

# Colorado Basin Outlook Report February 1, 2008



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

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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. These forecasts are coordinated between hydrologists in the Natural Resources Conservation Service and the National Weather Service. 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

### FEBRUARY 1, 2008

#### Summary

Abundant moisture continued to track across Colorado during January. Increases in snowpack percentages from last month have been recorded in every major basin of the state this month. Snowpack totals across southern Colorado continue to track at near record amounts in many locations. During December and January precipitation has been well above average nearly statewide. For southwestern Colorado, precipitation during this period has been two to three times the average. January's storms continued to improve the water supply prospects statewide. The state can now expect spring and summer streamflow volumes to range from near average across the Front Range to more than 150% of average along some southern streams and river. Given current conditions, only a dry spring across northern Colorado would have detrimental effects on water supplies. For the remainder of the state, abundant supplies are pretty well in the bank.

#### Snowpack

With increases over last month's readings in all basins, the February 1 snowpack percentages range from 97% of average in the South Platte basin to 173% of average in the Rio Grande basin. The greatest gains seen during January were in the Rio Grande and Gunnison basins, which increased by more than 30 percentage points from last month. The basins with the highest snowpack percentages, which exceed 145% of average, include the Rio Grande, Arkansas, Gunnison and the combined San Juan, Animas, Dolores, and San Miguel basins. This month's readings in the Rio Grande basin are the highest percentage measured since 1979, which was a very heavy snow year in this basin, and topped out at over 200% of average in April of that year. The Arkansas is also reporting the highest snowpack percentages since February, 1984. SNOTEL data in early February indicates that the current snowpack in the Arkansas, Rio Grande and combined San Juan, Animas, Dolores, and San Miguel basins has either reached or exceeded the normal maximum seasonal snowpack accumulations in these basins. In comparison to last year's snowpack on this date, nearly every basin is reporting totals that are well above those of a year ago. The single exception is again the South Platte basin. In the Gunnison and combined San Juan, Animas, Dolores, and San Miguel basins, this year's snowpack is nearly two times that of last year's. For the entire state, the current snowpack is 142% of last year's and is 129% of average.

#### Precipitation

For the second consecutive month precipitation during January was quite impressive across most of the state. This moisture has more than compensated for the dry October-November start to the water year in all basins. January's totals range from 150% - 200% of average in the Gunnison, Colorado, and Arkansas basins. In the Rio Grande and combined San Juan, Animas, Dolores, and San Miguel basins precipitation during January exceeded 200% of average, and is the second consecutive month to set this mark in these basins. Only the South Platte basin recorded near average precipitation during January at 111% of average. For the water year, which began on October 1, basinwide percentages range from 100% of average in the South Platte to 153% of average in the Rio Grande basin. For the entire state, January's precipitation measured at SNOTEL sites was 164% of average and was 244% of the relatively dry January of 2007.

## Reservoir Storage

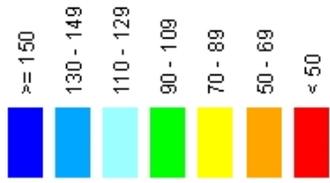
This month's reservoir storage is near average across most of the state. Statewide, storage volumes are 99% of average, and are 105% of last year's storage on February 1. The highest volumes, as a percent of average are in the combined San Juan, Animas, Dolores and San Miguel basins, at 110% of average, yet these volumes remain at 99% of last year's storage at this time. Meanwhile, the lowest storage percentages were recorded in the South Platte Basin, at 90% of average. In terms of volume, this deficit is 81,000 acre-feet below the average mark for this date. For the state, reservoir storage has improved somewhat each month since October, 2007, when storage was 96% of average. The current storage volumes remain well below the total storage capacities in all basins, and are only 56% of capacity statewide. With the abundant runoff anticipated in some basins, this year might be the best chance in many years to reach near capacity storage.

## Streamflow

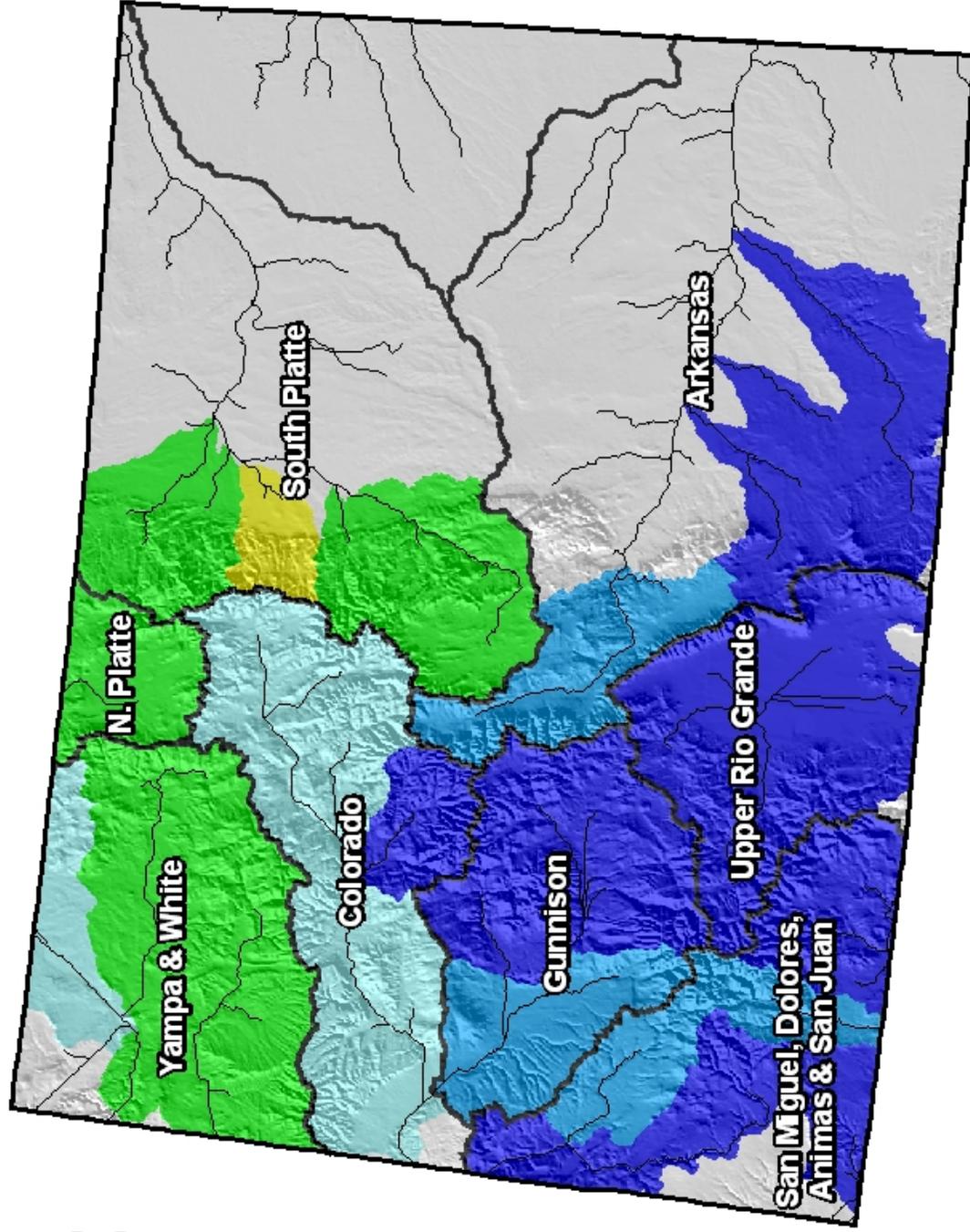
2008 is shaping up to be the best year for statewide water supplies since 1997. As in that year, streamflows are anticipated to be above average across most of the state. The highest runoff volumes, as a percent of average, will be across southern Colorado, where streamflows are expected to generally range from 140% to 165% of average. Streamflow forecasts decrease towards the northern portions of the state, but remain above average. Forecast volumes range from 130% to 150% of average in the Gunnison Basin, and decrease to 100% to 130% of average in the Colorado, Yampa and White basins. East of the Continental Divide a similar pattern exists. The highest forecasts occur along the southern tributaries of the Arkansas River, and decrease to slightly below average towards the northern Front Range tributaries of the South Platte River. With the wet season still ahead in the South Platte basin, recovery back to average, or better, in these basins remains easily attainable yet this season. For the first time in more than a decade, water supplies for the entire state look promising, with no critical shortages in sight for any basins.

