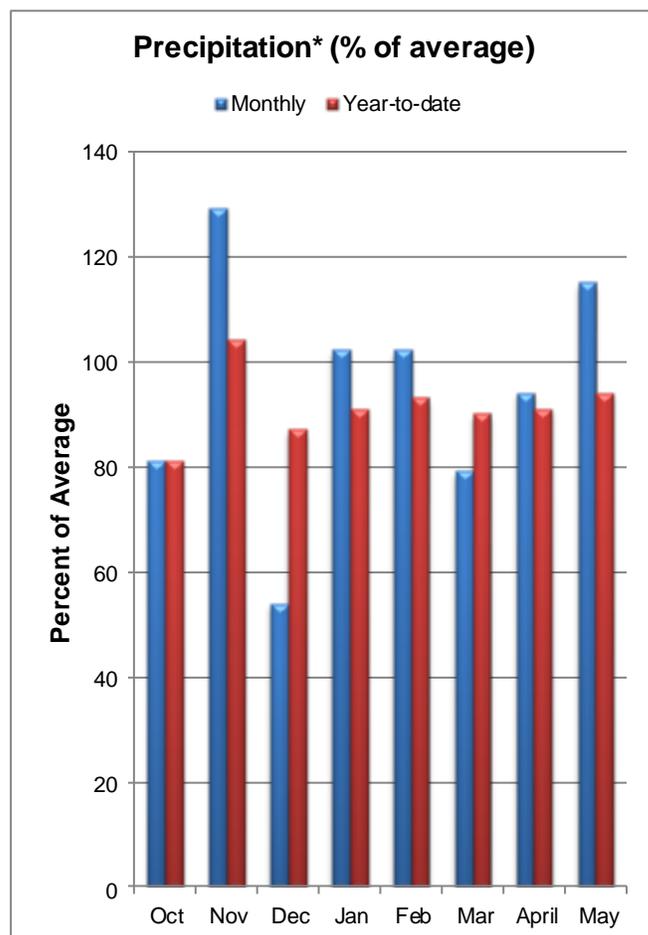
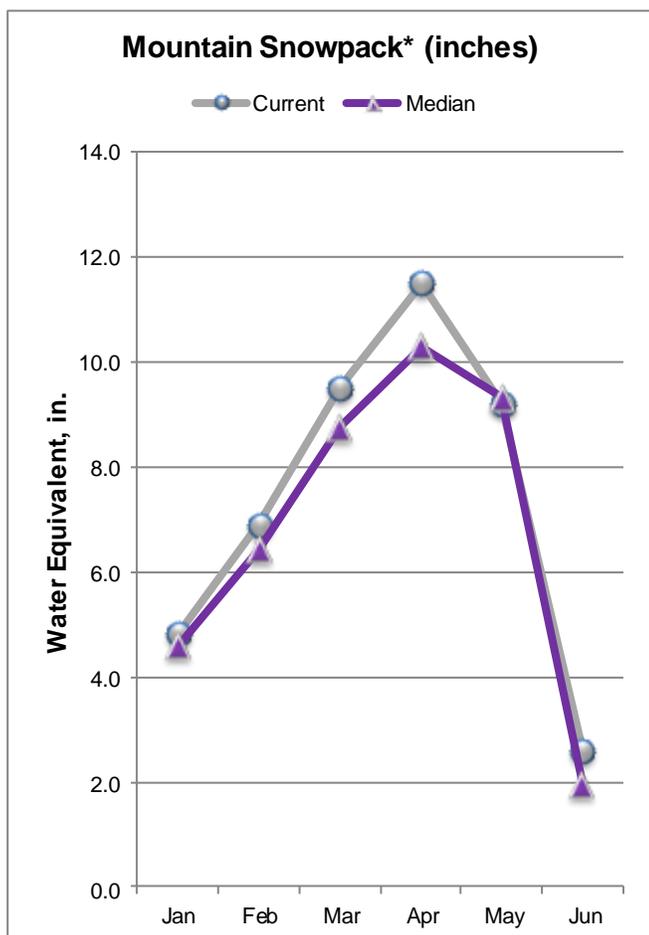
2) Forecasts are for unimpaired flows. Actual flow will be dependent on management of upstream reservoirs and diversions

