

Colorado Basin Outlook Report January 1, 2013



Photo taken by Lars Santana, Range Management Specialist out of Montrose, CO, on 3/30/2010 at the Lake City snow course near Lake City, CO. Uncompahgre Peak is shown in the background.

REMINDER:

We are soliciting field work photos from our snow surveyors this year. Each month we will pick one to grace the cover of this report! The photographer will be given proper credit of course. Please include information on where, when and of who/what the photo was taken.

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

For more water supply and resource management information, contact:

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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.

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Colorado Water Supply Outlook Report January 1, 2013

Summary

The water year got off to a very slow start in Colorado. With winter storm tracks failing to favor us, snowpack and mountain precipitation were tracking well below normal throughout October and November. Winter finally arrived to Colorado in mid December and conditions steadily improved throughout the month. Unfortunately it was not quite enough, and as of January 1, snowpack readings remain below normal in all of the state's major river basins. Due to the dry start to the water year, water supplies are currently expected to be below normal across the state this spring and summer. Adding to the water supply concerns, statewide reservoir storage is well below average as a result of last year's poor snowpack and drought conditions. While it is still early in the season and anything can happen, water users should pay close attention to this winter's weather patterns as well as the state's snowpack and plan accordingly.

Snowpack

Dry conditions across Colorado during the fall and early winter season have resulted in below normal snowpack totals statewide. The storm systems that moved across the state in mid to late December greatly improved statewide totals; boosting the statewide snowpack from just 36 percent of normal on December 1 to 70 percent of normal on January 1. While this was a welcome change to the persisting dry weather patterns, as you can see, it was not nearly enough to bring statewide snowpack totals to near normal conditions. Current readings are only 91 percent of last year's January 1 readings and this year's January 1 snowpack replaced 2012 as the fourth lowest recorded in the last 32 years. The highest snowpack readings, as a percent of normal, are in the combined Yampa, White and North Platte basins. They recorded a snowpack at 85 percent of normal as of January 1. The lowest reading statewide is 61 percent of normal recorded in the Arkansas basin. In general, the Colorado, Gunnison and Yampa, White and North Platte basins have a slightly better snowpack than they had last year at this same time. The South Platte, Arkansas, Upper Rio Grande and combined southwest basins (San Juan, San Miguel, Animas, & Dolores) have received less snow this year compared to what they had accumulated last year on January 1. Given the current snowpack deficit, the state needs to receive above normal snowfall over the next few months in order to reach normal conditions by spring.

Precipitation

Precipitation in the mountains of Colorado was sparse during October, November, and the first part of December. Statewide monthly precipitation totals measured at SNOTEL sites were just 50 percent of average for October, and only 41 percent of average for November. The state finally received some moisture in mid December and total precipitation for the month of December ended up at 112 percent of average. Conditions were fairly consistent across the state during these months, with some variability during December. Monthly precipitation for December ranged from 99 percent of average in the Arkansas basin to 123 percent of average in the combined Yampa, White and North Platte basins. Year to date precipitation totals reflect the dry conditions in October and November. Statewide totals as of January 1 are just 68 percent of average. The combined San Miguel, Dolores, Animas, and San Juan basins have received the lowest precipitation, as a percent of average, at 59 percent of average. The Yampa, White and North Platte basins came in with the highest totals on January 1, as a percent of average, at 81 percent of average.

Reservoir Storage

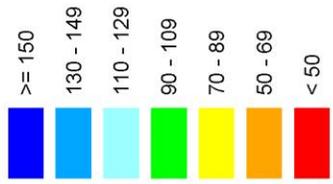
As a result of last year's well below average runoff, Colorado's statewide reservoir storage has been tracking below average since the end of May 2012. Storage volumes have dropped from 3,716,000 acre-feet at the end of May 2012 to 2,292,000 acre-feet reported at the end of December. Current storage volumes are only 68 percent of average and 65 percent of last year's volumes at this same time. The lowest storage volumes, as a percent of average, are reported in the Upper Rio Grande basin, at just 50 percent of average. The only basins currently reporting average reservoir volumes for this time of year are the combined Yampa, White and North Platte basins. The Arkansas River basin is currently storing volumes at 56 percent of average. Reservoir storage throughout the remainder of the state is below average as well, with the remaining basins reporting between 66 to 77 percent of average.

Streamflow

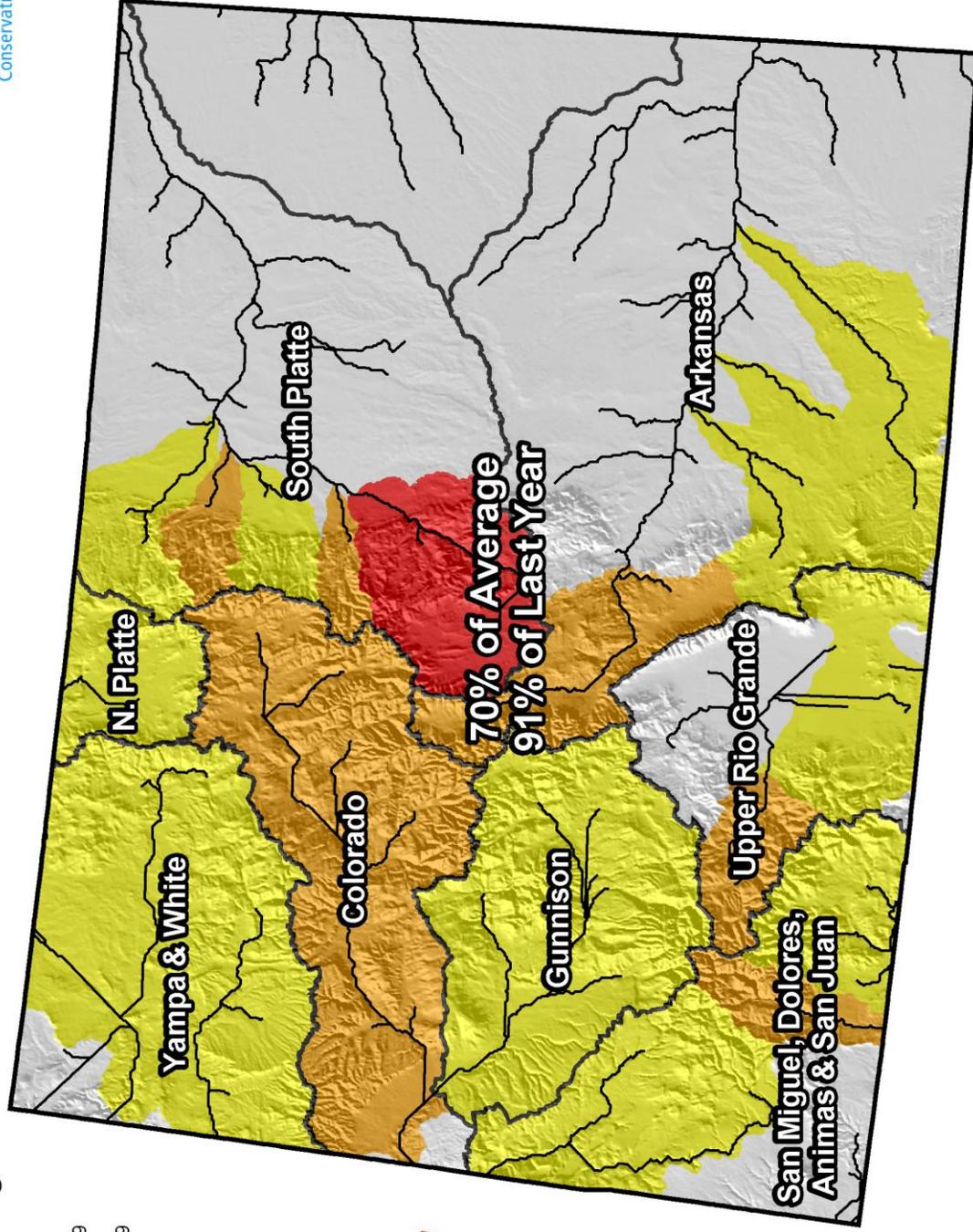
The first seasonal streamflow forecasts of the season reflect the below normal precipitation and snow accumulation received so far this water year. Across the state, seasonal streamflow volumes are expected to be below normal. Forecasts for the streams in Colorado's west slope basins range from just 47 percent of normal for Tomichi Creek at Gunnison, CO to 81 percent of normal flows expected for the Inflow to Willow Creek Reservoir in the headwaters of the Colorado River basin. Forecasts for the streams in the Arkansas and South Platte River basins are currently in the range of 50 to 70 percent of normal for the spring and summer season. The Upper Rio Grande basin currently has some of the lowest forecasts in the state; Sangre de Cristo Creek is expected to flow at just 36 percent of normal for the April to September period. And finally the basins in the southwest corner of the state are expected to see streamflow volumes ranging from 63 to 78 percent of normal this spring and summer.