# Colorado Snowpack Map

Percent of Average



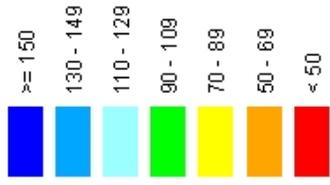
*Provisional Data  
Subject to Revision*



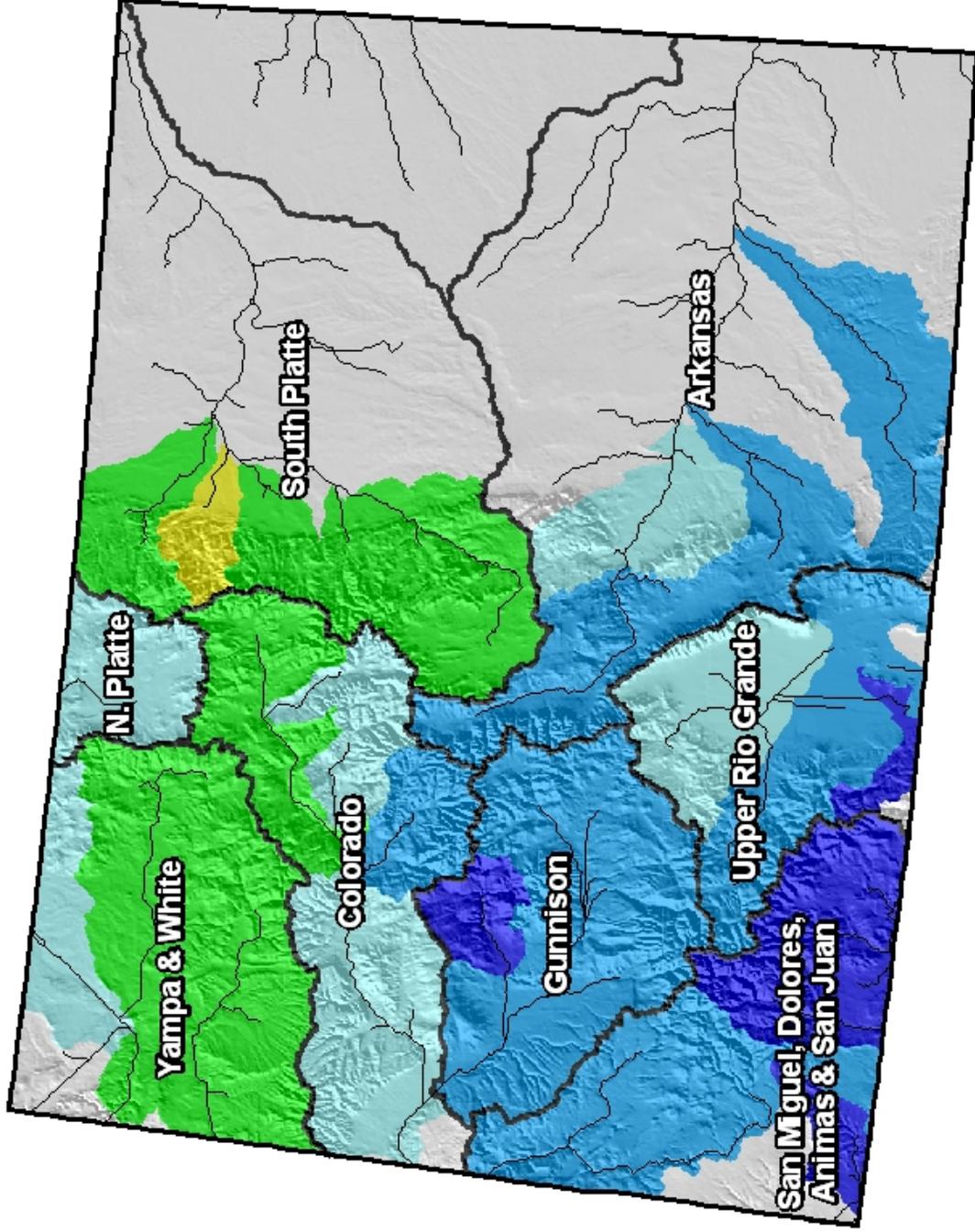
Current as of February 1, 2008

# Colorado Streamflow Forecast Map

Percent of Average



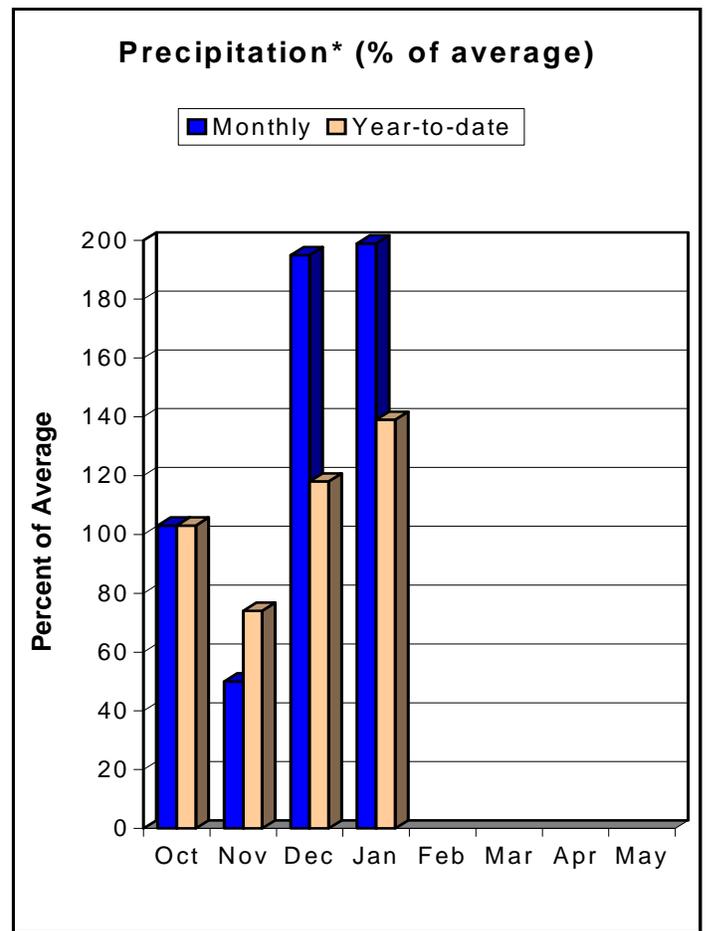
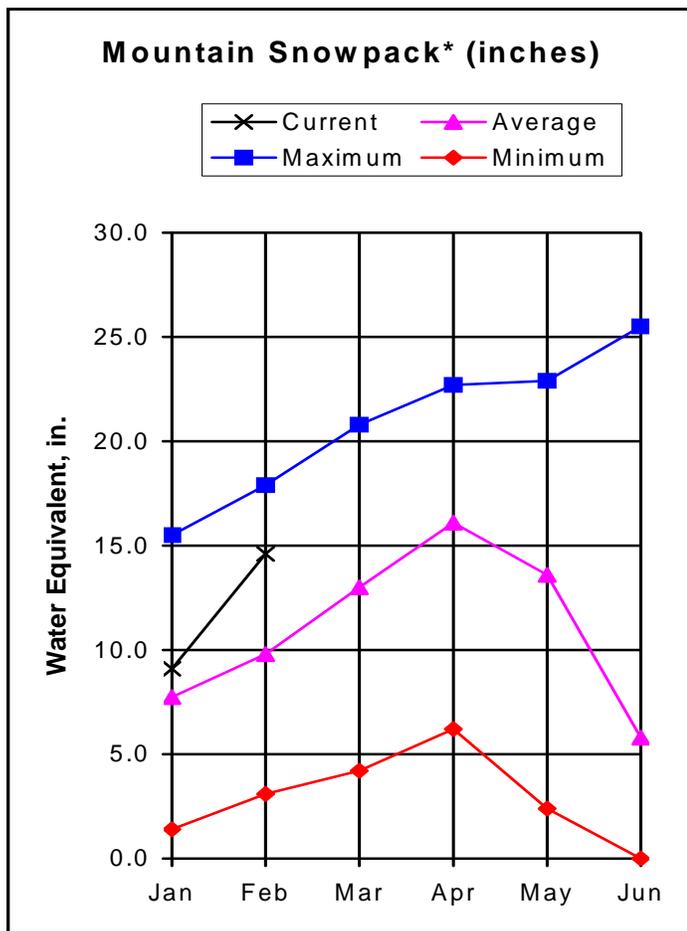
*Provisional Data  
Subject to Revision*



Current as of February 1, 2008

# GUNNISON RIVER BASIN

## as of February 1, 2008



\*Based on selected stations

Significant snowfall during the second and final week of January raised the Gunnison River Basin snowpacks from 117 percent on January 1 to 149 percent of average on February 1. This year's snowpack contains almost twice the water content available last year at this time. Snowpack conditions are the best the basin has seen since 1997 and the fourth highest going back to 1968. Snowpacks in the sub-basins are all well above average, ranging from 137 percent of average in the Uncompahgre Drainage to 152 percent of average in the Upper Gunnison Watershed. January precipitation in the high country was almost twice normal (199 percent of average). This is almost four times the amount recorded during January 2007. The much above average monthly precipitation improved the total year-to-date precipitation (since October 1) to 139 percent of average from last month's 118 percent of average figure. Reservoir storage is down slightly from the amount of stored water reported last year but remains above normal at 106 percent of average. Given the significant increases observed since January 1, forecast volumes increased from 12 to 39 percentage points over those issued last month. Above to well above average runoff is expected throughout the basin. April-July streamflows are predicted to range from 121 percent of average for Cochetopa Creek below Rock Creek near Parlin to 151 percent of average for the North Fork Gunnison River near Somerset.

