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**Natural
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Colorado Basin Outlook Report FEBRUARY 1, 2004



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, 2004

Summary

January was a dry month across most of Colorado. The state's snowpack percentages decreased from the January 1 readings in most river basins. Only the southwestern mountains have above average snowpack accumulations at this point in the winter season. Well below average snowpack totals are common east of the Continental Divide, increasing concerns for water supply shortages during the summer of 2004. Reservoir storage remains generally below average, yet is significantly better than a year ago. With only 40% of the winter snowpack accumulation season remaining, water users nearly statewide are dependent on a wet spring to achieve near average summer runoff.

Snowpack

The snowfall highlight for January is confined to a single major storm event, which brought snow to the entire state during the first few days of the month. This storm brought the greatest accumulations to the southwestern mountains where several feet of new snow accumulated. Although this storm was beneficial to the entire state, it was followed by an extended dry period, lasting several weeks in some locations, with no significant snowfall. As this dry period lingered on, snowpack percentages steadily decreased. While the last week of January brought an end to the dryness, snowpack percentages reflect an overall decrease for the month. By February 1, the statewide snowpack had dipped to 88% of average, down from the 92% of average measured on January 1. Only Colorado's southwestern basins, which benefited from the early January storm, can boast of an above average snowpack. Basinwide snowpack percentages in the Gunnison, Rio Grande and combined San Juan, Animas, Dolores, and San Miguel basins range from 101% to 106% of average. Colorado's lowest snowpack readings were measured in the South Platte and Arkansas basins which are consistently below average. With snowpack readings of only 65% of average in the South Platte Basin, this is the fourth consecutive year with February 1 snowpack readings at or below this percentage. For the state, 2004 marks the seventh consecutive year of below average snowpack accumulations on February 1.

Precipitation

Precipitation totals for January at Colorado SNOTEL sites were below average in all basins except the Rio Grande and combined San Juan, Animas, Dolores, and San Miguel. These basins managed to receive slightly above average totals for the month, with most of that moisture falling during the early-January storm. The lowest monthly totals were measured in the Yampa and White basins at only 56% of average. Totals were only slightly better (71% of average), in both the Colorado and South Platte basins. Statewide, precipitation for the month of January was only 80% of average. For the 2004 water year, which began on October 1, 2003, totals are below average statewide, ranging from 71% of average in the South Platte Basin, to 98% of average in the Rio Grande Basin. Statewide water year totals are only 87% of average. In terms of inches, this deficit equals an average of about 1.6 inches of precipitation. In order to overcome this deficit by the critical April 1 date, precipitation would have to be about 125% of average for the next two months.