Colorado Snowpack Map

Percent of Average

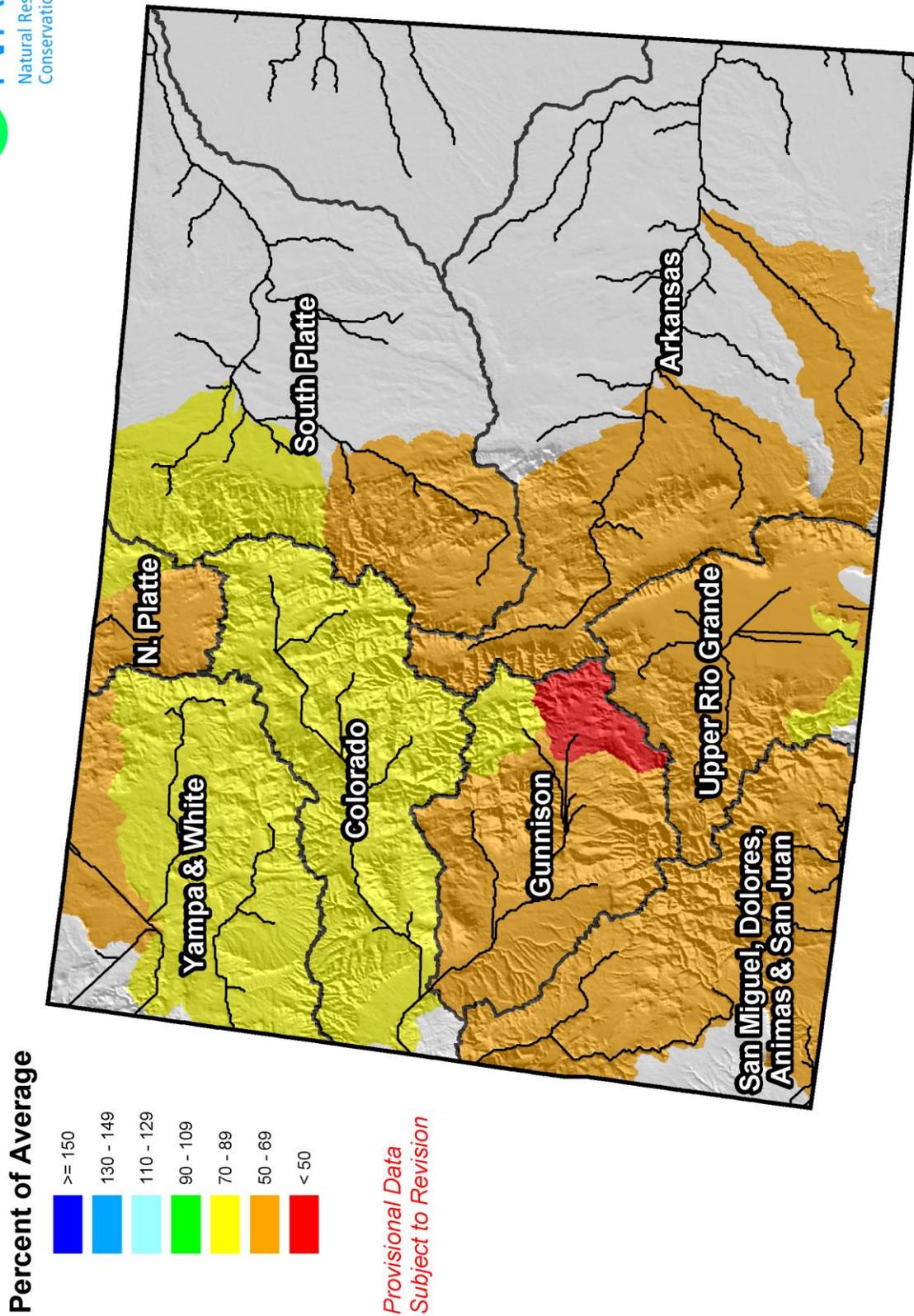


*Provisional Data
Subject to Revision*



Current as of January 1, 2013

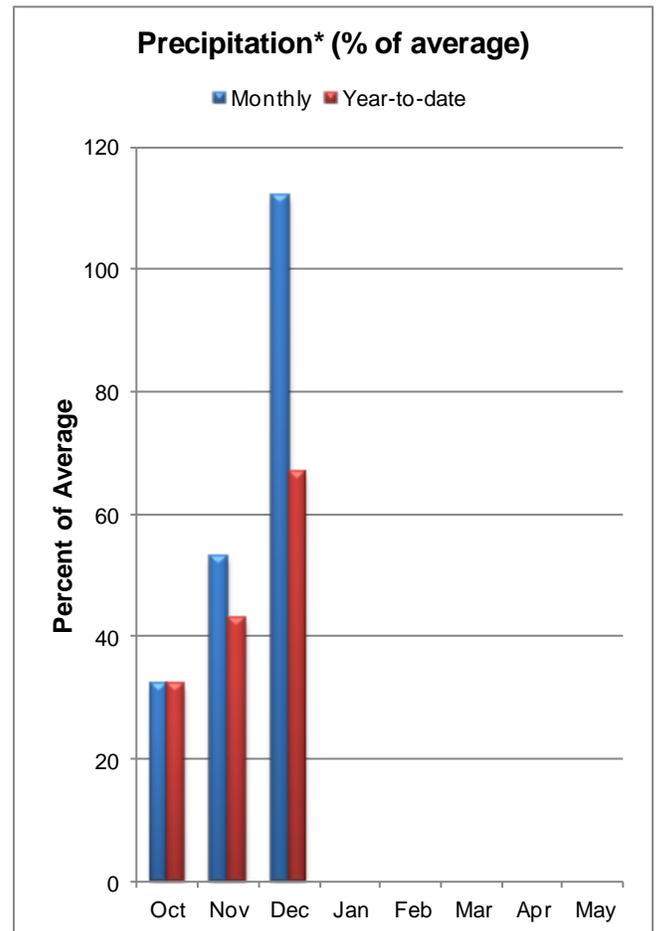
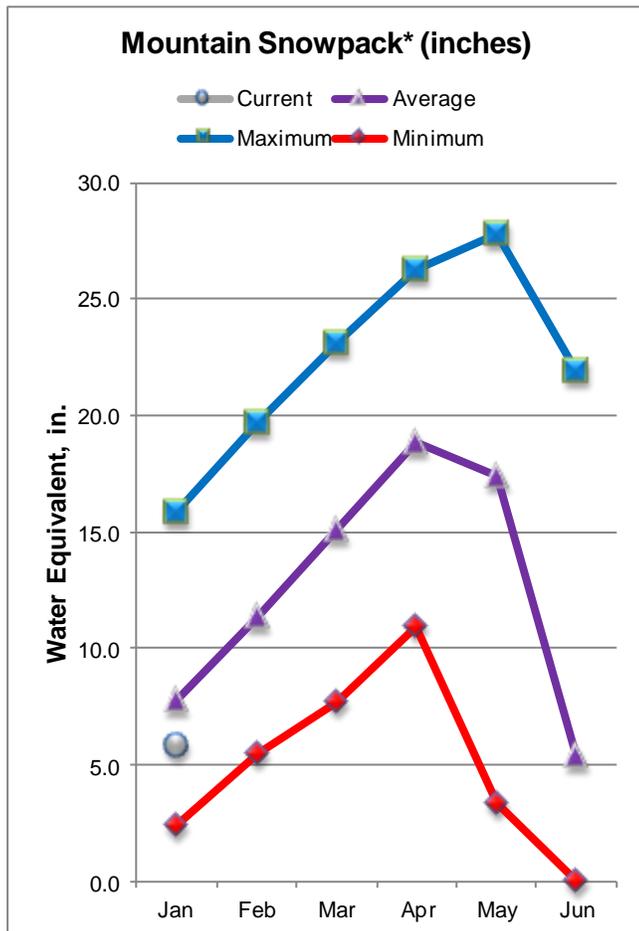
Colorado Streamflow Forecast Map



Current as of January 1, 2013

GUNNISON RIVER BASIN

as of January 1, 2013



*Based on selected stations

As far as water supply is concerned the 2013 water year got off to a slow start in the Gunnison River basin. Precipitation measured at the SNOTEL sites within the basin was well below average for both October and November; just 32 and 53 percent of average respectively. By December 1, year to date precipitation in the basin was just 43 percent of average and the snowpack measured only 38 percent of normal. Luckily, December finally brought some snowy weather to the basin and by January 1, the snowpack was at 74 percent of normal and year to date precipitation was 67 percent of average.

Reservoir storage in the basin has decreased significantly over the past spring and summer. Current storage in the basin is at 68 percent of average and 46 percent of capacity; last year at this same time reservoir storage was at 104 percent of average. The first streamflow forecasts of the season reflect the current snowpack and precipitation conditions within the basin. As of January 1 all April to July forecasts for the basin are well below normal. Streamflow volumes are currently forecast to range from just 47 percent of normal at Tomichi Creek in the headwaters of the Gunnison River to 78 percent of normal for the Slate River near Crested Butte, CO. Elsewhere in the basin forecasts were 57 percent of normal for the Inflow to Paonia Reservoir and 61 percent of normal for the Uncompahgre River at Colona, CO.