3) Median value used in place of average

Reservoir Storage End of May, 2014	Current (KAF)	Last Year (KAF)	Average (KAF)	Capacity (KAF)
STAGECOACH RESERVOIR NR OAK CREEK	36.8	36.4	32.1	33.3
YAMCOLO RESERVOIR	8.1	5.2	7.4	8.7
Basin-wide Total	44.9	41.6	39.5	42.0
# of reservoirs	2	2	2	2

Watershed Snowpack Analysis June 1, 2014	# of Sites	% Median	Last Year % Median
LARAMIE RIVER BASIN	2	278%	83%
NORTH PLATTE RIVER BASIN	26	176%	79%
LARAMIE & NORTH PLATTE RIVER BASINS	10	193%	82%
ELK RIVER BASIN	2		
YAMPA RIVER BASIN	9	157%	81%
WHITE RIVER BASIN	4	129%	85%
YAMPA & WHITE RIVER BASINS	12	139%	75%
LITTLE SNAKE RIVER BASIN	7	161%	63%
YAMPA-WHITE-NORTH PLATTE RIVER BASINS	26	176%	79%

ARKANSAS RIVER BASIN as of June 1, 2014



*Based on selected stations

SUMMARY OF WATER SUPPLY CONDITIONS

SNOWPACK

The snowpack in the Arkansas River basin remains quite variable. As of June 1 the Purgatoire sub-basin had completely melted out and the Cucharas and Huerfano tributaries were at just 38 percent of median. The headwaters portion of the basin on the other hand was at 143 percent of median which put the basin wide snowpack at 132 percent of median.

PRECIPITATION

The basin received above normal precipitation during May, with totals at 115 percent of average for the month. Year-to-date precipitation remains near normal at 94 percent of average.

RESERVOIR

Storage volumes declined again for the second consecutive month in the basin. Total storage at the end of May was just 56 percent of average.

STREAMFLOW FORECASTS

Streamflow forecasts continue to follow the snowpack trends within the basin. The latest June to July predictions range from 101 percent of average for the Arkansas River at Salida to 58 percent of average for the Cucharas River near La Veta.

Arkansas River Basin Streamflow Forecasts - June 1, 2014

Forecast Exceedance Probabilities for Risk Assessment
Chance that actual volume will exceed forecast