Reservoir Storage

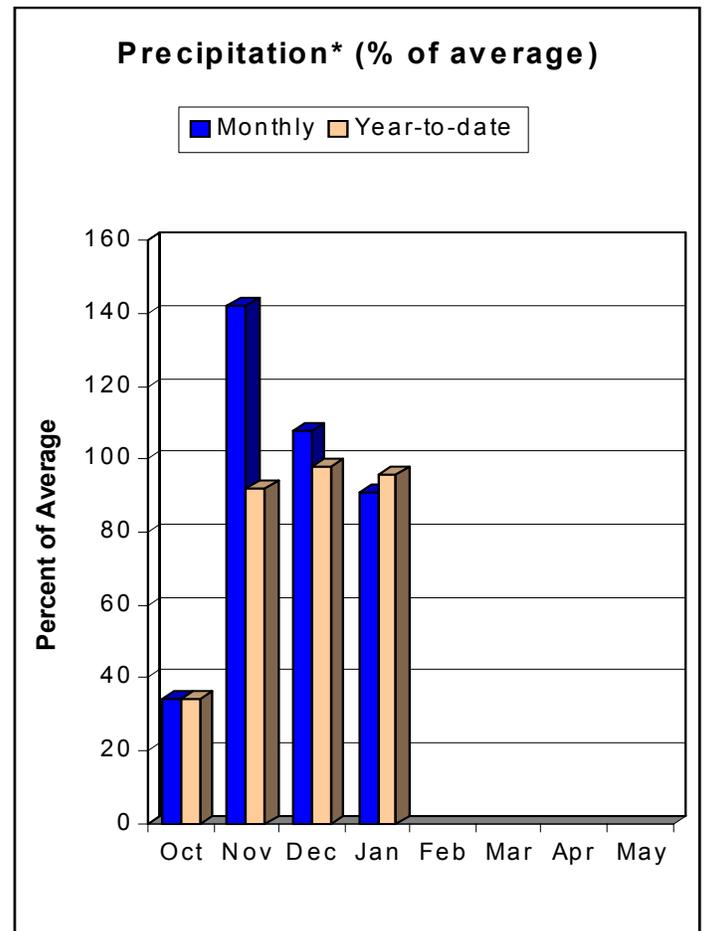
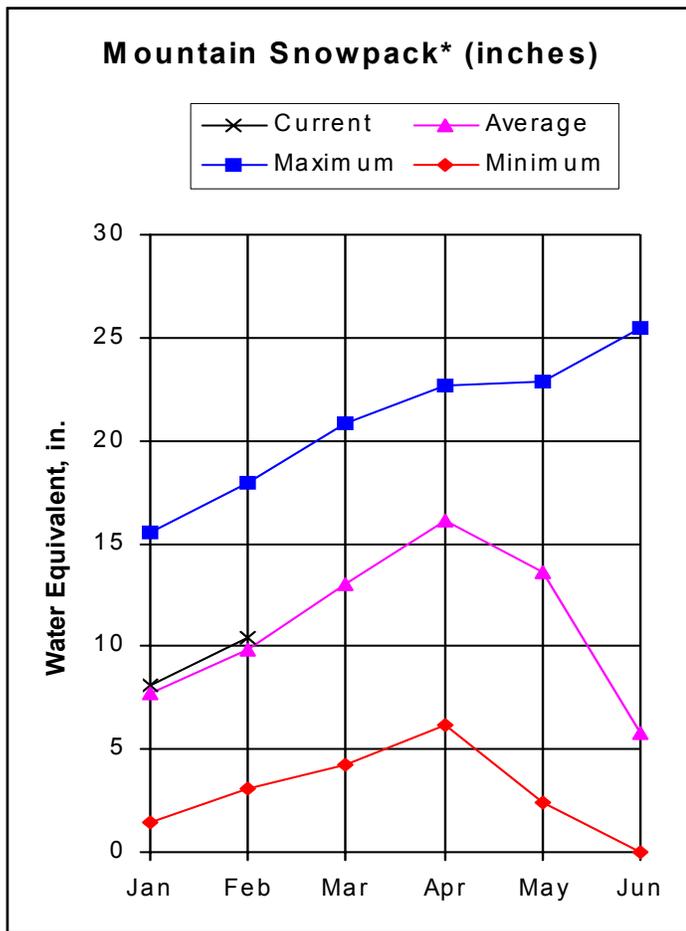
Storage in Colorado's major reservoirs continues to track at below average volumes, yet is much better than last year's storage volumes. Current volumes are the lowest, in terms of percent of average, in the Rio Grande at 40%, the Arkansas at 53%, and the San Juan, Animas, Dolores, and San Miguel at 66% of average. These basins suffered from the lowest snowpack accumulations and runoff during 2003, and this is now carried over into this year's storage. Statewide, reservoir storage is 76% of average for this month. While the state's reservoirs continue to track below the long-term average, the current storage is better than those of last year at this time nearly statewide. All basins are reporting volumes greater than last year's with the only exception of the Rio Grande Basin. Volumes in the Rio Grande Basin are only 67% of last year's. Meanwhile, the Colorado Basin is storing more than two times that of last year on this date. Statewide, reservoir storage is 147% of last year's volumes.