GUNNISON RIVER BASIN
Streamflow Forecasts - January 1, 2013

Forecast Point	Forecast Period	Future Conditions						30-Yr Avg. (1000AF)
		<<===== Drier =====>>		=====		>>===== Wetter =====>>		
		90% (1000AF)	70% (1000AF)	Chance Of Exceeding * 50% (1000AF) (% AVG.)		30% (1000AF)	10% (1000AF)	
Taylor Park Reservoir Inflow (2)	APR-JUL	41	57	70	71	84	107	99
Slate R nr Crested Butte	APR-JUL	40	54	65	78	77	96	83
East R at Almont	APR-JUL	75	108	135	74	165	215	182
Gunnison R near Gunnison (2)	APR-JUL	131	200	260	70	325	435	370
Tomichi Ck at Sargents	APR-JUL	7.0	13.4	19.0	63	26	37	30
Cochetopa Ck bl Rock Ck nr Parlin	APR-JUL	2.0	4.9	7.6	51	10.9	16.7	15.0
Tomichi Ck at Gunnison	APR-JUL	8.5	22	35	47	51	79	74
Lake Fk at Gateview	APR-JUL	48	66	80	65	95	120	123
Blue Mesa Reservoir Inflow (2)	APR-JUL	205	320	415	62	520	705	675
Paonia Reservoir Inflow (2)	MAR-JUN	21	39	54	56	72	103	96
	APR-JUL	18.9	38	55	57	75	110	97
NF Gunnison R nr Somerset (2)	APR-JUL	98	147	187	65	230	305	290
Surface Ck at Cedaredge	APR-JUL	5.6	8.9	11.6	69	14.6	19.8	16.8
Ridgway Reservoir Inflow (2)	APR-JUL	40	56	68	67	81	103	101
Uncompahgre R at Colona (2)	APR-JUL	39	63	83	61	105	143	137
Gunnison R nr Grand Junction (2)	APR-JUL	375	630	840	57	1080	1490	1480

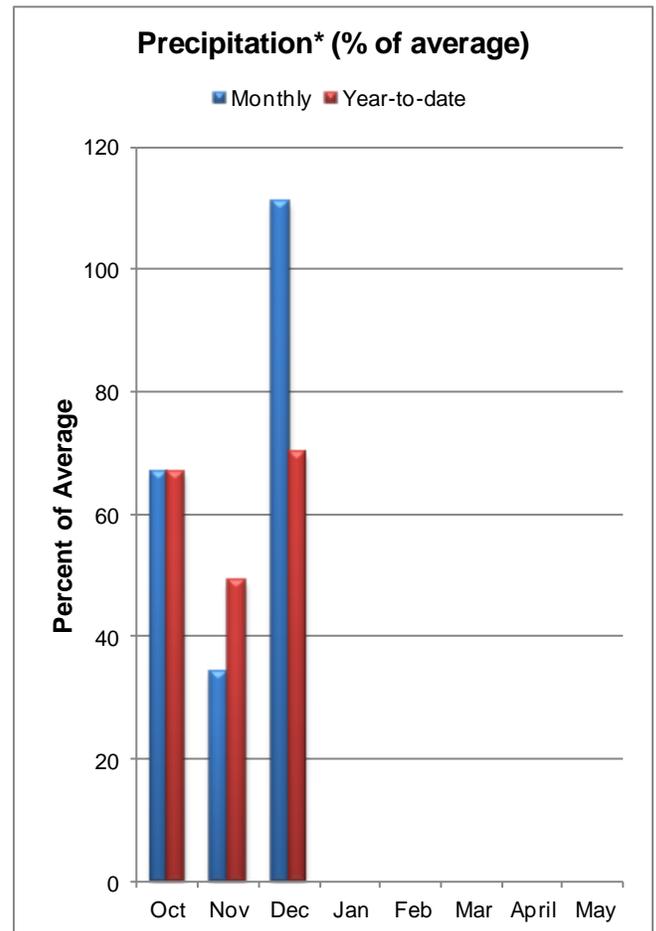
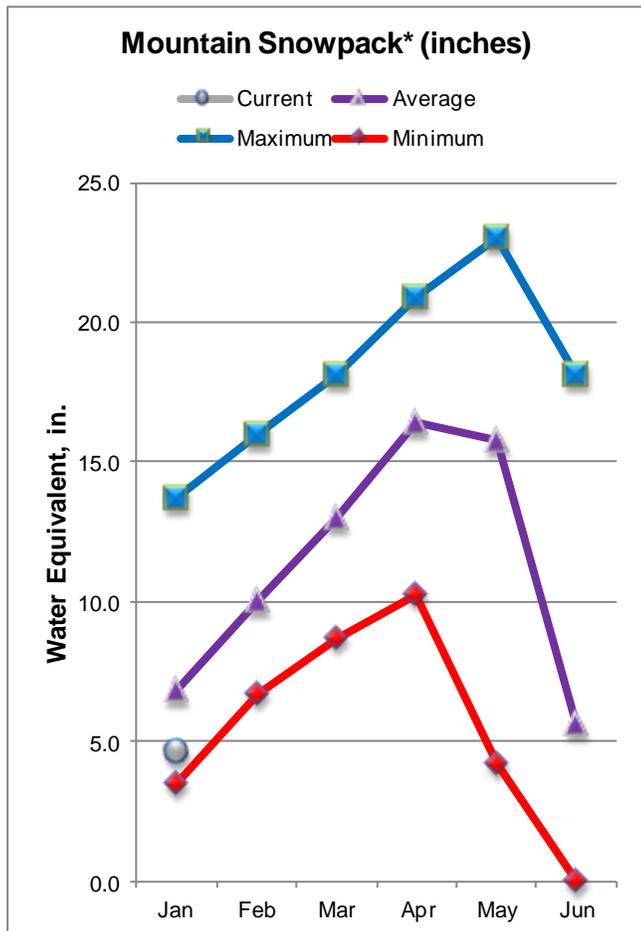
GUNNISON RIVER BASIN Reservoir Storage (1000 AF) - End of December					GUNNISON RIVER BASIN Watershed Snowpack Analysis - January 1, 2013			
Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
BLUE MESA	830.0	327.1	573.9	545.8	UPPER GUNNISON BASIN	9	113	72
CRAWFORD	14.0	1.3	5.4	7.5	SURFACE CREEK BASIN	2	141	82
FRUITGROWERS	3.6	0.9	2.7	2.8	UNCOMPAHGRE BASIN	3	97	77
FRUITLAND	9.2	0.0	2.0	1.3	TOTAL GUNNISON RIVER BASIN	12	108	74
MORROW POINT	121.0	106.4	113.0	113.4				
PAONIA	15.4	1.1	0.4	4.7				
RIDGWAY	83.0	54.3	68.8	60.1				
TAYLOR PARK	106.0	56.6	66.7	67.7				

* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

The average is computed for the 1981-2010 base period with the exception of reservoir storage which uses the 1971-2000 base period.

- (1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
- (2) - The value is natural volume - actual volume may be affected by upstream water management.
- (3) - Median value used in place of average.

UPPER COLORADO RIVER BASIN as of January 1, 2013



*Based on selected stations

As of January 1 the snowpack in the Colorado River basin measured just 68 percent of normal. Above average snow accumulation during the month of December helped boost the snowpack from just 31 percent of normal reported on December 1. Sub-basins were quite variable this month with snowpack reports ranging from 61 percent of normal in the Blue River basin to 91 percent of normal in the Muddy Creek drainage. Monthly precipitation measured in October and November was well below average; just 67 and 34 percent of average respectively. The month of December recorded precipitation that was 111 percent of average increasing the year to date precipitation total for the basin to 70 percent of average as of January 1.

In the Colorado basin reservoir storage volumes at the end of December were only 69 percent of average, which equates to a total of 559,000 acre-feet stored. Reservoir storage in the basin has declined just about every month since the end of May 2012, when storage was at 113 percent of average. Current forecasted streamflow volumes for April to July are below normal across the entire basin. They range from 69 percent of normal for the Inflow to Ruedi Reservoir to 81 percent of normal for the Inflow to Willow Creek Reservoir. In other parts of the basin, spring and summer streamflow is forecasted to be 75 percent of normal for the Blue River below Dillon, the Colorado River near Dotsero and the Eagle River below Gypsum.