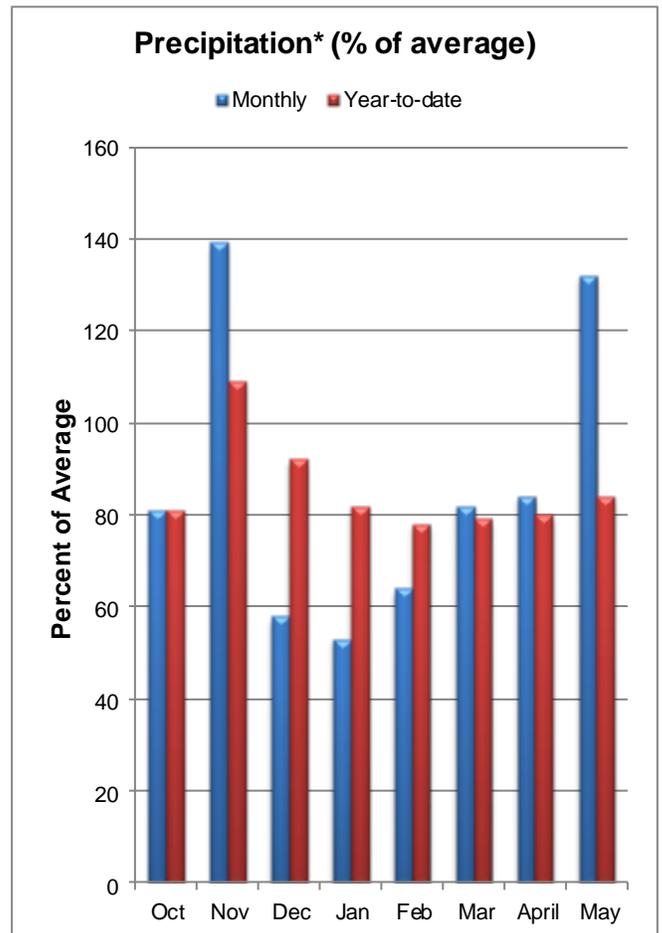
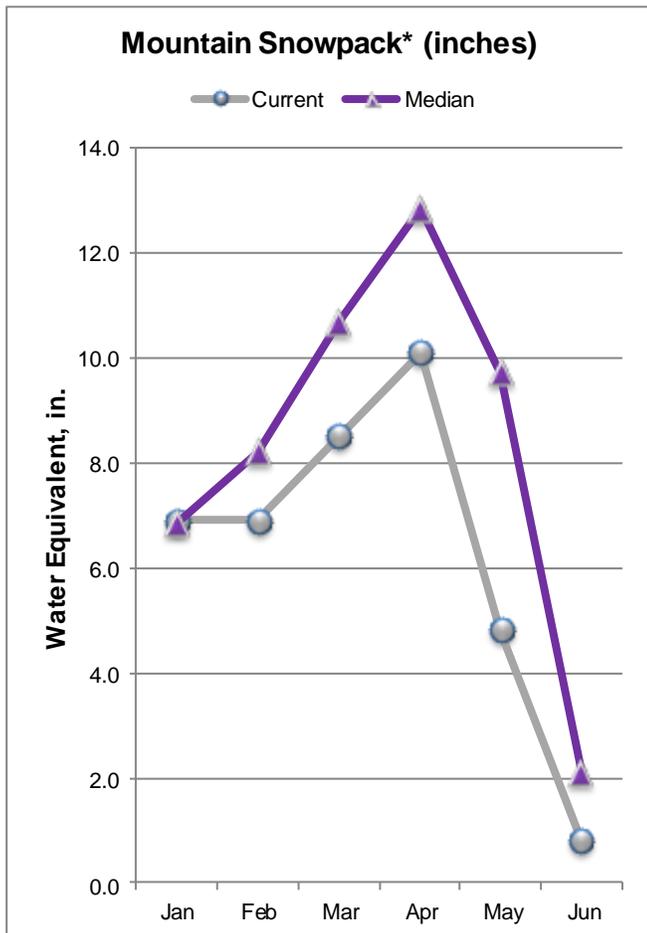
ARKANSAS RIVER BASIN	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avg (KAF)
Chalk Ck nr Nathrop	APR-JUL	15.3	18.8	21	100%	24	30	21
	APR-SEP	17.4	22	26	100%	30	37	26
	JUN-JUL	8.5	12	14.7	90%	17.7	23	16.3
	JUN-SEP	10.6	15.2	19.2	91%	23	30	21
Arkansas R at Salida ²	APR-JUL	205	240	265	110%	295	340	240
	APR-SEP	230	280	315	107%	355	420	295
	JUN-JUL	114	149	175	101%	205	250	174
	JUN-SEP	138	188	225	98%	265	330	230
Grape Ck nr Westcliffe	APR-JUL	6.5	8.6	10.6	67%	13	17.2	15.9
	APR-SEP	8.2	11.4	14	71%	17.2	23	19.6
	JUN-JUL	1.68	3.8	5.8	70%	8.2	12.4	8.3
	JUN-SEP	3.4	6.6	9.2	77%	12.4	18.2	12
Pueblo Reservoir Inflow ²	APR-JUL	245	290	325	90%	360	415	360
	APR-SEP	300	365	410	90%	465	545	455
	JUN-JUL	142	185	220	92%	255	310	240
	JUN-SEP	197	260	305	91%	360	440	335
Huerfano R nr Redwing	APR-JUL	6	7.2	8.2	69%	9.3	11.2	11.9
	APR-SEP	7.7	9.6	11.1	73%	12.7	15.3	15.2
	JUN-JUL	2.6	3.8	4.8	68%	5.9	7.8	7.1
	JUN-SEP	4.3	6.2	7.7	74%	9.3	11.9	10.4
Cucharas R nr La Veta	APR-JUL	5.1	6	6.8	56%	7.7	9.1	12.2
	APR-SEP	6	7.1	8	57%	8.9	10.5	14.1
	JUN-JUL	1.79	2.7	3.5	58%	4.4	5.8	6
	JUN-SEP	2.7	3.8	4.7	60%	5.6	7.2	7.8
Trinidad Lake Inflow ²	MAR-JUL	17.4	21	24	65%	28	33	37
	APR-SEP	21	27	32	68%	38	48	47
	JUN-JUL	6.1	9.9	13	67%	16.5	22	19.4
	JUN-SEP	10.9	16.9	22	71%	28	38	31