Streamflow

Without significantly above average snowfall across Colorado during the next two months, near average streamflow volumes during the spring and summer of 2004 will be a rare occurrence. Current forecasts call for below average runoff nearly statewide. Only portions of the San Juan and Rio Grande basins are expected to produce near to above average volumes this year. Elsewhere, volumes decrease to 90% to 100% of average in the Gunnison Basin, and 70% to 90% of average across most of the remainder of the state. The lowest volumes are forecast throughout the upper reaches of the South Platte Basin, with forecasted volumes that are less than 50% of average. Streamflow forecasts in the South Platte Basin are near those of last year at this time. However, that was prior to the March blizzard, which dramatically improved water supplies throughout the basin. It appears that it will be necessary to have another extremely wet spring again this year just to reach near average runoff in the upper South Platte Basin.

GUNNISON RIVER BASIN

as of February 1, 2004



*Based on selected stations

Additional snow since January 1 fell primarily during the very early part of the month, at which time accumulations reached nearly 40% above average in the Gunnison Basin, but snowfall amounts during the rest of the month were nearly zero and total accumulations on February 1 are only 1% above average, which is 4% of average less than last month. There is 136% of the amount of snow there was last year on February 1. Precipitation during January was 91% of average. The total precipitation this water year has been 96% of average. Reservoir storage in the basin is at 86% of average, which is 25% above the amount last year at this time. Hopefully, the favorable snowpack conditions will carry into the runoff season allowing enough flow to adequately fill the reservoirs. Currently, streamflow forecasts are reflective of the snowpack levels at near average for most of the forecast points. Forecasts range from only 74% of average at Tomichi Creek at Gunnison, to 100% of average on the Slate River near Crested Butte.

GUNNISON RIVER BASIN
Streamflow Forecasts - February 1, 2004

Forecast Point	Forecast Period	Future Conditions						30-Yr Avg. (1000AF)
		<<----- Drier ----->>		----->>>		----->>>		
		90% (1000AF)	70% (1000AF)	Chance Of Exceeding * 50% (Most Probable) (1000AF) (% AVG.)		30% (1000AF)	10% (1000AF)	
Taylor River blw Taylor Park Resv	APR-JUL	51	76	92	89	108	133	103
Slate River nr Crested Butte	APR-JUL	66	80	89	100	98	112	89
East River at Almont	APR-JUL	120	156	180	94	202	242	192
Gunnison River nr Gunnison	APR-JUL	220	295	350	90	405	480	390
Tomichi Creek at Sargents	APR-JUL	7.9	17.0	24	75	31	40	32
Cochetopa Creek blw Rock Creek	APR-JUL	4.6	9.6	13.0	75	16.4	21	17.3
Tomichi Creek at Gunnison	APR-JUL	24	43	60	74	79	113	81
Lake Fork at Gateview	APR-JUL	60	93	115	91	137	170	126
Blue Mesa Reservoir Inflow	APR-JUL	330	510	630	88	750	930	720
Paonia Reservoir Inflow	MAR-JUN	43	74	100	100	130	181	100
	APR-JUL	37	72	102	100	138	200	102
N.F. Gunnison River nr Somerset	APR-JUL	189	252	300	98	352	436	305
Surface Creek nr Cedaredge	APR-JUL	11.0	14.3	17.0	99	20	26	17.1
Ridgway Reservoir Inflow	APR-JUL	66	82	95	93	110	136	102
Uncompahgre River at Colona	APR-JUL	80	105	123	89	143	175	139
Gunnison River nr Grand Junction	APR-JUL	790	1150	1400	90	1650	2010	1560