UPPER COLORADO RIVER BASIN
Streamflow Forecasts - January 1, 2013

Forecast Point	Forecast Period	Future Conditions						30-Yr Avg. (1000AF)
		<<===== Drier =====>>		=====		>>===== Wetter =====>>		
		90% (1000AF)	70% (1000AF)	Chance Of Exceeding * 50% (1000AF) (% AVG.)		30% (1000AF)	10% (1000AF)	
Lake Granby Inflow (2)	APR-JUL	114	149	175	80	205	250	220
Willow Ck Reservoir Inflow (2)	APR-JUL	20	30	38	81	47	61	47
Williams Fk Reservoir Inflow (2)	APR-JUL	48	64	77	79	91	113	97
Dillon Reservoir Inflow (2)	APR-JUL	73	101	123	76	147	186	163
Green Mountain Reservoir Inflow (2)	APR-JUL	127	174	210	76	250	315	275
Muddy Ck bl Wolford Mtn Resv (2)	APR-JUL	18.5	30	39	72	49	67	54
Eagle R bl Gypsum (2)	APR-JUL	149	205	250	75	300	375	335
Colorado R nr Dotsero (2)	APR-JUL	615	860	1050	75	1260	1600	1400
Ruedi Reservoir Inflow (2)	APR-JUL	60	81	96	69	113	140	139
Roaring Fk at Glenwood Springs (2)	APR-JUL	285	400	485	70	580	735	690
Colorado R nr Cameo (2)	APR-JUL	970	1360	1660	71	1990	2540	2350

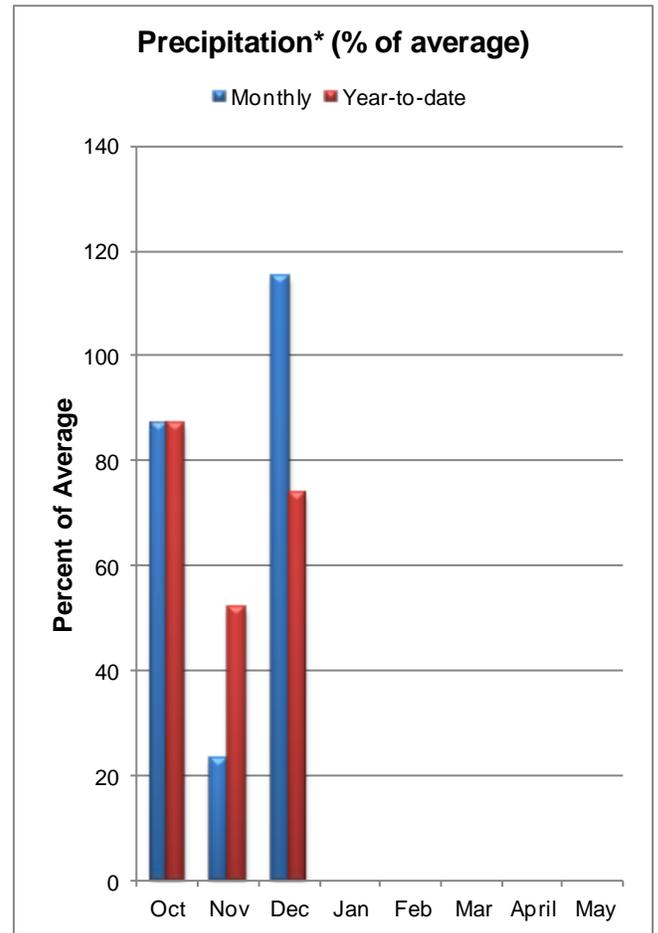
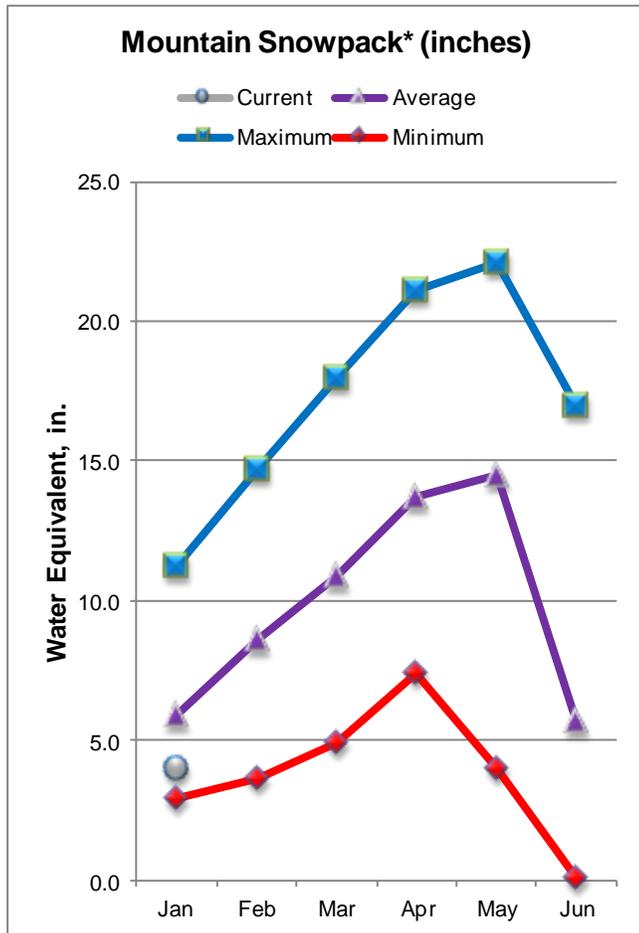
UPPER COLORADO RIVER BASIN Reservoir Storage (1000 AF) - End of December					UPPER COLORADO RIVER BASIN Watershed Snowpack Analysis - January 1, 2013			
Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
DILLON	254.0	178.2	240.8	224.8	BLUE RIVER BASIN	5	91	61
LAKE GRANBY	465.6	209.6	387.8	322.1	UPPER COLORADO RIVER BASI	14	102	67
GREEN MOUNTAIN	146.8	58.0	91.1	90.3	MUDDY CREEK BASIN	1	118	91
HOMESTAKE	43.0	0.3	23.9	28.4	PLATEAU CREEK BASIN	2	141	82
RUEDI	102.0	63.7	77.9	79.7	ROARING FORK BASIN	6	111	67
VEGA	32.9	7.8	16.7	11.0	WILLIAMS FORK BASIN	1	112	65
WILLIAMS FORK	97.0	43.0	80.1	62.9	WILLOW CREEK BASIN	2	96	87
WILLOW CREEK	9.1	6.3	6.6	6.1	TOTAL COLORADO RIVER BASI	22	107	68

* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

The average is computed for the 1981-2010 base period with the exception of reservoir storage which uses the 1971-2000 base period.

- (1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
- (2) - The value is natural volume - actual volume may be affected by upstream water management.
- (3) - Median value used in place of average.

SOUTH PLATTE RIVER BASIN as of January 1, 2013



*Based on selected stations

As of January 1, the snowpack in the South Platte Basin was just 67 percent of normal. The sub-basins varied widely, the Saint Vrain watershed reported the highest snowpack within the basin, at 72 percent of normal and the Upper South Platte basin reported the lowest, at only 49 percent of normal. Overall the snowpack in the basin is below where it was this time last year, with the current basin wide report at just 72 percent of last year's report. The month of December received precipitation totals in mountains of the basin that was 115 percent of average. Unfortunately it was not enough to recover completely from the deficit left by a dry October and November. October received precipitation that was 87 percent of average and November recorded precipitation totals at just 23 percent of the average. As a result, year to date precipitation is at 74 percent of the average in the South Platte basin as of January 1,

Based on data from 29 reservoirs within the South Platte basin; reservoir storage is at 77 percent of average and 55 percent of capacity. Storage in the basin has been below average since the end of May 2012. The recent forecasted April through July streamflow volumes for the basin reflect the current snowpack and precipitation conditions with all forecasts being below normal. Forecasts range from 54 percent normal for the Inflow to Antero Reservoir to 75 percent of normal for both the Cache la Poudre at Canyon Mouth and St. Vrain Creek at Lyons.

SOUTH PLATTE RIVER BASIN
Streamflow Forecasts - January 1, 2013

Forecast Point	Forecast Period	Future Conditions						30-Yr Avg. (1000AF)
		Drier		Future Conditions		Wetter		
		90% (1000AF)	70% (1000AF)	Chance Of Exceeding * 50% (1000AF) (% AVG.)		30% (1000AF)	10% (1000AF)	
Antero Reservoir Inflow (2)	APR-JUL	3.9	5.9	7.8	54	10.4	15.8	14.5
	APR-SEP	4.6	7.1	9.5	53	12.7	19.5	17.8
Spinney Mountain Res Inflow (2)	APR-JUL	16.1	24	31	65	40	60	48
	APR-SEP	19.0	29	39	64	52	80	61
Elevenmile Canyon Res Inflow (2)	APR-JUL	15.9	24	32	64	42	64	50
	APR-SEP	18.3	29	40	63	55	87	64
Cheesman Lake Inflow (2)	APR-JUL	33	49	64	64	84	126	100
	APR-SEP	39	59	78	62	104	158	126
South Platte R at South Platte (2)	APR-JUL	54	83	112	62	150	230	180
	APR-SEP	67	104	140	62	188	290	225
Bear Ck ab Evergreen	APR-JUL	4.6	7.4	10.3	63	14.3	23	16.4
	APR-SEP	6.6	10.4	14.1	67	19.2	30	21
Bear Ck at Morrison	APR-JUL	4.6	8.3	12.3	56	18.2	33	22
	APR-SEP	6.8	11.7	17.0	61	25	43	28
Clear Ck at Golden	APR-JUL	36	56	70	67	84	104	105
	APR-SEP	47	70	86	67	102	125	128
St. Vrain Ck at Lyons (2)	APR-JUL	46	58	66	75	74	86	88
	APR-SEP	56	69	78	76	87	100	103
Boulder Ck nr Orodell (2)	APR-JUL	29	35	40	74	45	51	54
	APR-SEP	32	40	46	73	52	60	63
S Boulder Ck nr Eldorado Springs(2)	APR-JUL	42	48	51	65	54	60	79
	APR-SEP	49	56	61	67	66	73	91
Big Thompson R at Canyon Mouth (2)	APR-JUL	45	57	66	73	75	87	90
	APR-SEP	56	72	82	77	92	108	107
Cache La Poudre at Canyon Mouth (2)	APR-JUL	93	138	169	75	200	245	225
	APR-SEP	103	154	188	75	220	275	250