GUNNISON RIVER BASIN  
Streamflow Forecasts - February 1, 2008

Forecast Point	Forecast Period	<<==== Drier ==== Future Conditions ===== Wetter =====>>						30-Yr Avg. (1000AF)				
		90%		70%		50%			30%		10%	
		(1000AF)	(1000AF)	(1000AF)	(% AVG.)	(1000AF)	(1000AF)		(1000AF)	(1000AF)	(1000AF)	(1000AF)
Taylor Park blw Taylor Park Res (2)	APR-JUL	98	119	135	131	152	178	103				
Slate River nr Crested Butte	APR-JUL	96	108	117	132	126	140	89				
East River at Almont	APR-JUL	198	235	265	138	295	340	192				
Gunnison River nr Gunnison (2)	APR-JUL	390	475	540	139	605	710	390				
Tomichi Creek at Sargents	APR-JUL	25	34	41	128	49	63	32				
Cochetopa Creek blw Rock Ck nr Parli	APR-JUL	11.4	16.7	21	121	26	35	17.3				
Tomichi Creek at Gunnison	APR-JUL	57	86	110	136	139	189	81				
Lake Fork at Gateview	APR-JUL	128	152	170	135	189	220	126				
Blue Mesa Reservoir Inflow (2)	APR-JUL	685	865	1000	139	1150	1400	720				
Paonia Reservoir Inflow	MAR-JUN	91	124	150	150	179	230	100				
	APR-JUL	91	126	155	152	188	245	102				
North Fork Gunnison R nr Somerset (2)	APR-JUL	320	400	460	151	510	560	305				
Surface Creek at Cedaredge	APR-JUL	17.3	22	25	146	29	35	17.1				
Ridgway Reservoir Inflow	APR-JUL	101	123	140	137	158	188	102				
Uncompahgre River at Colona (2)	APR-JUL	127	162	190	137	220	270	139				
Gunnison River nr Grand Junction (2)	APR-JUL	1660	2010	2250	144	2490	2840	1560				

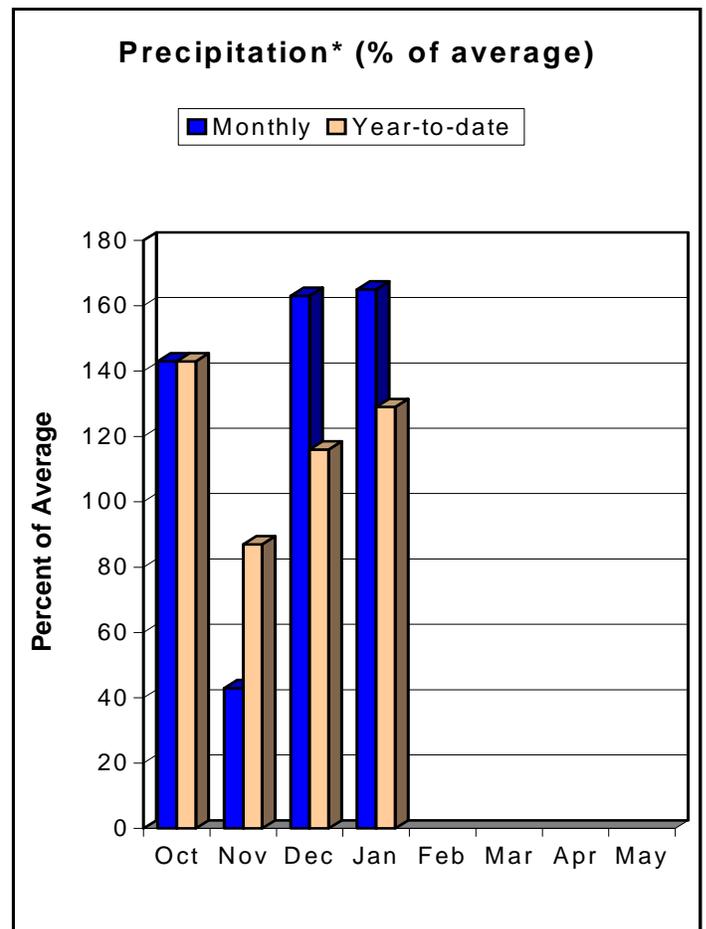
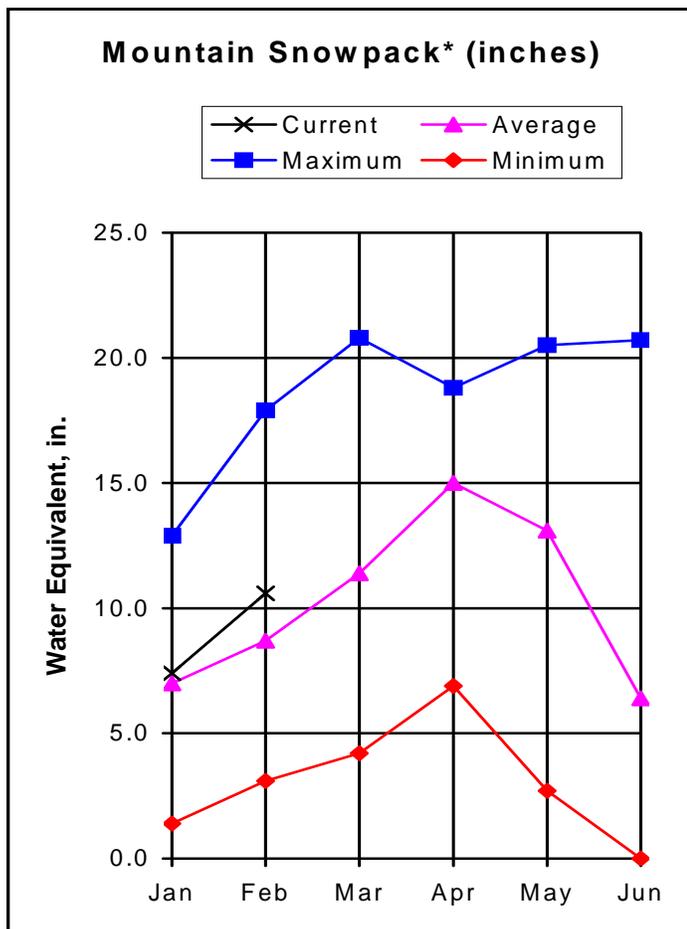
GUNNISON RIVER BASIN Reservoir Storage (1000 AF) - End of January					GUNNISON RIVER BASIN Watershed Snowpack Analysis - February 1, 2008			
Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
BLUE MESA	830.0	519.9	524.5	493.3	UPPER GUNNISON BASIN	15	209	152
CRAWFORD	14.0	7.0	10.0	8.2	SURFACE CREEK BASIN	3	216	139
FRUITGROWERS	4.4	3.2	4.5	3.4	UNCOMPAHGRE BASIN	4	154	137
FRUITLAND	9.2	0.8	2.2	1.8	TOTAL GUNNISON RIVER BASIN	19	194	149
MORROW POINT	121.0	114.2	105.5	113.4				
PAONIA	15.4	1.4	0.9	4.7				
RIDGWAY	83.0	74.0	77.8	60.2				
TAYLOR PARK	106.0	78.3	78.3	66.7				

\* 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 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.

# UPPER COLORADO RIVER BASIN as of February 1, 2008



\*Based on selected stations

The Upper Colorado River Basin saw a steady stream of storms pass through the basin during the month of January. As a result, the basin saw its snowpacks improve from 105 percent of average on January 1 to 122 percent of average on February 1. When compared to last year's snowpacks at this time, this year's snow water content is 33 percent higher. This is the second highest February 1 snowpack (behind 2006) since 1997 and it represents the third above average February 1 snowpack in the last four years. Snowpacks in the sub-basins ranged from 97 percent of average in the Muddy Creek Drainage to 152 percent of average in the Roaring Fork Watershed. Mountain precipitation during January was well above normal at 165 percent of average. This month's precipitation was 269 percent of the precipitation measured during January of last year. Total precipitation for the water year, which began on October 1, is 129 percent of average and 132 percent of the total October-January precipitation reported a year ago. Despite being down slightly when compared to last year, reservoir storage improved slightly from last month to 101 percent of average. Forecasts saw modest increases over those released last month. Overall, the basin can expect average to above average runoff this spring and summer. Volumes are expected to range from 100 percent of average for the Lake Granby Inflow and Muddy Creek below Wolford Mountain Reservoir to 131 percent of average for the Roaring Fork at Glenwood Springs.