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

GUNNISON RIVER BASIN
Watershed Snowpack Analysis - February 1, 2004

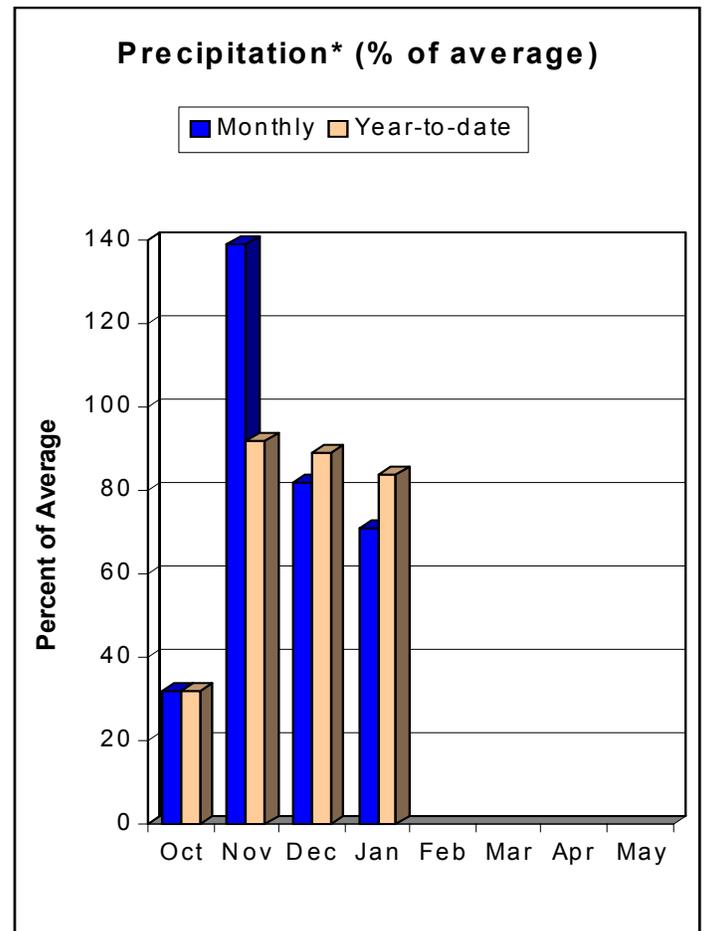
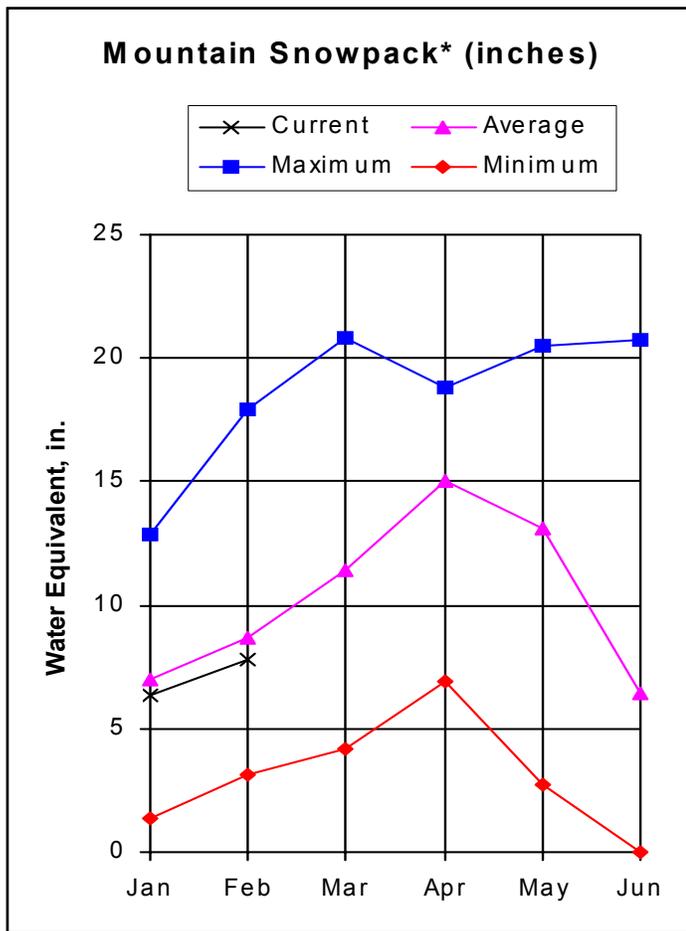
Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
BLUE MESA	830.0	382.5	290.9	493.3	UPPER GUNNISON BASIN	15	137	99
CRAWFORD	14.3	3.1	4.0	8.2	SURFACE CREEK BASIN	3	155	108
FRUITGROWERS	4.3	1.6	1.4	3.4	UNCOMPAHGRE BASIN	4	135	104
FRUITLAND	9.2	0.1	0.5	1.8	TOTAL GUNNISON RIVER BASIN	19	136	100
MORROW POINT	121.0	110.9	110.4	113.4				
PAONIA	18.0	3.5	4.5	4.7				
RIDGWAY	83.2	70.8	61.3	60.2				
TAYLOR PARK	106.0	71.8	40.5	66.7				