SOUTH PLATTE RIVER BASIN
Reservoir Storage (1000 AF) - End of December

SOUTH PLATTE RIVER BASIN
Watershed Snowpack Analysis - January 1, 2013

Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
ANTERO	19.9	15.2	16.1	16.5	BIG THOMPSON BASIN	3	78	67
BARR LAKE	30.1	10.4	26.2	22.4	BOULDER CREEK BASIN	3	70	71
BLACK HOLLOW	6.5	2.3	3.9	3.8	CACHE LA POUFRE BASIN	2	69	70
BOYD LAKE		NO REPORT			CLEAR CREEK BASIN	1	96	65
BUTTON ROCK/RALPH PRICE	16.2	15.3	14.9	13.6	SAINT VRAIN BASIN	1	60	71
CACHE LA POUFRE	10.1	2.0	9.7	6.3	UPPER SOUTH PLATTE BASIN	1	58	48
CARTER	108.9	49.9	55.0	74.7	TOTAL SOUTH PLATTE BASIN	11	72	67
CHAMBERS LAKE	8.8	1.8	6.8	2.8				
CHEESMAN	79.0	48.6	72.2	60.9				
COBB LAKE	22.3	11.8	19.5	13.9				
ELEVEN MILE	98.0	99.5	99.9	95.9				
EMPIRE	36.5	21.0	29.3	22.2				
FOSSIL CREEK	11.1	8.2	9.7	6.3				
GROSS	41.8	30.9	30.9	26.2				
HALLIGAN	6.4	3.2	3.7	3.6				
HORSECREEK	14.7	0.0	4.7	10.9				
HORSETOOTH	149.7	65.0	109.8	87.8				
JACKSON	26.1	20.3	22.0	23.0				
JULESBURG	20.5	16.2	17.6	18.4				
LAKE LOVELAND		NO REPORT						
LONE TREE		NO REPORT						
MARIANO		NO REPORT						
MARSHALL	10.0	5.4	6.8	4.7				
MARSTON	13.0	11.7	8.5	12.7				
MILTON	23.5	1.5	19.7	14.8				
POINT OF ROCKS	70.6	30.9	65.8	51.1				
PREWITT	28.2	3.4	21.4	18.0				
RIVERSIDE	55.8	20.6	40.6	38.1				
SPINNEY MOUNTAIN	49.0	29.2	44.3	35.4				
STANDLEY	42.0	28.0	36.5	32.5				
TERRY LAKE	8.0	4.7	5.7	5.2				
UNION	13.0	4.0	12.3	10.4				
WINDSOR	15.2	10.4	11.1	10.0				

* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

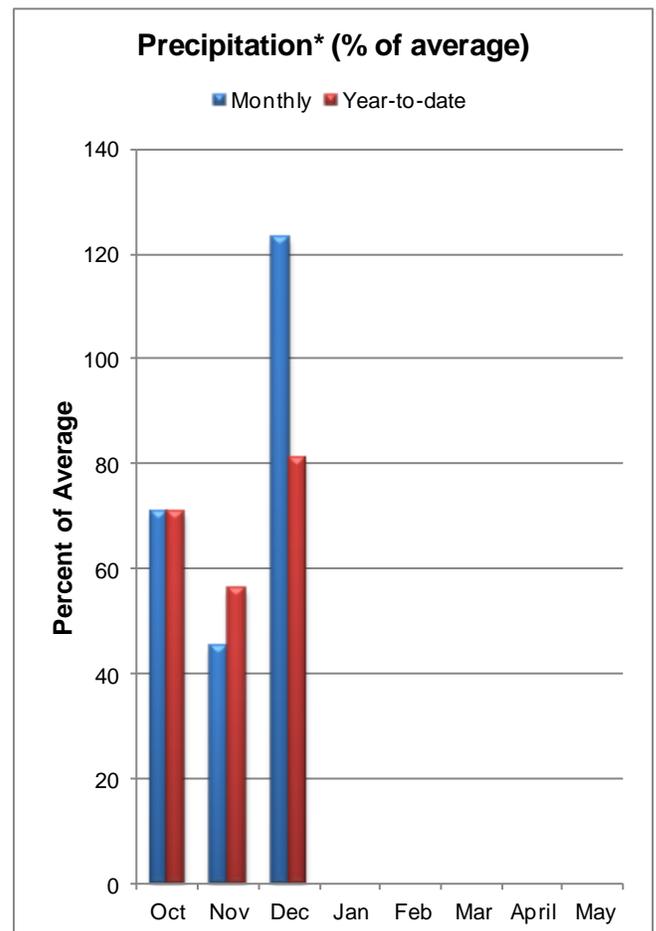
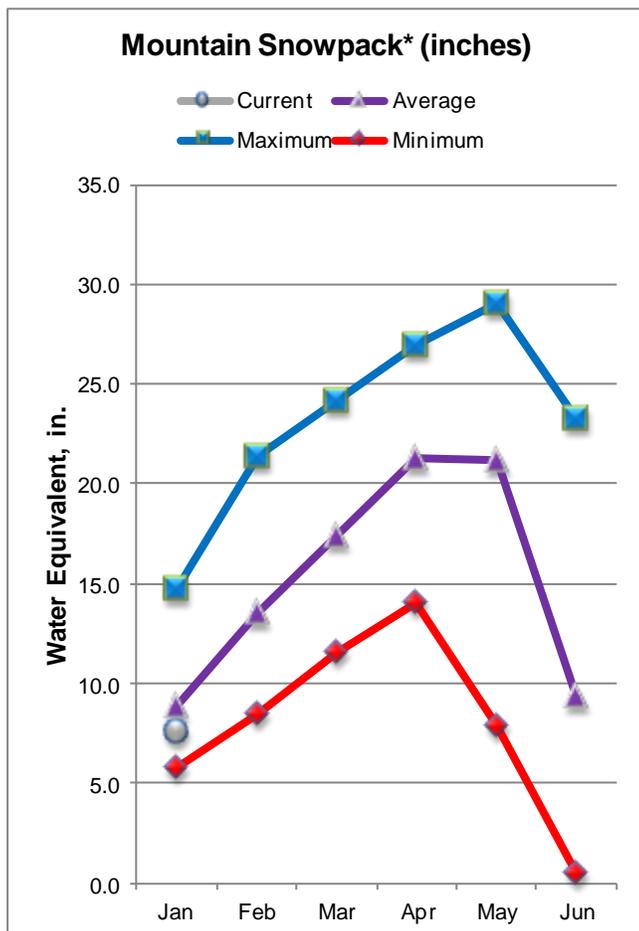
The average is computed for the 1981-2010 base period with the exception of reservoir storage which uses the 1971-2000 base period.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.

(2) - The value is natural volume - actual volume may be affected by upstream water management.

(3) - Median value used in place of average.

YAMPA, WHITE, NORTH PLATTE AND LARAMIE RIVER BASINS as of January 1, 2013



*Based on selected stations

As far as snowpack is concerned the combined Yampa, White, North Platte, and Laramie River basins are fairing much better than last year at this same time. Measurements as of January 1 for the combined basins revealed that the snowpack was at 85 percent of normal compared to last year's January 1 report which was just 66 percent of normal. The Little Snake River basin boasted the highest snowpack percentage within the basin at 89 percent of normal. The sub-basin with the lowest snowpack percentage was the North Platte basin at 79 percent of normal. Monthly precipitation totals in these basins for October and November were 71 and 45 percent of average respectively. The basins received above average precipitation in December with totals for the month at 123 percent of average, the highest in the state. Year to date precipitation reported for these basins is also the highest in the state, currently at 81 percent of average.

As of the end of December, reservoir storage levels in these basins are in decent condition at 100 percent of average and 71 percent of capacity. The two reservoirs that are used in this report were storing 32,000 acre-feet at the end of December. The first April to July streamflow forecast's issued this season are below normal for all forecast points within the basins. They range from 64 percent of normal for the Little Snake River near Dixon to 75 percent of normal forecast for the Elk River near Milner, Colorado.