UPPER COLORADO RIVER BASIN  
Streamflow Forecasts - February 1, 2008

Forecast Point	Forecast Period	<<===== Drier ===== Future Conditions ===== Wetter =====>>						30-Yr Avg. (1000AF)				
		90%		70%		50%			30%		10%	
		(1000AF)	(1000AF)	(1000AF)	(% AVG.)	(1000AF)	(1000AF)		(1000AF)	(1000AF)		
Lake Granby Inflow (2)	APR-JUL	171	200	225	100	250	285	225				
Willow Creek Reservoir Inflow	APR-JUL	43	51	58	114	65	76	51				
Williams Fork Reservoir Inflow (2)	APR-JUL	79	93	103	108	114	130	95				
Dillon Reservoir Inflow (2)	APR-JUL	135	161	180	108	200	235	167				
Green Mountain Reservoir Inflow (2)	APR-JUL	230	275	310	111	345	405	280				
Muddy Creek blw Wolford Mtn Resv (2)	APR-JUL	42	52	60	100	68	82	60				
Eagle River blw Gypsum (2)	APR-JUL	260	325	370	110	420	505	335				
Colorado River nr Dotsero (2)	APR-JUL	1150	1380	1550	108	1730	2010	1440				
Ruedi Reservoir Inflow (2)	APR-JUL	134	161	180	128	200	235	141				
Roaring Fork at Glenwood Springs (2)	APR-JUL	695	830	930	131	1040	1220	710				
Colorado River nr Cameo (2)	APR-JUL	1960	2430	2750	114	3070	3540	2420				

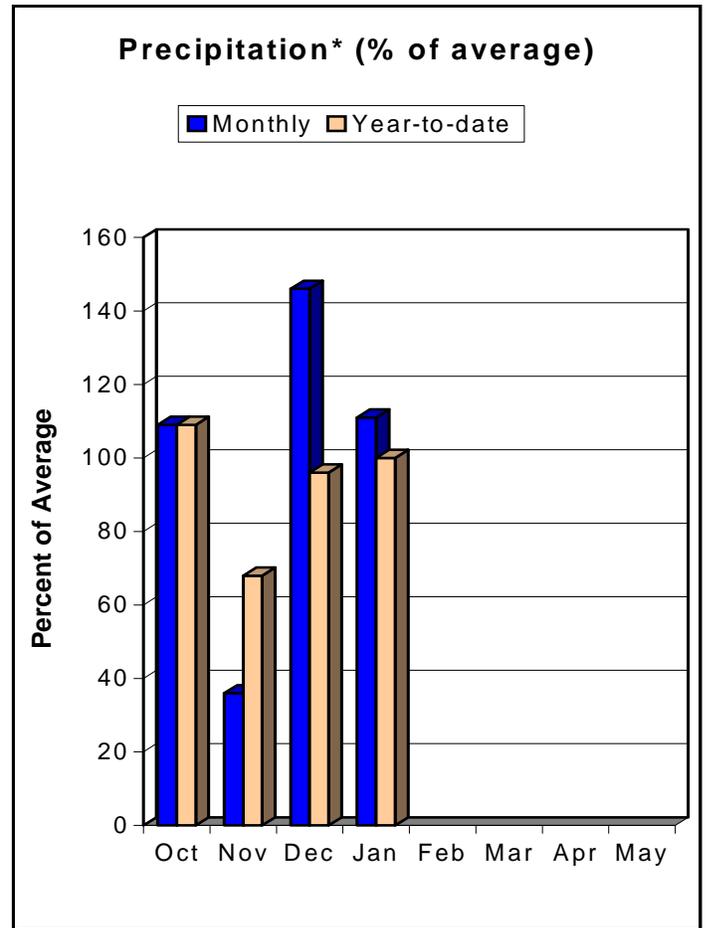
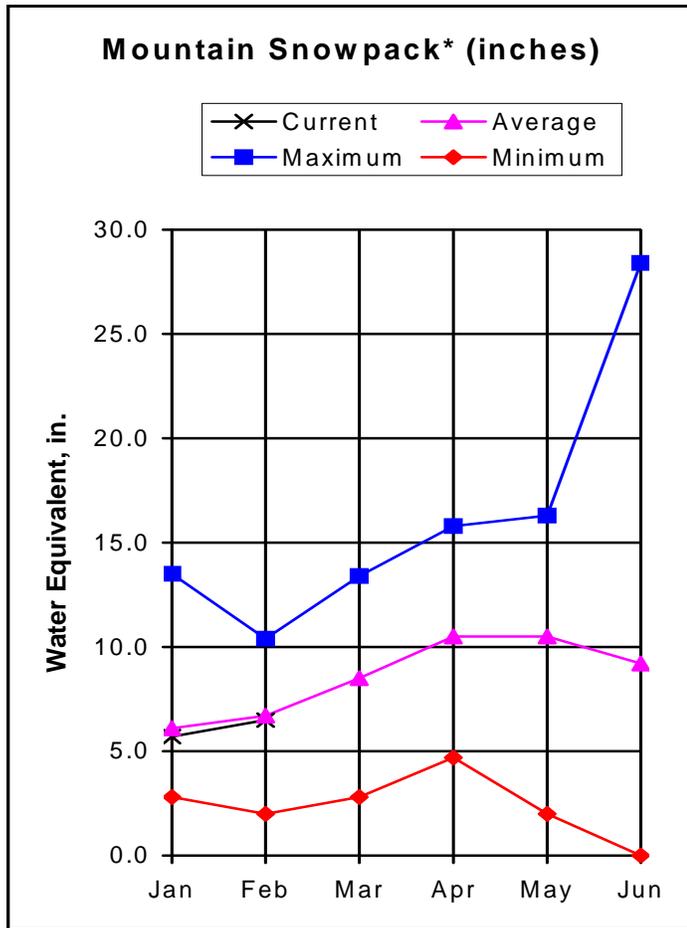
UPPER COLORADO RIVER BASIN Reservoir Storage (1000 AF) - End of January					UPPER COLORADO RIVER BASIN Watershed Snowpack Analysis - February 1, 2008			
Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
DILLON	250.7	240.0	237.7	221.3	BLUE RIVER BASIN	9	117	118
LAKE GRANBY	465.6	241.7	260.1	300.7	UPPER COLORADO RIVER BASIN	37	118	113
GREEN MOUNTAIN	146.8	78.0	80.0	80.3	MUDDY CREEK BASIN	4	138	97
HOMESTAKE	43.0	41.9	41.2	27.7	PLATEAU CREEK BASIN	3	216	139
RUEDI	102.0	77.2	77.2	73.7	ROARING FORK BASIN	8	174	152
VEGA	32.9	15.9	16.7	11.6	WILLIAMS FORK BASIN	4	109	111
WILLIAMS FORK	97.0	83.2	71.4	59.5	WILLOW CREEK BASIN	4	121	119
WILLOW CREEK	9.1	7.6	6.8	6.4	TOTAL COLORADO RIVER BASIN	48	133	122

\* 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 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.

# SOUTH PLATTE RIVER BASIN as of February 1, 2008



\*Based on selected stations

Precipitation diminished slightly in January in the South Platte River Basin, but mountain precipitation of 111% of average for January is nothing to complain about. The drop from 146% of average in December left the year to date precipitation at an even 100% of average for the period of October 1 to February 1 and 86% of the year to date precipitation at this time last year. Snowpack in the South Platte is still slightly less than average at 97% of average, up from 93% of average last month. Snow levels are distributed pretty evenly around the basin, with Clear Creek at 109% of average on the high end and Boulder Creek at 88% of average on the low end. Based on reports from 33 facilities, reservoir storage on the South Platte is below average at 90% of average. The good news is that current storage is 110% of the storage this time last year. Streamflow volume is forecast to be near average on all waterways in the South Platte Basin. Expect April through September volumes to range from 89% of average on the Big Thompson to 106% of average on Clear Creek.

SOUTH PLATTE RIVER BASIN  
Streamflow Forecasts - February 1, 2008

Forecast Point	Forecast Period	<<===== Drier ===== Future Conditions ===== Wetter =====>>						30-Yr Avg. (1000AF)				
		90%		70%		50%			30%		10%	
		(1000AF)	(1000AF)	(1000AF)	(% AVG.)	(1000AF)	(1000AF)		(1000AF)	(1000AF)		
ANTERO RESERVOIR Inflow (2)	APR-JUL	7.1	10.8	17.7	105	18.9	29	16.8				
	APR-SEP	8.6	13.2	23	106	24	37	22				
SPINNEY MOUNTAIN RESV Inflow (2)	APR-JUL	25	38	56	100	68	103	56				
	APR-SEP	30	47	69	100	85	131	69				
ELEVENMILE CANYON RESV Inflow (2)	APR-JUL	26	40	58	100	73	113	58				
	APR-SEP	30	49	72	100	92	147	72				
CHEESMAN LAKE Inflow (2)	APR-JUL	50	78	110	97	144	225	114				
	APR-SEP	60	95	134	96	178	285	140				
SOUTH PLATTE R at South Platte (2)	APR-JUL	82	135	198	97	265	435	205				
	APR-SEP	102	167	245	96	330	545	255				
BEAR CREEK abv Evergreen	APR-JUL	8.7	14.3	19.5	101	28	46	19.3				
	APR-SEP	11.8	18.9	25	100	36	57	25				
BEAR CREEK at Morrison	APR-JUL	9.6	17.4	25	100	39	70	25				
	APR-SEP	12.4	22	31	100	47	83	31				
CLEAR CREEK at Golden	APR-JUL	78	95	117	106	119	136	110				
	APR-SEP	94	115	142	106	145	166	134				
ST. VRAIN CREEK at Lyons (2)	APR-JUL	76	88	97	103	106	118	94				
	APR-SEP	87	102	112	103	122	137	109				
BOULDER CREEK nr Orodell (2)	APR-JUL	40	47	51	98	55	62	52				
	APR-SEP	46	54	59	98	64	72	60				
SOUTH BOULDER CK nr Eldorado Spgs (2)	APR-JUL	35	40	43	105	46	51	41				
	APR-SEP	31	37	48	104	45	51	46				
BIG THOMPSON R at Canyon Mouth (2)	APR-JUL	63	78	88	89	98	113	99				
	APR-SEP	73	91	106	89	115	133	119				
CACHE LAPOUDRE at Canyon Mouth (2)	APR-JUL	143	189	220	90	250	295	245				
	APR-SEP	164	215	250	91	285	335	275				