* 90%, 70%, 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, 2004



*Based on selected stations

The February 1 snowpack measurements are only 85% of average in the Upper Colorado Basin, which is 6% below the percent of average last month. Most of January's accumulation fell during the very early part of the month, after which snowfall diminished to nearly zero. There is only 3% more snow accumulation this year than last year at this time. Measurements range from only 75% of average in the Blue River Watershed, to 106% of average in the Plateau Creek Watershed. The precipitation during January was the lowest monthly accumulation since October, at only 71% of average, and the water year total is now only 84% of average. The combined reservoir storage is about 86% of average on February 1. There is 238% of the storage there was last year at this time. Streamflow forecasts for the upcoming runoff season are all below average at this time. Forecasts range from only 73% of average at the Inflow to Willow Creek Reservoir, to 92% of average on the Roaring Fork at Glenwood Springs.

UPPER COLORADO RIVER BASIN
Streamflow Forecasts - February 1, 2004

Forecast Point	Forecast Period	<<----- Drier ----- Future Conditions ----- Wetter ----->>						30-Yr Avg. (1000AF)
				Chance Of Exceeding *				
		90% (1000AF)	70% (1000AF)	50% (Most Probable) (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	
Lake Granby Inflow	APR-JUL	126	153	175	78	200	244	225
Willow Creek Reservoir Inflow	APR-JUL	24	31	37	73	43	53	51
Williams Fork Reservoir inflow	APR-JUL	59	71	80	84	90	105	95
Dillon Reservoir Inflow	APR-JUL	58	98	125	75	152	191	167
Green Mountain Reservoir inflow	APR-JUL	172	203	225	80	248	285	280
Muddy Creek blw Wolford Mtn. Resv.	APR-JUL	31	42	53	88	66	92	60
Eagle River blw Gypsum	APR-JUL	170	222	265	79	317	412	335
Colorado River nr Dotsero	APR-JUL	525	870	1100	76	1330	1680	1440
Ruedi Reservoir Inflow	APR-JUL	84	104	120	85	139	171	141
Roaring Fork at Glenwood Springs	APR-JUL	469	573	650	92	731	860	710
Colorado River nr Cameo	APR-JUL	1020	1540	1900	79	2260	2780	2420