YAMPA, WHITE, AND NORTH PLATTE RIVER BASINS
Streamflow Forecasts - January 1, 2013

Forecast Point	Forecast Period	Future Conditions						30-Yr Avg. (1000AF)
		<<===== Drier =====>>		=====		>>===== Wetter =====>>		
		90% (1000AF)	70% (1000AF)	Chance Of Exceeding * 50% (1000AF) (% AVG.)		30% (1000AF)	10% (1000AF)	
North Platte R nr Northgate	APR-JUL APR-SEP	35 41	106 120	155 173	69 69	205 225	275 305	225 250
Laramie R nr Woods	APR-JUL APR-SEP	55 61	77 85	92 101	80 80	107 117	129 141	115 126
Yampa R at Steamboat Springs (2)	APR-JUL	105	151	188	72	230	295	260
Elk R nr Milner	APR-JUL	133	193	240	75	290	380	320
Elkhead Ck ab Long Gulch	APR-JUL	20	38	53	73	71	101	73
Yampa R nr Maybell (2)	APR-JUL	340	515	650	70	805	1060	935
Little Snake R nr Slater (2)	APR-JUL	53	82	105	67	131	174	156
Little Snake R nr Savery (2)	APR-JUL	70	149	220	64	305	455	345
Little Snake R nr Lily (2)	APR-JUL	95	166	225	65	295	410	345
White R nr Meeker	APR-JUL	118	167	205	73	245	315	280

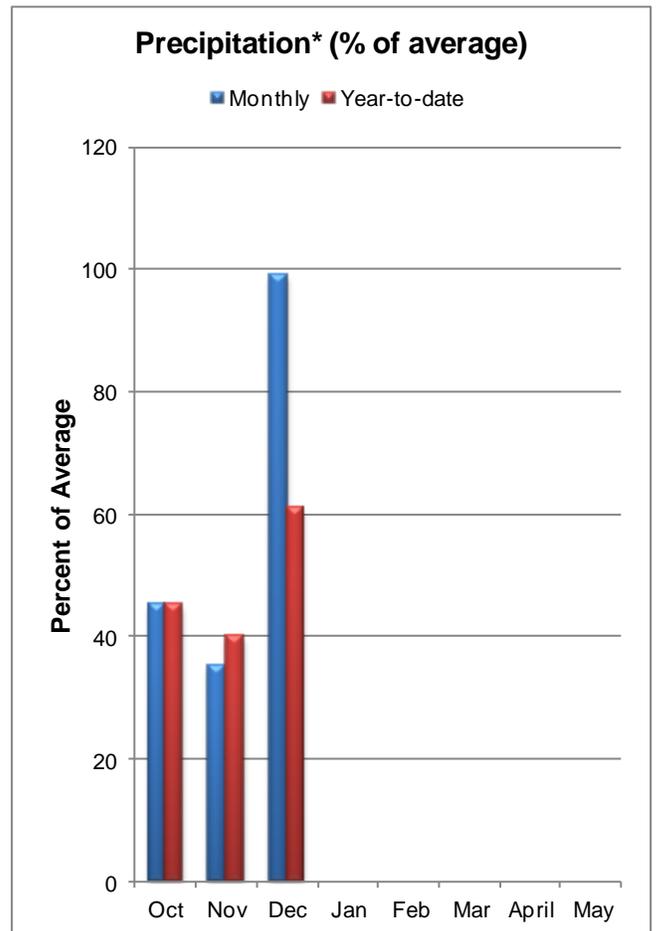
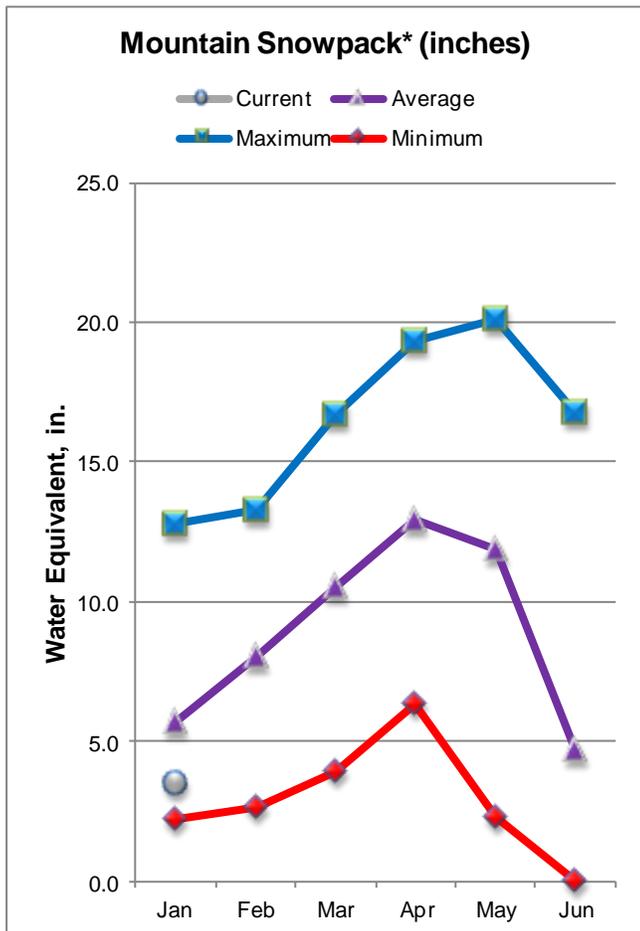
YAMPA, WHITE, AND NORTH PLATTE RIVER BASINS Reservoir Storage (1000 AF) - End of December					YAMPA, WHITE, AND NORTH PLATTE RIVER BASINS Watershed Snowpack Analysis - January 1, 2013			
Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
STAGECOACH	36.4	28.9	31.1	26.4	LARAMIE RIVER BASIN	2	71	82
YAMCOLO	8.7	2.9	6.4	5.5	NORTH PLATTE RIVER BASIN	3	110	80
					TOTAL NORTH PLATTE BASIN	5	100	80
					ELK RIVER BASIN	1	122	82
					YAMPA RIVER BASIN	8	129	85
					WHITE RIVER BASIN	4	119	82
					TOTAL YAMPA AND WHITE RIV	11	126	82
					LITTLE SNAKE RIVER BASIN	6	112	89
					TOTAL YAMPA, WHITE AND NO	19	112	85

* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

The average is computed for the 1981-2010 base period with the exception of reservoir storage which uses the 1971-2000 base period.

- (1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
- (2) - The value is natural volume - actual volume may be affected by upstream water management.
- (3) - Median value used in place of average.

ARKANSAS RIVER BASIN as of January 1, 2013



*Based on selected stations

Total snow accumulation over the Arkansas River basin was reported to be just 61 percent of the normal for January 1. There is however stark contrasts between the snowpack in the Upper Arkansas River basin compared to the lower reaches of the basin. Snowpack in the Upper Arkansas watershed above Salida, CO was only 55 percent of normal on January 1, while the snowpack measured in, the Cucharas and Huerfano watersheds was 85 percent of the normal and the Purgatoire basin was at 78 percent of normal. Dry is the best way to describe precipitation totals during the months of October and November in the basin. October and November received precipitation that was just 45 and 35 percent of the average respectively. December's precipitation was near average at 99 percent of average. Despite December's encouraging moisture the year to date totals in the basin are only 61 percent of average.

At the end of December, reservoir storage in the Arkansas River basin was just 56 percent of average. The 283,000 acre-feet of water stored in the 13 reservoirs reported on in this basin is a significant decrease from the 446,000 acre-feet reported last year at this time. Current streamflow forecasts for the Arkansas River basin, project that the Arkansas River at Salida will flow at 65 percent of normal between April and July. Elsewhere in the basin runoff projections for the Cucharas River near La Veta are currently 50 percent of normal.

ARKANSAS RIVER BASIN
Streamflow Forecasts - January 1, 2013

Forecast Point	Forecast Period	Future Conditions						30-Yr Avg. (1000AF)
		<<==== Drier ====		==== Wetter =====>>				
		90% (1000AF)	70% (1000AF)	Chance Of Exceeding *		30% (1000AF)	10% (1000AF)	
		(1000AF)	(% AVG.)					
Chalk Ck nr Nathrop	APR-JUL	5.6	9.9	13.6	65	17.8	25	21
	APR-SEP	7.5	12.6	16.8	65	22	30	26
Arkansas R at Salida (2)	APR-JUL	96	129	155	65	183	230	240
	APR-SEP	119	159	190	64	225	275	295
Grape Ck nr Westcliffe	APR-JUL	0.4	3.8	8.1	51	13.9	25	15.9
	APR-SEP	2.1	6.1	9.9	51	14.7	23	19.6
Arkansas R ab Pueblo (2)	APR-JUL	110	174	225	63	285	380	360
	APR-SEP	151	225	285	63	350	460	455
Huerfano R nr Redwing	APR-JUL	3.3	5.3	6.9	58	8.7	11.8	11.9
	APR-SEP	4.5	6.9	8.8	58	10.9	14.5	15.2
Cucharas R nr La Veta	APR-JUL	1.2	3.6	6.1	50	9.2	14.9	12.2
	APR-SEP	1.6	4.4	7.0	50	10.2	16.1	14.1
Purgatoire R at Trinidad (2)	MAR-JUL	3.7	11.4	18.9	51	28	46	37
	APR-SEP	6.2	15.3	24	51	34	53	47