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

SOUTH PLATTE RIVER BASIN  
Watershed Snowpack Analysis - February 1, 2008

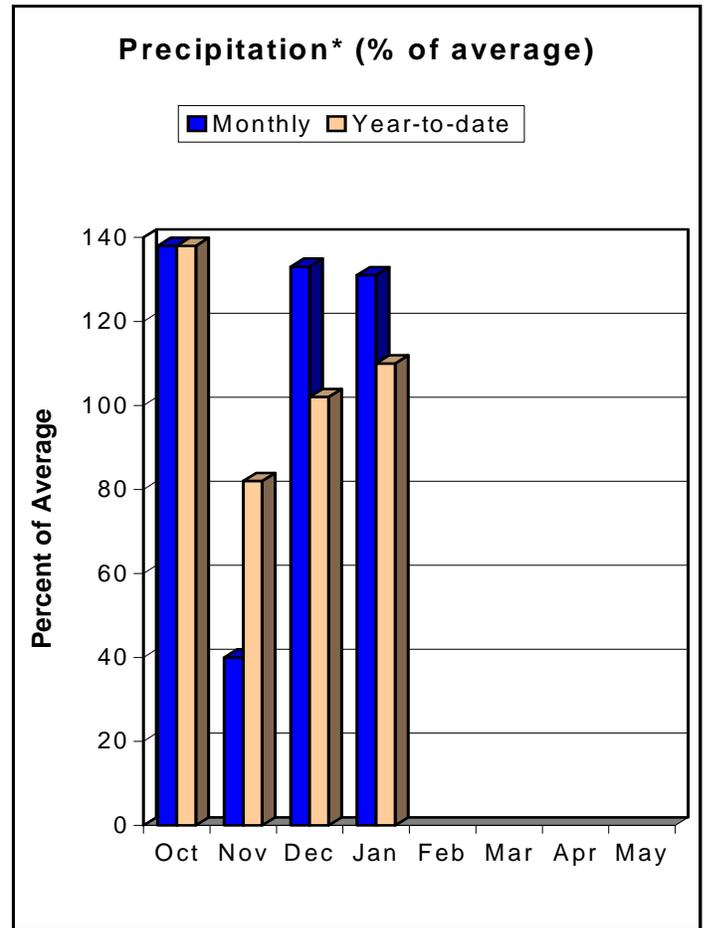
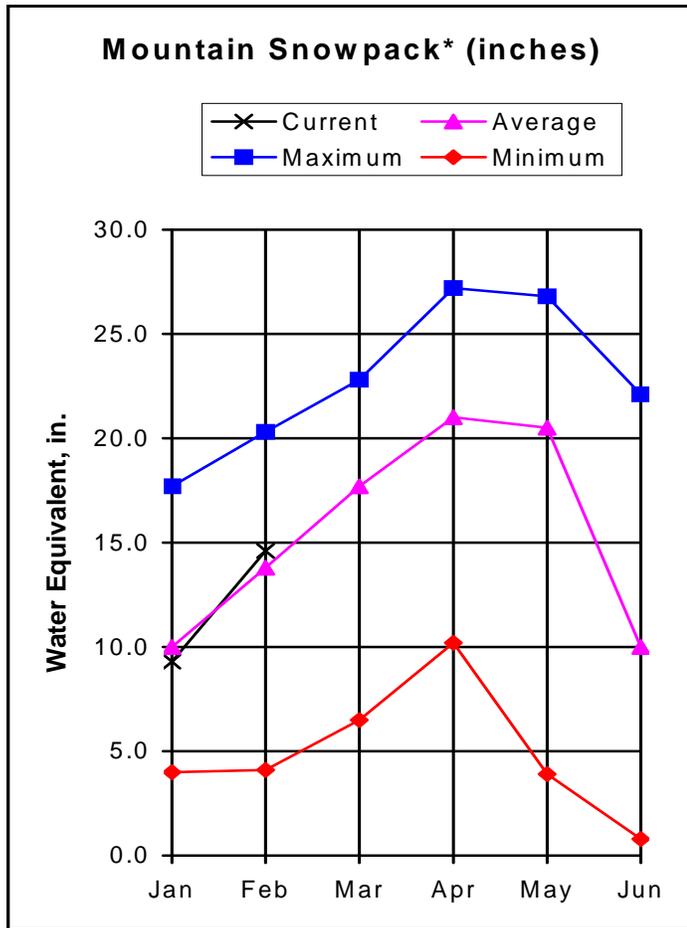
Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
ANTERO	19.9	19.9	17.0	16.4	BIG THOMPSON BASIN	7	83	91
BARR LAKE	30.1	25.9	23.1	24.0	BOULDER CREEK BASIN	5	68	88
BLACK HOLLOW	6.5	2.2	2.3	3.9	CACHE LA POUFRE BASIN	8	84	98
BOYD LAKE	44.0	20.7	12.8	32.1	CLEAR CREEK BASIN	4	91	109
BUTTON ROCK/RALPH PRICE	16.2	14.4	15.2	13.0	SAINT VRAIN BASIN	4	82	88
CACHE LA POUFRE	10.1	5.7	3.6	7.2	UPPER SOUTH PLATTE BASIN	15	92	104
CARTER	108.9	15.2	28.5	84.6	TOTAL SOUTH PLATTE BASIN	43	84	97
CHAMBERS LAKE	8.8	1.8	2.0	3.0				
CHEESMAN	79.0	68.7	72.7	59.7				
COBB LAKE	22.3	2.8	3.4	13.9				
ELEVEN MILE	98.0	99.2	99.8	95.9				
EMPIRE	36.5	13.4	13.1	22.8				
FOSSIL CREEK	11.1	3.8	7.6	6.8				
GROSS	42.0	29.9	23.7	26.0				
HALLIGAN	6.4	3.7	3.8	4.3				
HORSECREEK	14.7	13.8	7.5	11.6				
HORSETOOTH	149.7	108.4	100.2	99.0				
JACKSON	26.1	24.0	19.4	26.1				
JULESBURG	20.5	16.2	17.6	18.8				
LAKE LOVELAND	14.0	11.4	10.9	8.7				
LONE TREE	9.0	6.8	5.8	6.4				
MARIANO	6.0	1.5	3.9	4.2				
MARSHALL	10.0	4.8	4.2	5.1				
MARSTON	13.0	8.5	9.3	12.8				
MILTON	23.5	18.0	14.1	15.5				
POINT OF ROCKS	70.6	45.1	30.9	57.0				
PREWITT	28.2	22.2	6.1	19.3				
RIVERSIDE	55.8	42.5	36.7	41.7				
SPINNEY MOUNTAIN	49.0	36.1	31.7	33.3				
STANDLEY	42.0	37.7	40.0	33.1				
TERRY LAKE	8.0	5.8	5.7	5.3				
UNION	13.0	11.9	8.1	10.6				
WINDSOR	15.2	9.7	1.3	10.8				

\* 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 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.

# YAMPA, WHITE, NORTH PLATTE AND LARAMIE RIVER BASINS as of February 1, 2008



\*Based on selected stations

Above average snowfall during January helped bring the combined Yampa, White, North Platte and Laramie River basin snowpacks to above normal conditions (106 percent of average) from last month's below average numbers. This is only the second time February 1 snowpacks have been above average since 1997. By comparison, this year's snowpacks are 42 percent higher than those measured at this time last year. Above average snowpacks can be found throughout all the sub-basins. The Yampa Watershed produced the lowest February 1 snowpack totals at 101 percent of average, while the Little Snake boasted the highest numbers at 115 percent of average. Precipitation in the mountains during January, measured from 25 SNOTEL stations, was well above normal at 131 percent of average. This month's precipitation is 244 percent of the January precipitation measured during 2007. This helped boost water year total precipitation (beginning October 1) from 102 percent of average last month to 110 percent of average. Reservoir storage at Stagecoach Reservoir is 115 percent of average and Yamcolo is 81 percent of average. Together, they are 108 percent of average and 102 percent of the stored water available last year at this time. Near to above average runoff can be expected throughout the basin this spring and summer. Forecast volumes range from 98 percent of average for the Yampa River at Steamboat Springs to 119 percent of average for Elkhead Creek below Maynard Gulch.