- 1) 90% and 10% exceedance probabilities are actually 95% and 5%
- 2) Forecasts are for unimpaired flows. Actual flow will be dependent on management of upstream reservoirs and diversions
- 3) Median value used in place of average

Reservoir Storage End of May, 2014	Current (KAF)	Last Year (KAF)	Average (KAF)	Capacity (KAF)
ADOBE CREEK RESERVOIR	15.5	6.2	41.4	62.0
CLEAR CREEK RESERVOIR	7.9	7.1	7.5	11.4
CUCHARAS RESERVOIR			6.0	40.0
GREAT PLAINS RESERVOIR	0.0	0.0	37.4	150.0
HOLBROOK LAKE	0.1	0.0	4.1	7.0
HORSE CREEK RESERVOIR	0.0	0.0	9.9	27.0
JOHN MARTIN RESERVOIR	26.0	20.5	141.9	616.0
LAKE HENRY	4.6	1.1	6.3	8.0
MEREDITH RESERVOIR	12.5	9.0	26.8	42.0
PUEBLO RESERVOIR	183.7	147.6	186.4	354.0
TRINIDAD LAKE	14.1	10.6	29.3	167.0
TURQUOISE LAKE	53.2	42.3	82.3	127.0
TWIN LAKES RESERVOIR	33.5	29.0	54.9	86.0
Basin-wide Total	351.1	273.3	634.2	1697.4
# of reservoirs	12	12	13	13

Watershed Snowpack Analysis June 1, 2014	# of Sites	% Median	Last Year % Median
UPPER ARKANSAS BASIN	3	143%	96%
CUCHARAS & HUERFANO BASINS	3	38%	0%
PURGATOIRE RIVER BASIN	2		
ARKANSAS RIVER BASIN	8	132%	86%

UPPER RIO GRANDE RIVER BASIN as of June 1, 2014



*Based on selected stations

SUMMARY OF WATER SUPPLY CONDITIONS

SNOWPACK

On June 1 the mountains in the Upper Rio Grande basin were very close to being snow free. The only area reporting any snow was the headwaters portion of the basin whose snowpack was just 39 percent of median. The basin will likely melt out around two weeks earlier than normal this year.

PRECIPITATION

In May the basin received above normal precipitation for the first month since November. May precipitation totals were 132 percent of average which boosted year-to-date precipitation up to 84 percent of average.

RESERVOIR

Storage volumes increased slightly over the last month and totals were 63 percent of average but just 24 percent of capacity at the end of May.