UPPER COLORADO RIVER BASIN
Reservoir Storage (1000 AF) - End of January

UPPER COLORADO RIVER BASIN
Watershed Snowpack Analysis - February 1, 2004

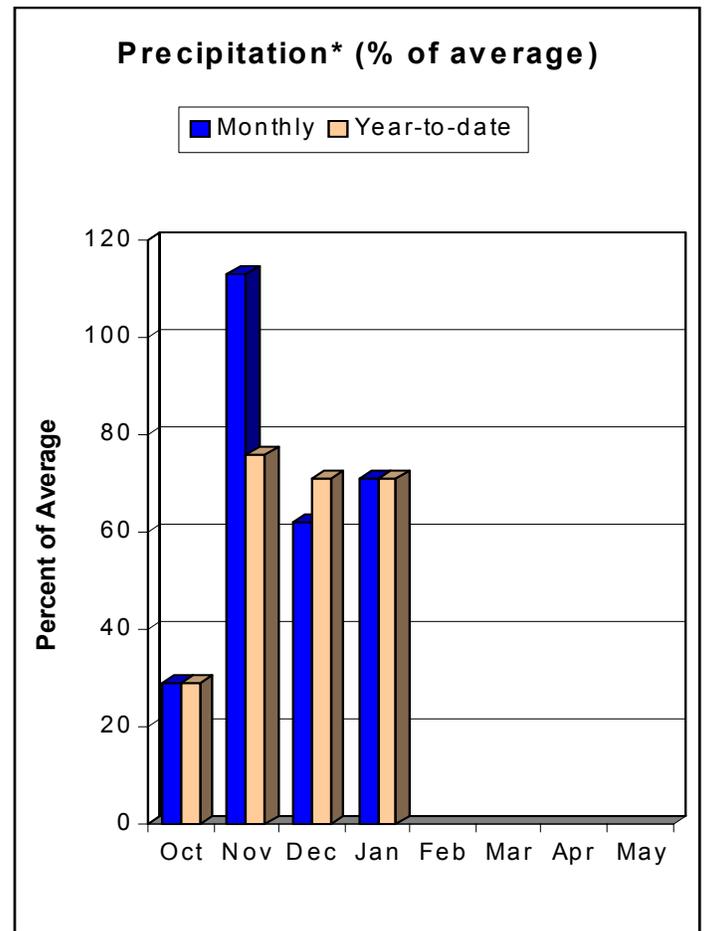
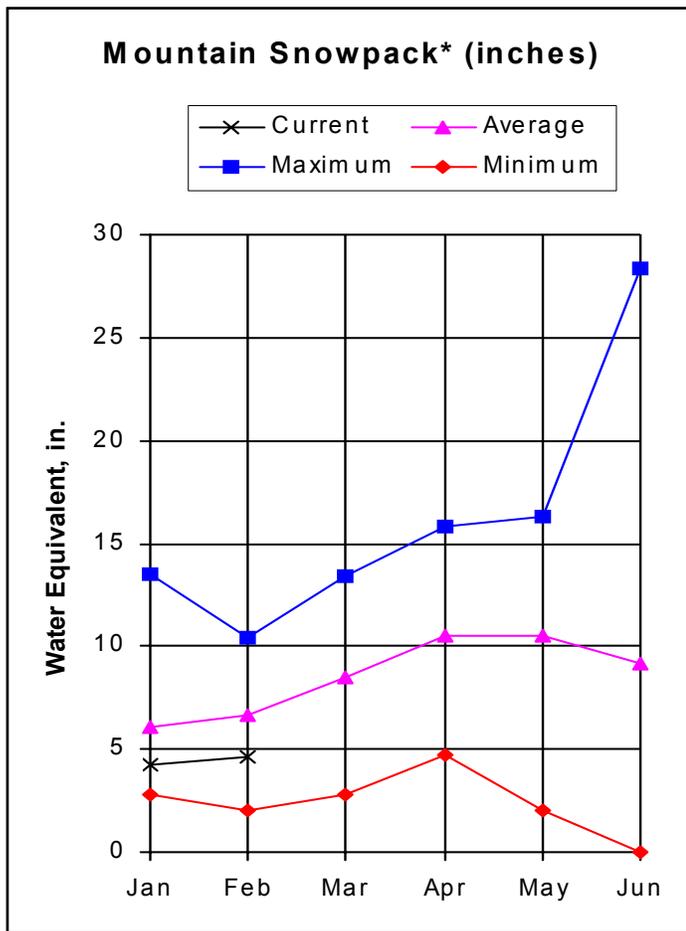
Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
DILLON	250.8	221.9	133.3	221.3	BLUE RIVER BASIN	9	87	73
LAKE GRANBY	465.6	225.1	35.1	300.7	UPPER COLORADO RIVER BASIN	37	95	79
GREEN MOUNTAIN	139.0	62.3	33.1	80.3	MUDDY CREEK BASIN	4	108	81
HOMESTAKE	43.0	21.8	17.0	27.7	PLATEAU CREEK BASIN	3	155	108
RUEDI	102.0	67.2	46.8	73.7	ROARING FORK BASIN	8	121	93
VEGA	32.0	10.2	4.0	11.6	WILLIAMS FORK BASIN	4	102	87
WILLIAMS FORK	96.8	58.9	7.5	59.5	WILLOW CREEK BASIN	4	97	87
WILLOW CREEK	9.0	6.9	6.9	6.4	TOTAL COLORADO RIVER BASIN	48	103	84