YAMPA, WHITE, AND NORTH PLATTE RIVER BASINS  
Streamflow Forecasts - February 1, 2008

Forecast Point	Forecast Period	<<==== Drier ==== Future Conditions ==== Wetter =====>>						30-Yr Avg. (1000AF)				
		90%		70%		50%			30%		10%	
		(1000AF)	(1000AF)	(1000AF)	(% AVG.)	(1000AF)	(1000AF)		(1000AF)	(1000AF)	(1000AF)	(1000AF)
NORTH PLATTE RIVER nr Northgate	APR-JUL	171	235	285	116	340	430	245				
	APR-SEP	190	260	315	117	375	470	270				
LARAMIE RIVER nr Woods	APR-JUL	84	119	143	116	167	200	123				
	APR-SEP	92	131	157	116	183	220	135				
Yampa R ab Stagecoach Reservoir (2)	APR-JUL	20	27	33	114	40	51	29				
Yampa River at Steamboat Springs (2)	APR-JUL	205	245	275	98	305	360	280				
Elk River nr Milner	APR-JUL	265	315	350	108	385	445	325				
Elkhead Creek nr Elkhead	APR-JUL	28	37	43	110	50	61	39				
Elkhead Creek blw Maynard Gulch (2)	APR-JUL	47	60	70	119	81	98	59				
Fortification Ck nr Fortification	MAR-JUN	4.5	6.4	8.0	107	9.8	12.9	7.5				
Yampa River nr Maybell (2)	APR-JUL	715	890	1020	103	1160	1380	990				
Little Snake River nr Slater	APR-JUL	129	157	178	112	200	235	159				
Little Snake River nr Dixon	APR-JUL	265	335	385	117	440	530	330				
Little Snake River nr Lily	APR-JUL	285	365	430	118	500	610	365				
White River nr Meeker	APR-JUL	225	275	315	109	355	420	290				

YAMPA, WHITE, AND NORTH PLATTE RIVER BASINS  
Reservoir Storage (1000 AF) - End of January

YAMPA, WHITE, AND NORTH PLATTE RIVER BASINS  
Watershed Snowpack Analysis - February 1, 2008

Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
STAGECOACH	33.3	28.9	29.6	25.1	LARAMIE RIVER BASIN	3	99	103
YAMCOLO	8.7	5.0	3.6	6.2	NORTH PLATTE RIVER BASIN	12	133	102
					TOTAL NORTH PLATTE BASIN	14	128	103
					ELK RIVER BASIN	2	162	111
					YAMPA RIVER BASIN	12	149	101
					WHITE RIVER BASIN	6	146	102
					TOTAL YAMPA AND WHITE RIV	17	151	102
					LITTLE SNAKE RIVER BASIN	8	168	115
TOTAL YAMPA, WHITE AND NO	36	142	106					

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

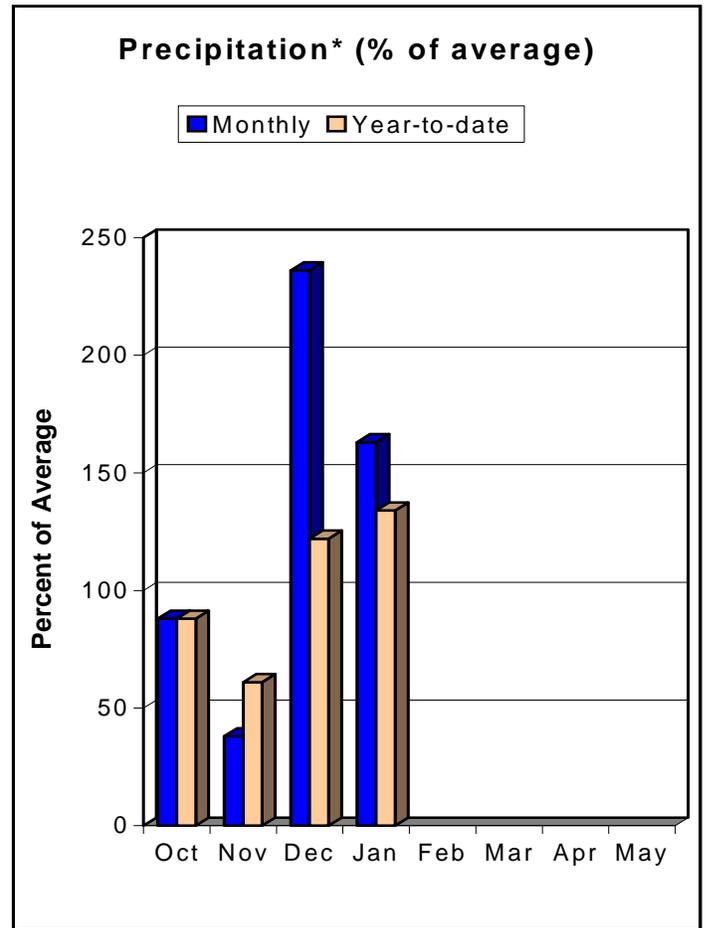
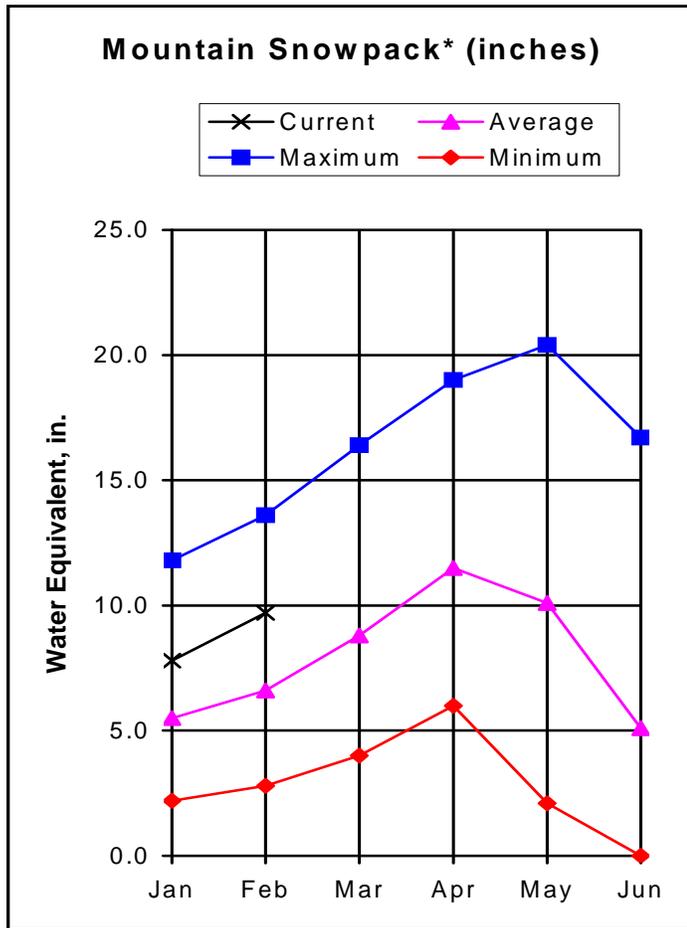
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(2) - The value is natural volume - actual volume may be affected by upstream water management.

# ARKANSAS RIVER BASIN

## as of February 1, 2008



\*Based on selected stations

After a stellar December, precipitation in the Arkansas River Basin stayed the course in January. Down from 236% of average in December, mountain precipitation during the month of January was a very respectable 163% of average. Year to date precipitation continued to increase and was at 134% of average for the period of October 1 to February 1. Snowpack numbers followed suit and were at 147% of average, up slightly from last month's 141% of average. Snow levels look to be slightly higher in the southern portions of the basin, as snow levels in the Purgatoire Basin are at 204% of average. Whitewater enthusiasts should be pleased to know that the Upper Arkansas has 132% of its average snowpack. The last time the Arkansas as a whole saw a snowpack this strong on February 1 was back in 1984 when the snow level was at 161% of average. Reservoir storage in the Arkansas River Basin is slightly below average at 93% of average but 121% of the storage from last year at this time. April through September streamflow volumes are forecast to be well above average at all points, especially Grape Creek, which is predicted to produce 194% of its average volume. On the lower end, but by no means dry, is inflow to Pueblo Reservoir at 125% of average. Boaters on the Upper Arkansas should be pleased with a streamflow forecast of 131% of average.

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ARKANSAS RIVER BASIN  
Streamflow Forecasts - February 1, 2008

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Forecast Point	Forecast Period	<<===== Drier ===== Future Conditions ===== Wetter =====>>						30-Yr Avg. (1000AF)				
		90%		70%		50%			30%		10%	
		(1000AF)	(1000AF)	(1000AF)	(% AVG.)	(1000AF)	(1000AF)		(1000AF)	(1000AF)	(1000AF)	(1000AF)
CHALK CK at Nathrop	APR-JUL	21	28	34	148	40	50	23				
	APR-SEP	25	34	40	148	47	58	27				
ARKANSAS RIVER at Salida (2)	APR-JUL	250	300	335	131	375	435	255				
	APR-SEP	300	360	405	131	450	525	310				
GRAPE CK nr Westcliffe	APR-JUL	11.7	22	31	193	41	59	16.1				
	APR-SEP	17.8	29	38	194	48	66	19.6				
PUEBLO RESERVOIR Inflow (2)	APR-JUL	305	405	480	125	560	690	385				
	APR-SEP	400	520	605	125	700	850	485				
HUERFANO RIVER nr Redwing	APR-JUL	11.0	14.7	17.5	142	21	25	12.3				
	APR-SEP	14.4	18.7	22	142	26	31	15.5				
CUCHARAS RIVER nr La Veta	APR-JUL	7.6	12.2	15.9	141	20	27	11.3				
	APR-SEP	9.3	14.3	18.3	141	23	30	13.0				
TRINIDAD LAKE Inflow (2)	MAR-JUL	19.4	33	45	132	58	81	34				
	APR-SEP	28	45	60	136	77	105	44				