STREAMFLOW FORECASTS

Overall streamflow predictions remain consistent with those issued last month. June to September streamflow forecasts currently range from 97 percent of average for Saguache Creek near Saguache to just 17 percent of average for the San Antonio River at Ortiz.

Upper Rio Grande Basin Streamflow Forecasts - June 1, 2014

 Forecast Exceedance Probabilities for Risk Assessment
 Chance that actual volume will exceed forecast

UPPER RIO GRANDE BASIN	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avg (KAF)
Rio Grande at Thirty Mile Bridge ²	APR-JUL	80	87	92	81%	97	106	113
	APR-SEP	85	94	101	78%	108	120	129
	JUN-JUL	28	35	40	59%	45	54	68
	JUN-SEP	33	42	49	58%	56	68	84
Rio Grande at Wagon Wheel Gap ²	APR-SEP	245	270	285	84%	305	335	340
	JUN-SEP	87	111	128	61%	147	176	210
SF Rio Grande at South Fork ²	APR-SEP	89	94	98	77%	102	108	127
	JUN-SEP	21	26	30	46%	34	40	65
Rio Grande nr Del Norte ²	APR-SEP	345	385	420	82%	455	510	515
	JUN-SEP	95	136	168	55%	205	260	305
Saguache Ck nr Saguache	APR-SEP	25	29	32	100%	36	41	32
	JUN-SEP	12.1	16.2	19.4	97%	23	28	20
Alamosa Ck ab Terrace Reservoir	APR-SEP	39	43	45	66%	48	53	68
	JUN-SEP	9	12.4	15	39%	17.9	23	38
La Jara Ck nr Capulin	MAR-JUL	4.1	4.5	4.9	55%	5.3	6	8.9
	JUN-JUL	0.39	0.8	1.15	50%	1.57	2.3	2.3
Trinchera Ck ab Turners Ranch	APR-SEP	4.8	5.4	5.9	47%	6.5	7.4	12.6
	JUN-SEP	1.94	2.6	3.1	40%	3.7	4.6	7.8
Sangre de Cristo Ck ²	APR-SEP	4.8	5.3	5.8	36%	6.4	7.6	16.3
	JUN-SEP	0.18	0.65	1.15	23%	1.78	3	5
Ute Ck nr Fort Garland	APR-SEP	5	6	7	55%	8.1	10	12.8
	JUN-SEP	1.25	2.3	3.3	41%	4.4	6.3	8
Platoro Reservoir Inflow	APR-JUL	35	38	40	71%	42	46	56
	APR-SEP	36	40	43	69%	46	52	62
	JUN-JUL	12.1	15.1	17.4	50%	19.9	24	35
	JUN-SEP	13.7	17.8	21	51%	24	30	41
Conejos R nr Mogote ²	APR-SEP	110	122	131	68%	141	157	194
	JUN-SEP	35	47	56	50%	66	82	112
San Antonio R at Ortiz	APR-SEP	4.7	4.8	4.9	31%	5.1	5.4	15.6
	JUN-SEP	0.01	0.1	0.21	17%	0.37	0.69	1.25
Los Pinos R nr Ortiz	APR-SEP	35	37	42	58%	49	65	73
	JUN-SEP	0	2.1	6.8	28%	14.3	30	24
Culebra Ck at San Luis	APR-SEP	5.7	8.1	10.1	44%	12.6	16.9	23
	JUN-SEP	2.1	4.5	6.5	44%	9	13.3	14.9
Costilla Reservoir Inflow	MAR-JUL	5.7	6.2	6.6	59%	7	7.6	11.1
	JUN-JUL	2.4	2.9	3.3	62%	3.7	4.3	5.3
Costilla Ck nr Costilla ²	MAR-JUL	12.1	13.2	13.9	53%	14.8	16.1	26
	JUN-JUL	3.5	4.6	5.3	54%	6.2	7.5	9.9