* 90%, 70%, 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, 2004



*Based on selected stations

Snowpack measurements in the South Platte Basin are only 65% of average on February 1, which is slightly below the percent of average on January 1. There is about the same amount of snow in the basin as there was last year at this time. The measurements are highly variable throughout the basin, ranging from only 53% of average in the Upper South Platte Watershed, to 78% of average in the Big Thompson and Clear Creek watersheds. Precipitation during January was only 71% of average. The water year total remains at only 71% of average. The combined reservoir storage for 31 major reservoirs in the basin is 81% of average, which is about 57% more storage than last year at this time. All of the streamflow forecasts for the runoff season are below, to much below average at this time. They are highly variable ranging from only 21% of average at the Inflow to Antero Reservoir, to 91% of average on Boulder Creek near Orodell.

SOUTH PLATTE RIVER BASIN
Streamflow Forecasts - February 1, 2004

Forecast Point	Forecast Period	Future Conditions						30-Yr Avg. (1000AF)
		<<----- Drier ----->>		----->>		----->>		
		90% (1000AF)	70% (1000AF)	Chance Of Exceeding * (1000AF) (% AVG.)		30% (1000AF)	10% (1000AF)	
Antero Reservoir inflow	APR-JUL	1.7	2.7	3.7	21	5.1	8.2	17.5
Spinney Mountain Reservoir inflow	APR-JUL	9.6	13.6	17.2	30	22	31	57
Elevenmile Canyon Reservoir inflow	APR-JUL	2.4	8.1	15.2	26	22	33	59
Cheesman Lake inflow	APR-JUL	23	31	37	33	45	59	114
South Platte River at South Platte	APR-SEP	23	83	123	48	163	225	254
Bear Creek abv Evergreen	APR-SEP	6.5	10.5	14.6	58	20	33	25
Bear Creek at Morrison	APR-SEP	6.4	11.2	16.5	53	24	43	31
Clear Creek at Golden	APR-SEP	62	83	98	73	113	134	134
St. Vrain Creek at Lyons	APR-SEP	37	52	62	74	72	87	84
Boulder Creek nr Orodell	APR-SEP	35	43	48	91	53	61	53
South Boulder nr Eldorado Spgs	APR-SEP	24	30	34	74	38	44	46
Big Thompson River at mouth nr Drake	APR-SEP	68	86	98	84	110	128	117
CACHE LAPOUDRE at Canyon Mouth	APR-SEP	134	185	220	80	255	305	275