ARKANSAS RIVER BASIN Reservoir Storage (1000 AF) - End of January					ARKANSAS RIVER BASIN Watershed Snowpack Analysis - February 1, 2008			
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	44.6	26.3	31.1	UPPER ARKANSAS BASIN	9	142	132
CLEAR CREEK	11.4	3.1	8.3	6.4	CUCHARAS & HUERFANO RIVER	4	123	182
CUCHARAS RESERVOIR	40.0	0.5	0.6	4.8	PURGATOIRE RIVER BASIN	2	125	204
GREAT PLAINS	150.0	0.0	0.0	35.2	TOTAL ARKANSAS RIVER BASIN	14	136	147
HOLBROOK	7.0	0.9	2.2	3.9				
HORSE CREEK	27.0	0.0	0.0	12.2				
JOHN MARTIN	616.0	51.3	40.1	120.9				
LAKE HENRY	8.0	5.0	5.4	4.1				
MEREDITH	42.0	29.3	12.0	16.2				
PUEBLO	354.0	217.9	161.4	158.3				
TRINIDAD	167.0	23.2	22.9	25.3				
TURQUOISE	127.0	72.8	89.3	82.7				
TWIN LAKES	86.0	57.7	49.0	44.8				

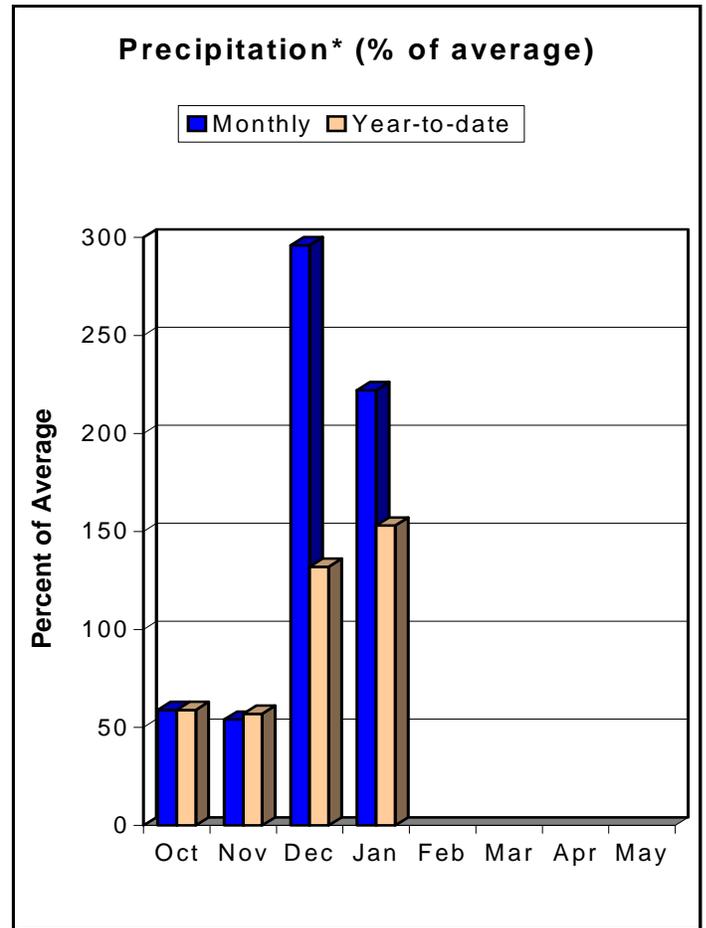
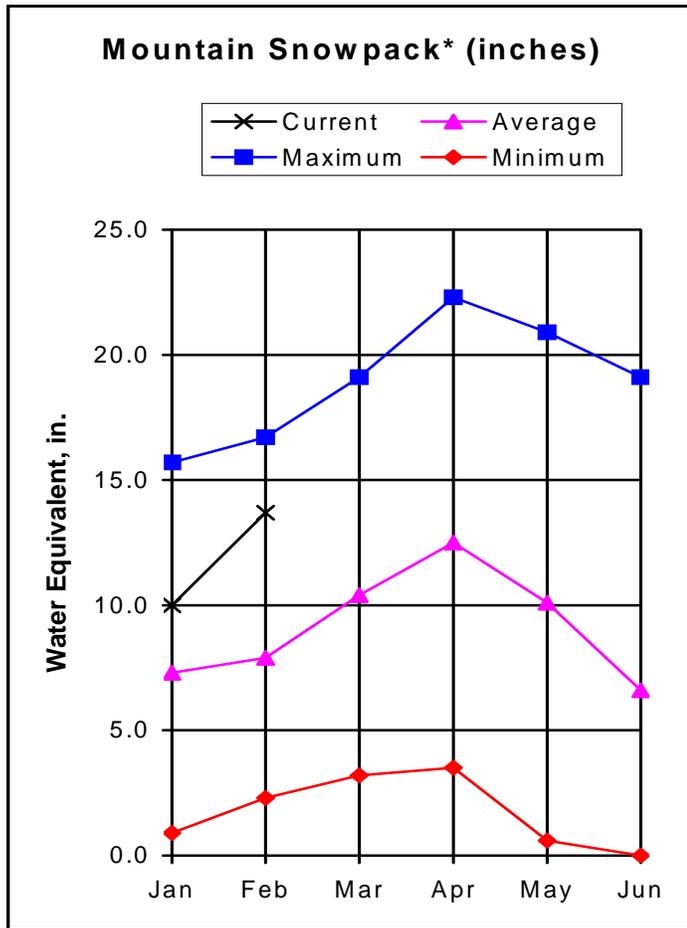
\* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

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# UPPER RIO GRANDE RIVER BASIN as of February 1, 2008



\*Based on selected stations

At 153% of average, up from 132% of average last month, year to date precipitation remains well above average in the Upper Rio Grande River Basin. After an amazing 296% of average monthly precipitation fell in December, January also saw more than twice its average precipitation at 222% of average. As far as snowpack goes, the Rio Grande Basin has not seen this much snow on February 1 since 1979 when snow levels were at 226% of average. Snowpack in the Rio Grande Basin this month is at 173% of average as of February 1, up from 137% of average last month. Sub-basins in the southwest portion of the watershed are carrying a little more of the load than the west Sangre de Cristos, as snow levels in the Alamosa Creek Basin are at 198% of average, while Culebra and Trinchera Creeks are at 160% of average. Based on reports from six reservoirs, storage is 98% of average in the Rio Grande Basin, and at 140% of the storage at this time last year. Expect April through September streamflow volume to be well above average on all streams. Most notably, the San Antonio River at Ortiz is forecast to produce 183% of its average volume. On the low (but not lacking) side, Saguache Creek near Saguache is expected to produce 127% of its average volume.

UPPER RIO GRANDE BASIN  
Streamflow Forecasts - February 1, 2008

Forecast Point	Forecast Period	<<==== Drier ==== Future Conditions ===== Wetter =====>>						30-Yr Avg. (1000AF)
		90%		50%		10%		
		(1000AF)	(1000AF)	(1000AF)	(% AVG.)	(1000AF)	(1000AF)	
Rio Grande at Thirty Mile Bridge (2)	APR-SEP	142	170	190	140	210	245	136
	APR-JUL	122	147	165	140	185	215	118
Rio Grande at Wagon Wheel Gap (2)	APR-SEP	350	425	480	139	540	630	345
South Fork Rio Grande at South Fork	APR-SEP	145	176	200	152	225	265	132
Rio Grande nr Del Norte (2)	APR-SEP	565	695	790	149	895	1060	531
Saguache Creek nr Saguache (2)	APR-SEP	26	35	42	127	50	62	33
Alamosa Creek abv Terrace Reservoir	APR-SEP	74	92	105	150	120	143	70
La Jara Creek nr Capulin	MAR-JUL	8.0	11.0	13.4	154	16.1	21	8.7
Trinchera Creek abv Turners Ranch	APR-SEP	10.4	14.2	16.8	140	19.4	23	12.0
Sangre de Cristo Creek (2)	APR-SEP	5.8	10.1	13.0	148	15.9	20	8.8
Ute Ck nr Fort Garland	APR-SEP	8.7	12.9	16.3	134	20	27	12.2
Platoro Reservoir Inflow	APR-JUL	67	80	90	141	100	117	64
	APR-SEP	74	88	98	138	109	127	71
Conejos River nr Mogote (2)	APR-SEP	225	275	310	155	350	415	200
San Antonio River at Ortiz	APR-SEP	18.2	25	30	183	36	46	16.4
Los Pinos River nr Ortiz	APR-SEP	91	113	130	176	149	179	74
Culebra Creek at San Luis (2)	APR-SEP	14.4	23	30	130	39	54	23
Costilla Reservoir Inflow	MAR-JUL	8.2	11.7	14.5	137	17.8	23	10.6
Costilla Creek nr Costilla (2)	MAR-JUL	20	29	37	142	46	61	26