1) 90% and 10% exceedance probabilities are actually 95% and 5%

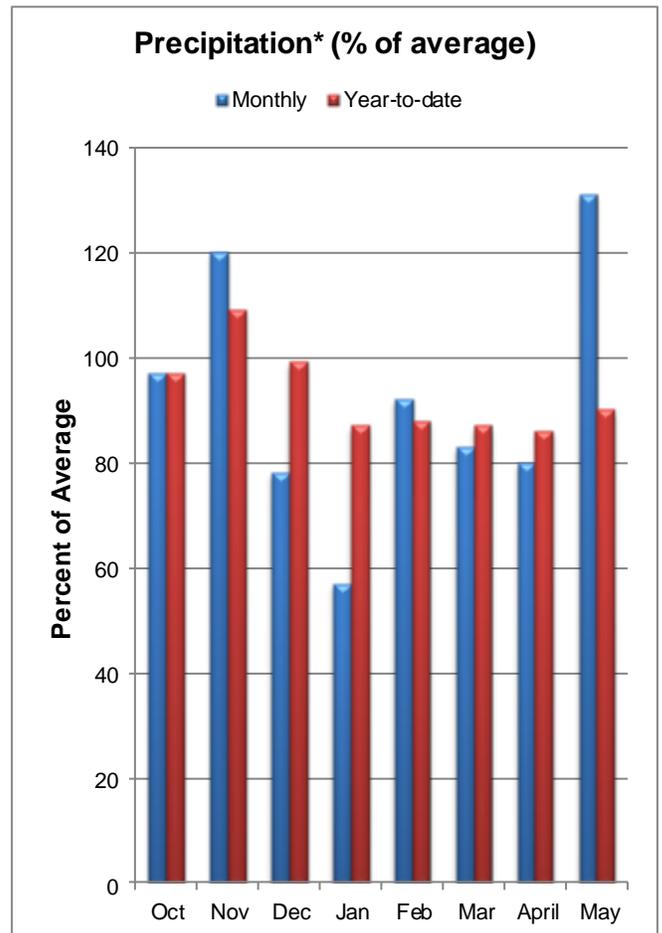
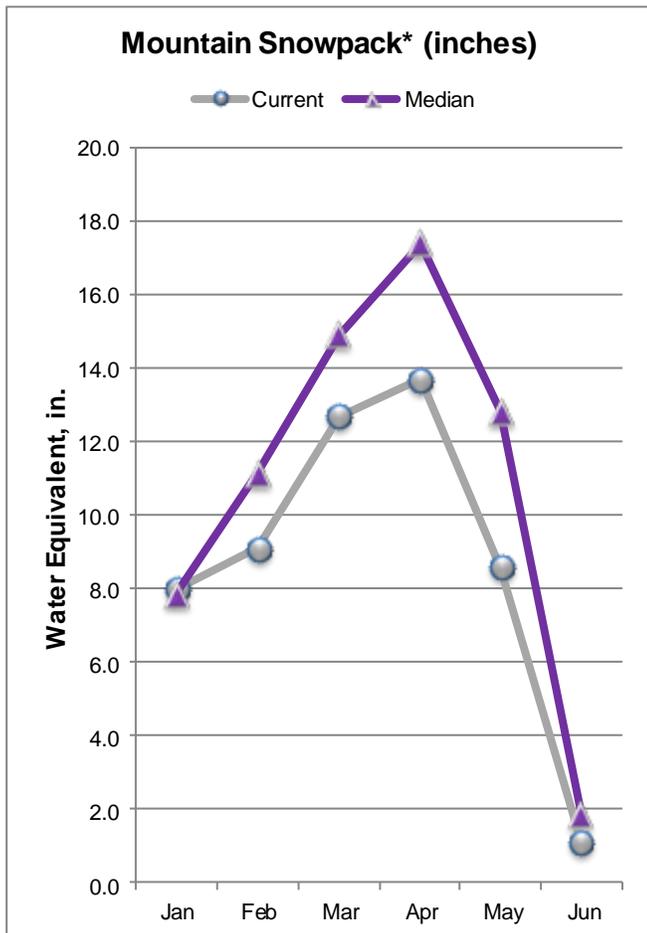
2) Forecasts are for unimpaired flows. Actual flow will be dependent on management of upstream reservoirs and diversions