ARKANSAS RIVER BASIN Reservoir Storage (1000 AF) - End of December					ARKANSAS RIVER BASIN Watershed Snowpack Analysis - January 1, 2013				
Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of		
		This Year	Last Year	Avg			Last Yr	Average	
ADOBE	62.0	6.8	27.7	23.4	UPPER ARKANSAS BASIN	3	81	54	
CLEAR CREEK	11.4	6.5	6.8	5.9	CUCHARAS & HUERFANO RIVER	1	50	85	
CUCHARAS RESERVOIR	40.0	0.1	0.1	4.8	PURGATOIRE RIVER BASIN	2	48	78	
GREAT PLAINS	150.0	0.0	0.0	32.2	TOTAL ARKANSAS RIVER BASIN	5	61	61	
HOLBROOK	7.0	0.0	2.3	3.0					
HORSE CREEK	27.0	0.0	0.0	8.4					
JOHN MARTIN	616.0	22.1	23.0	108.7					
LAKE HENRY	8.0	2.8	6.9	3.7					
MEREDITH	42.0	15.4	17.8	13.6					
PUEBLO	354.0	164.7	196.7	144.0					
TRINIDAD	167.0	11.5	14.1	24.2					
TURQUOISE	127.0	42.4	95.7	87.9					
TWIN LAKES	86.0	11.0	55.1	46.3					

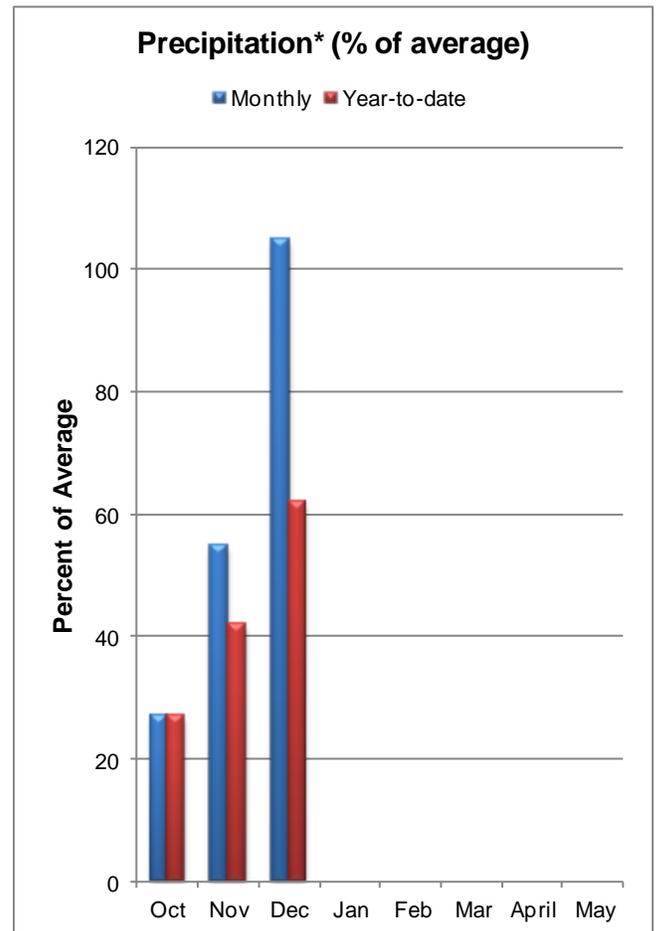
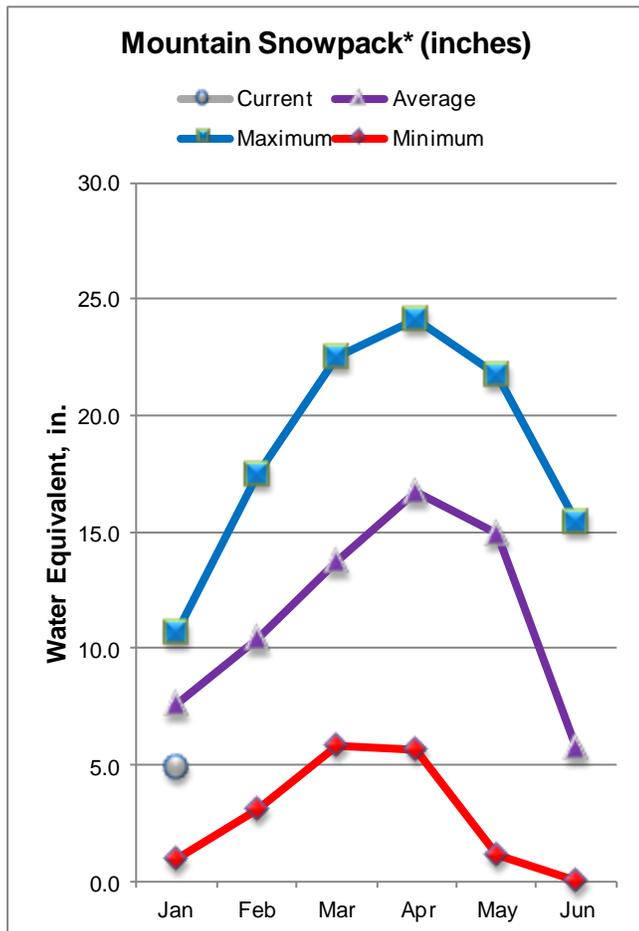
* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

The average is computed for the 1981-2010 base period with the exception of reservoir storage which uses the 1971-2000 base period.

- (1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
- (2) - The value is natural volume - actual volume may be affected by upstream water management.
- (3) - Median value used in place of average.

UPPER RIO GRANDE RIVER BASIN

as of January 1, 2013



*Based on selected stations

As of January 1 the snowpack in the Upper Rio Grande River basin was reported to be at 65 percent of normal. There was quite a bit of variation reported in the sub-basins. On the lower end the Alamosa Creek sub-basin was at only 56 percent of normal. In contrast, the Conejos and the Rio San Antonio basins are at 75 percent of normal and the Culebra and Trinchera Creek watershed are at 79 percent of normal. Very little precipitation fell over the Upper Rio Grande basin until December of this new water year. Precipitation for the month of December was 105 percent of average. Year to date precipitation totals for the basin were less than encouraging in October and November; at the end of October year to date precipitation was just 27 percent of average and at the end of November it was only 42 percent of average. By January 1, year to date precipitation had increased to 62 percent of average.

Reservoir volumes as reported at the end of December in the Upper Rio Grande basin were below average and below where they were last year at this time. Overall, reservoir storage was just 50 percent of average and 78 percent of last year's storage totals. Current streamflow forecasts for the basin range from 77 percent of normal at the Inflow to Platoro Reservoir to 36 percent of normal for Sangre de Cristo Creek. Elsewhere in the basin, the South Fork of the Rio Grande at South Fork is expected to run at 68 percent of normal for the April to September period.

UPPER RIO GRANDE BASIN
Streamflow Forecasts - January 1, 2013

Forecast Point	Forecast Period	Future Conditions						30-Yr Avg. (1000AF)
		<<===== Drier =====>>		=====		>>===== Wetter =====>>		
		90% (1000AF)	70% (1000AF)	Chance Of Exceeding * 50% (1000AF) (% AVG.)		30% (1000AF)	10% (1000AF)	
Rio Grande at Thirty Mile Bridge (2)	APR-SEP	54	74	89	69	106	133	129
	APR-JUL	48	65	79	70	94	118	113
Rio Grande at Wagon Wheel Gap (2)	APR-SEP	130	186	230	68	280	360	340
SF Rio Grande at South Fork (2)	APR-SEP	50	70	86	68	103	131	127
Rio Grande nr Del Norte (2)	APR-SEP	195	275	340	66	410	525	515
Saguache Ck nr Saguache (2)	APR-SEP	4.7	14.4	21	66	28	37	32
Alamosa Ck ab Terrace Reservoir	APR-SEP	27	39	48	71	57	69	68
La Jara Ck nr Capulin	MAR-JUL	2.8	4.4	5.7	64	7.2	9.6	8.9
Trinchera Ck ab Turners Ranch	APR-SEP	2.0	4.7	6.5	52	8.3	11.0	12.6
Sangre de Cristo Ck (2)	APR-SEP	0.8	3.2	5.8	36	9.2	15.5	16.3
Ute Ck nr Fort Garland	APR-SEP	2.4	4.7	6.8	53	9.2	13.5	12.8
Platoro Reservoir Inflow (2)	APR-JUL	27	36	43	77	50	59	56
	APR-SEP	29	40	47	76	54	65	62
Conejos R nr Mogote (2)	APR-SEP	83	119	144	74	169	205	194
San Antonio R at Ortiz	APR-SEP	2.9	5.9	8.6	55	11.8	17.4	15.6
Los Pinos R nr Ortiz	APR-SEP	23	41	53	73	65	83	73
Culebra Ck at San Luis (2)	APR-SEP	3.4	6.8	9.7	42	13.2	19.3	23
Costilla Reservoir Inflow (2)	MAR-JUL	3.7	5.5	7.0	63	8.6	11.4	11.1
Costilla Ck nr Costilla (2)	MAR-JUL	6.1	10.5	14.1	54	18.3	25	26