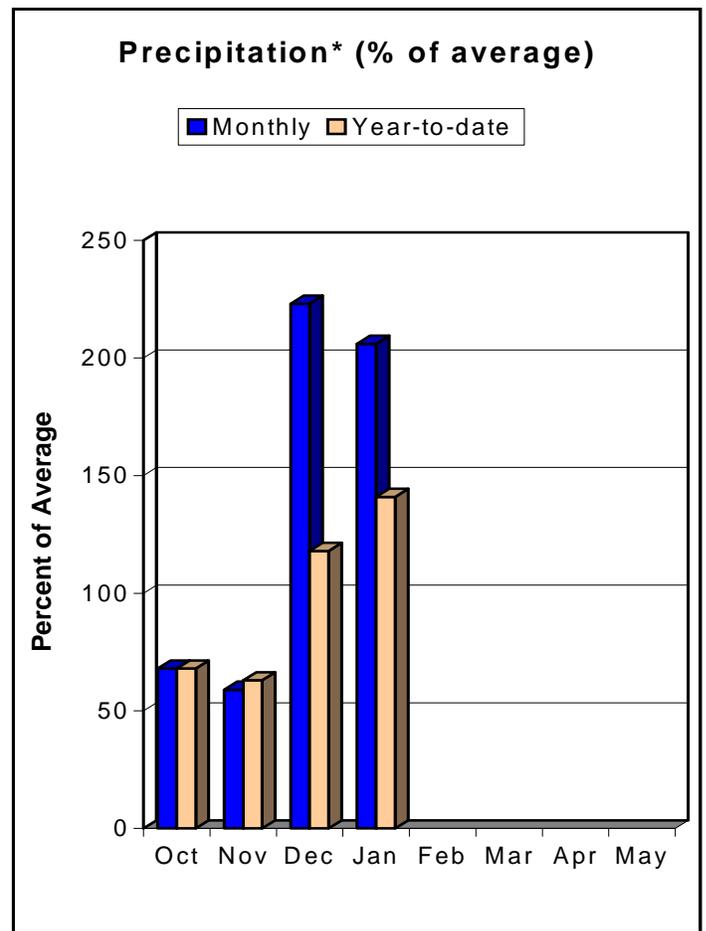
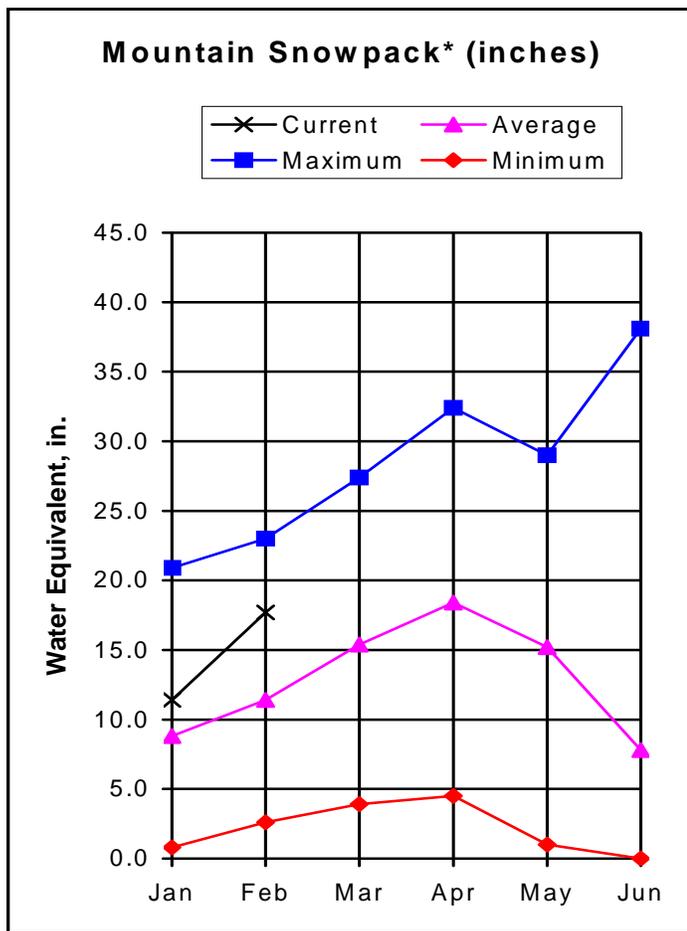
UPPER RIO GRANDE BASIN Reservoir Storage (1000 AF) - End of January					UPPER RIO GRANDE BASIN Watershed Snowpack Analysis - February 1, 2008			
Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
CONTINENTAL	27.0	3.8	3.8	5.8	ALAMOSA CREEK BASIN	2	170	198
PLATORO	60.0	13.1	9.7	24.7	CONEJOS & RIO SAN ANTONIO	4	198	190
RIO GRANDE	51.0	26.1	21.7	16.5	CULEBRA & TRINCHERA CREEK	5	139	160
SANCHEZ	103.0	29.8	13.3	24.1	UPPER RIO GRANDE BASIN	12	172	167
SANTA MARIA	45.0	6.6	7.0	10.5	TOTAL UPPER RIO GRANDE BA	23	170	173
TERRACE	18.0	6.2	5.8	6.1				

\* 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 1971-2000 base period.

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

# SAN MIGUEL, DOLORES, ANIMAS, AND SAN JUAN RIVER BASINS as of February 1, 2008



\*Based on selected stations

"And the rich get richer" was the theme for snowpacks in the San Miguel, Dolores, Animas and San Juan River basins during January. The combined basins saw their snowpack figures jump from 129 percent of average on January 1 to 155 percent of average on February 1. Current snow water content figures are just over twice of those reported last February. This year's February 1 percentage ties with 2005 as the third highest snowpack since 1968. Only 1979 (at 210 percent of average) and 1997 (at 168 percent of average) had higher snowpack percentages on February 1. All the watersheds within the combined basins are reporting well above average snowpacks, with the San Juan Drainage taking the lead at 172 percent of average and the San Miguel bringing up the rear at 140 percent of average. Mountain precipitation during January was 206 percent of average, making it the second month in a row with monthly totals over 200 percent of average. Total precipitation for the water year, beginning October 1, took a huge leap from 118 percent of average last month to 141 percent of average. Reservoir storage, down slightly from last year at this time, is now above normal at 110 percent of average. Water users throughout the basin can expect above to well above normal runoff during the April-July forecast period. Streamflow volumes are forecast to range from 120 percent of average for the Gurley Reservoir Inlet to 166 percent of average for the Navajo Reservoir Inflow.

SAN MIGUEL, DOLORES, ANIMAS, AND SAN JUAN RIVER BASINS  
Streamflow Forecasts - February 1, 2008

Forecast Point	Forecast Period	<<===== Drier ===== Future Conditions ===== Wetter =====>>						30-Yr Avg. (1000AF)
		90% (1000AF)	70% (1000AF)	Chance Of Exceeding * 50% (1000AF) (% AVG.)		30% (1000AF)	10% (1000AF)	
Dolores River at Dolores	APR-JUL	250	325	385	145	430	480	265
McPhee Reservoir Inflow	APR-JUL	300	395	470	147	500	540	320
San Miguel River nr Placerville	APR-JUL	125	156	180	136	205	250	132
Gurley Reservoir Inlet	APR-JUL	15.1	19.0	22	120	25	31	18.3
Cone Reservoir Inlet	APR-JUL	1.8	3.2	4.5	138	6.1	9.1	3.3
Lilylands Reservoir Inlet	APR-JUL	2.4	3.2	3.8	129	4.5	5.7	2.9
Rio Blanco at Blanco Diversion (2)	APR-JUL	64	77	86	162	96	112	53
Navajo River at Oso Diversion (2)	APR-JUL	73	91	105	152	120	146	69
San Juan River nr Carracas (2)	APR-JUL	430	555	650	161	755	935	405
Piedra River nr Arboles	APR-JUL	230	310	370	161	440	555	230
Vallecito Reservoir Inflow	APR-JUL	205	250	285	139	325	385	205
Navajo Reservoir Inflow (2)	APR-JUL	895	1120	1300	166	1490	1810	785
Animas River at Durango	APR-JUL	485	595	680	155	775	925	440
Lemon Reservoir Inflow	APR-JUL	61	72	80	138	89	103	58
La Plata River at Hesperus	APR-JUL	23	30	35	140	41	50	25
Mancos River nr Mancos (2)	APR-JUL	29	42	50	152	58	71	33
	APRIL			7.2	164			4.4
	MAY			19.5	159			12.3
	JUNE			16.8	149			11.3
	JULY			6.5	130			5.0

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

SAN MIGUEL, DOLORES, ANIMAS, AND SAN JUAN RIVER BASINS  
Watershed Snowpack Analysis - February 1, 2008

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	14.8	16.2	12.0	ANIMAS RIVER BASIN	8	199	149
JACKSON GULCH	10.0	5.8	6.3	4.6	DOLORES RIVER BASIN	7	229	158
LEMON	40.0	22.8	33.5	20.2	SAN MIGUEL RIVER BASIN	5	179	140
MCPHEE	381.0	286.0	275.0	274.4	SAN JUAN RIVER BASIN	4	197	172
NARRAGUINNEP	19.0	15.1	19.0	12.7	TOTAL SAN MIGUEL, DOLORES	23	201	155
VALLECITO	126.0	76.2	76.3	59.4	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.

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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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