3) Median value used in place of average

Reservoir Storage End of May, 2014	Current (KAF)	Last Year (KAF)	Average (KAF)	Capacity (KAF)
BEAVER RESERVOIR	0.0	2.0	4.2	4.5
CONTINENTAL RESERVOIR	4.8	8.4	7.7	27.0
PLATORO RESERVOIR	10.1	8.9	28.7	60.0
RIO GRANDE RESERVOIR	28.1	6.6	23.9	51.0
SANCHEZ RESERVOIR	7.3	6.2	30.8	103.0
SANTA MARIA RESERVOIR	15.6	6.8	11.3	45.0
TERRACE RESERVOIR	7.5	4.3	9.1	18.0
Basin-wide Total	73.4	43.3	115.7	308.5
# of reservoirs	7	7	7	7

Watershed Snowpack Analysis June 1, 2014	# of Sites	% Median	Last Year % Median
ALAMOSA CREEK BASIN	1		
CONEJOS & RIO SAN ANTONIO BASINS	2		
CULEBRA & TRINCHERA BASINS	3		
HEADWATERS RIO GRANDE RIVER BASIN	6	39%	2%
UPPER RIO GRANDE BASIN	12	39%	2%

SAN MIGUEL, DOLORES, ANIMAS, AND SAN JUAN RIVER BASINS as of June 1, 2014



*Based on selected stations

SUMMARY OF WATER SUPPLY CONDITIONS

SNOWPACK

Snowmelt is in full swing in these basins. The snowpack in general has remained below normal since early January and as of June 1 was at just 59 percent of the median. The Dolores and San Miguel sub-basins reported no snow this month.

PRECIPITATION

For the first time since November these basins recorded above normal monthly precipitation! May precipitation was 131 percent of average which boosted year-to-date precipitation up to 90 percent of average.

RESERVOIR

Rapid snowmelt and significant precipitation this past month have increased reservoir storage volumes in the region. Current storage is at 89 percent of average and 77 percent of capacity.

STREAMFLOW FORECASTS

Forecasts for June to July range from 107 percent of average for the San Miguel River near Placerville to 41 percent of average for both the Rio Blanco at Blanco Diversion and the Inflow to Navajo Reservoir.

San Miguel-Dolores-Animas-San Juan River Basins Streamflow Forecasts - June 1, 2014

 Forecast Exceedance Probabilities for Risk Assessment
 Chance that actual volume will exceed forecast