UPPER RIO GRANDE BASIN
Reservoir Storage (1000 AF) - End of December

UPPER RIO GRANDE BASIN
Watershed Snowpack Analysis - January 1, 2013

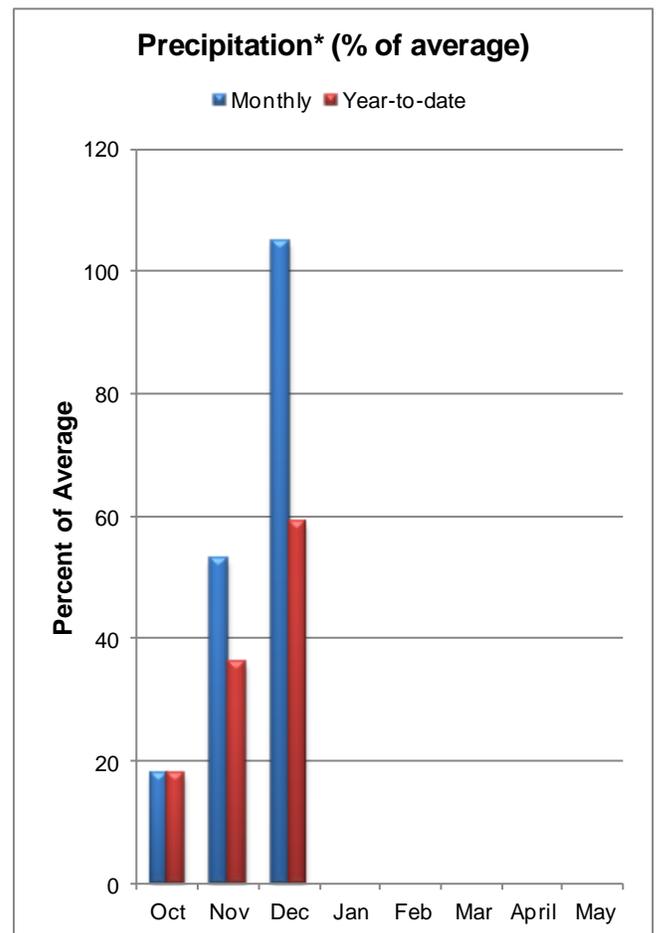
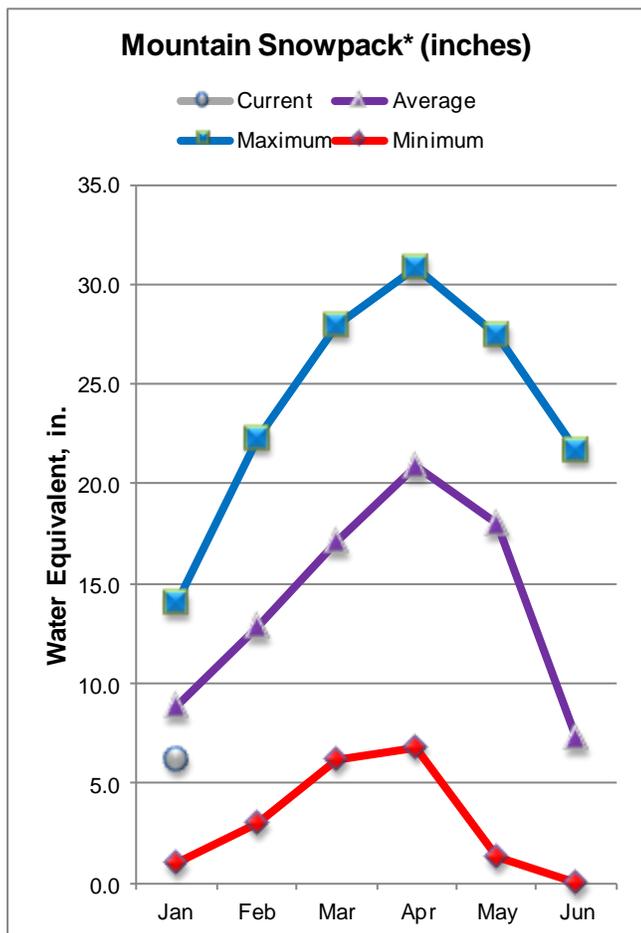
Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
CONTINENTAL	27.0	6.9	3.5	4.9	ALAMOSA CREEK BASIN	1	100	56
PLATORO	60.0	8.8	15.1	24.3	CONEJOS & RIO SAN ANTONIO	2	92	75
RIO GRANDE	51.0	10.8	15.4	15.1	CULEBRA & TRINCHERA CREEK	2	77	78
SANCHEZ	103.0	5.9	7.6	23.9	UPPER RIO GRANDE BASIN	4	62	57
SANTA MARIA	45.0	7.1	7.8	10.1	TOTAL UPPER RIO GRANDE BA	8	69	65
TERRACE	18.0	2.5	4.2	5.6				

* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

The average is computed for the 1981-2010 base period with the exception of reservoir storage which uses the 1971-2000 base period.

- (1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
- (2) - The value is natural volume - actual volume may be affected by upstream water management.
- (3) - Median value used in place of average.

SAN MIGUEL, DOLORES, ANIMAS, AND SAN JUAN RIVER BASINS as of January 1, 2013



*Based on selected stations

The combined San Miguel, Dolores, Animas and San Juan basins benefited greatly from above average snow accumulation in December. The basins began December with a snowpack at just 37 percent of normal. Thanks to multiple storm systems hitting the basins in mid to late December the snowpack was at 70 percent of normal by January 1. The basins began the water year with well below average mountain precipitation. Total precipitation for the month of October was just 18 percent of average and November precipitation was only slightly better at 53 percent of average. December brought a welcome change with precipitation totals at 105 percent of average. Despite the above average December year to date precipitation was still just 59 percent of average on January 1, which is the lowest percentage reported statewide. Reservoir storage volumes in the basins have dropped from 106 percent of average reported at the end of May 2012 to just 66 percent of average as of the end of December 2012. The reservoirs in these basins are currently storing a total of 248,000 acre-feet of water compared to 400,000 acre-feet stored last year at this same time. Seasonal streamflow forecasts issued on January 1 for the April to July period are well below normal across the basins. The Mancos River near Mancos is forecast to flow at 63 percent of normal, the forecast for the San Juan River near Carracas is currently 68 percent of normal, and the Inlet to Cone Reservoir is expected to see flows at 77 percent of normal.

SAN MIGUEL, DOLORES, ANIMAS, AND SAN JUAN RIVER BASINS
Streamflow Forecasts - January 1, 2013

Forecast Point	Forecast Period	Future Conditions						30-Yr Avg. (1000AF)
		Drier		50%		Wetter		
		90% (1000AF)	70% (1000AF)	50% (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	
Dolores R at Dolores	APR-JUL	88	134	172	70	215	285	245
McPhee Reservoir Inflow (2)	APR-JUL	81	137	183	62	235	325	295
San Miguel R nr Placerville	APR-JUL	45	65	80	63	97	124	128
Gurley Reservoir Inlet	APR-JUL	7.9	10.6	12.7	77	15.1	19.1	16.4
Cone Reservoir Inlet	APR-JUL	1.0	1.7	2.3	77	3.1	4.5	3.0
Lillylands Reservoir Inlet	APR-JUL	0.8	1.2	1.5	78	1.9	2.6	1.9
Rio Blanco at Blanco Diversion (2)	APR-JUL	22	32	39	72	47	60	54
Navajo R at Oso Diversion (2)	APR-JUL	26	38	47	72	57	74	65
San Juan R nr Carracas (2)	APR-JUL	137	205	260	68	320	420	380
Piedra R nr Arboles	APR-JUL	62	99	130	62	165	225	210
Vallecito Reservoir Inflow (2)	APR-JUL	81	113	137	71	164	210	194
Navajo Reservoir Inflow (2)	APR-JUL	245	360	455	62	560	735	735
Animas R at Durango	APR-JUL	153	220	275	66	335	435	415
Lemon Reservoir Inflow (2)	APR-JUL	20	30	37	67	45	59	55
La Plata R at Hesperus	APR-JUL	6.2	10.7	14.5	63	18.9	26	23
Mancos R nr Mancos (2)	APR-JUL	7.8	14.1	19.5	63	26	37	31

SAN MIGUEL, DOLORES, ANIMAS, AND SAN JUAN RIVER BASINS
Reservoir Storage (1000 AF) - End of December

SAN MIGUEL, DOLORES, ANIMAS, AND SAN JUAN RIVER BASINS
Watershed Snowpack Analysis - January 1, 2013

Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
GROUNDHOG	22.0	3.4	4.8	12.0	ANIMAS RIVER BASIN	6	76	59
JACKSON GULCH	10.0	1.4	3.7	4.6	DOLORES RIVER BASIN	3	98	74
LEMON	40.0	8.0	14.2	20.1	SAN MIGUEL RIVER BASIN	3	111	87
MCPHEE	381.0	192.1	289.3	271.1	SAN JUAN RIVER BASIN	3	76	71
NARRAGUINNEP	19.0	3.2	12.6	12.7	TOTAL SAN MIGUEL, DOLORES	14	84	70
VALLECITO	126.0	40.3	74.9	58.6	AN JUAN RIVER BASINS			

* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

The average is computed for the 1981-2010 base period with the exception of reservoir storage which uses the 1971-2000 base period.

- (1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
- (2) - The value is natural volume - actual volume may be affected by upstream water management.
- (3) - Median value used in place of average.



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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>

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Colorado
Basin Outlook Report
Natural Resources Conservation Service
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