SAN MIGUEL-DOLORES-ANIMAS-SAN JUAN RIVER BASINS	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avg (KAF)
Dolores R at Dolores	APR-JUL	160	172	181	74%	191	205	245
	JUN-JUL	47	59	68	74%	78	93	92
McPhee Reservoir Inflow	APR-JUL	171	182	190	64%	198	210	295
	JUN-JUL	51	62	70	72%	78	92	97
San Miguel R nr Placerville	APR-JUL	107	119	127	99%	136	150	128
	JUN-JUL	60	72	80	107%	89	103	75
Cone Reservoir Inlet	APR-JUL	1.18	2.1	3	100%	4.1	6.1	3
	JUN-JUL	0.38	0.8	1.2	97%	1.72	2.7	1.24
Gurley Reservoir Inlet	APR-JUL	11.9	14.6	16.6	101%	18.8	22	16.4
	JUN-JUL	3.2	4.6	5.8	104%	7.2	9.5	5.6
Lilylands Reservoir Inlet	APR-JUL	1.29	1.69	2	104%	2.4	2.9	1.92
	JUN-JUL	0.38	0.58	0.75	103%	0.95	1.3	0.73
Rio Blanco at Blanco Diversion ²	APR-JUL	28	31	33	61%	36	41	54
	JUN-JUL	4.2	7.1	9.5	41%	12.2	16.9	23
Navajo R at Oso Diversion ²	APR-JUL	27	31	34	52%	37	42	65
	JUN-JUL	6.9	10.6	13.5	45%	16.8	22	30
San Juan R nr Carracas ²	APR-JUL	184	200	210	55%	225	245	380
	JUN-JUL	42	58	70	44%	83	104	158
Piedra R nr Arboles	APR-JUL	122	129	134	64%	140	149	210
	JUN-JUL	24	31	36	49%	42	51	74
Vallecito Reservoir Inflow	APR-JUL	131	138	143	74%	148	157	194
	JUN-JUL	43	50	55	56%	60	69	99
Navajo Reservoir Inflow ²	APR-JUL	375	400	415	56%	435	470	735
	JUN-JUL	75	100	118	41%	138	170	290
Animas R at Durango	APR-JUL	290	330	355	86%	385	435	415
	JUN-JUL	120	157	185	84%	215	265	220
Lemon Reservoir Inflow	APR-JUL	34	37	39	71%	42	45	55
	JUN-JUL	9.7	12.7	15	56%	17.5	21	27
La Plata R at Hesperus	APR-JUL	10.2	11	11.6	50%	12.3	13.4	23
	JUN-JUL	2.6	3.4	4	47%	4.7	5.8	8.5
Mancos R nr Mancos ²	APR-JUL	11	12.7	14.1	45%	15.7	18.4	31
	JUN-JUL	2.4	4.1	5.5	53%	7.1	9.8	10.4

1) 90% and 10% exceedance probabilities are actually 95% and 5%

2) Forecasts are for unimpaired flows. Actual flow will be dependent on management of upstream reservoirs and diversions

3) Median value used in place of average

Reservoir Storage End of May, 2014	Current (KAF)	Last Year (KAF)	Average (KAF)	Capacity (KAF)
GROUNDHOG RESERVOIR	15.1	10.5	18.2	22.0
JACKSON GULCH RESERVOIR	6.4	3.6	9.5	10.0
LEMON RESERVOIR	33.3	14.7	32.1	40.0
MCPHEE RESERVOIR	270.0	215.6	344.7	381.0
NARRAGUINNEP RESERVOIR	16.6	9.3	17.3	19.0
TROUT LAKE RESERVOIR	1.2	1.7	2.2	3.2
VALLECITO RESERVOIR	122.5	80.3	100.7	126.0
Basin-wide Total	465.1	335.8	524.7	601.2
# of reservoirs	7	7	7	7

Watershed Snowpack Analysis June 1, 2014	# of Sites	% Median	Last Year % Median
ANIMAS RIVER BASIN	9	80%	0%
DOLORES RIVER BASIN	5		
SAN MIGUEL RIVER BASIN	3		
SAN JUAN RIVER BASIN	19	59%	2%
SAN MIGUEL-DOLORES-ANIMAS-SAN JUAN RIVER BASINS	19	59%	2%



Denver Federal Center, Bldg 56, Rm 2604
PO Box 25426
Denver, CO 80225-0426

In addition to the basin outlook reports, water supply forecast information for the Western United States is available from the Natural Resources Conservation Service and the National Weather Service monthly, January through May. The information may be obtained from the Natural Resources Conservation Service web page at <http://www.wcc.nrcs.usda.gov/wsf/westwide.html>

Issued by

Jason Weller
Chief
Natural Resources Conservation Service
U.S. Department of Agriculture

Released by

Phyllis Ann Philipps
State Conservationist
Natural Resources Conservation Service
Lakewood, Colorado

Colorado
Basin Outlook Report
Natural Resources Conservation Service
Lakewood, CO