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

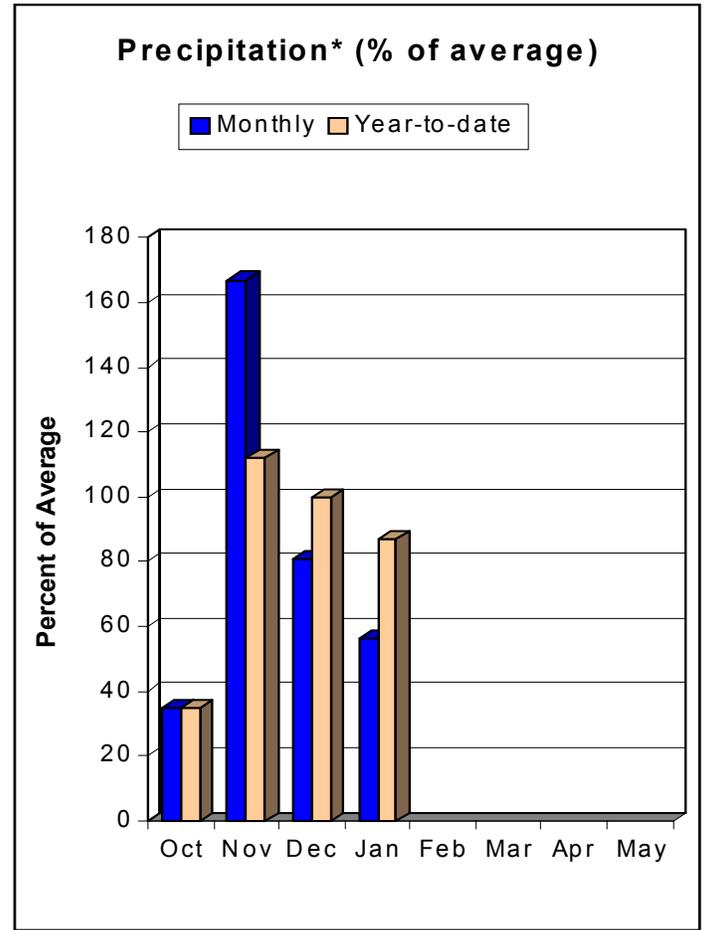
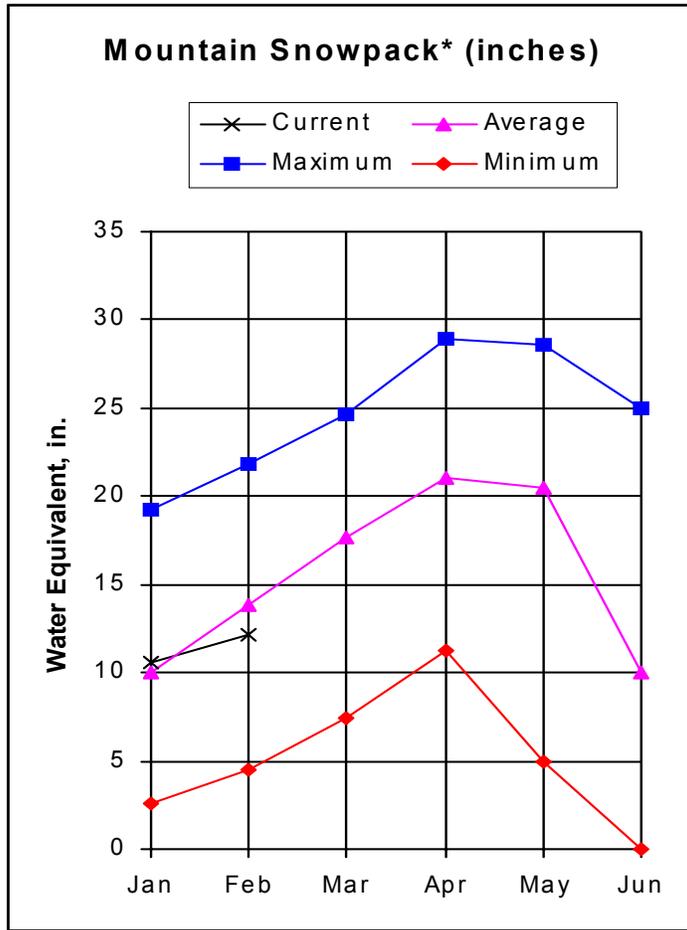
SOUTH PLATTE RIVER BASIN
Watershed Snowpack Analysis - February 1, 2004

Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
ANTERO	20.0	0.0	0.0	16.4	BIG THOMPSON BASIN	7	114	74
BARR LAKE	32.0	21.1	15.0	24.0	BOULDER CREEK BASIN	5	100	61
BLACK HOLLOW	8.0	2.8	2.1	3.9	CACHE LA POUUDRE BASIN	8	108	71
BOYD LAKE	49.0	30.8	6.0	32.1	CLEAR CREEK BASIN	4	101	78
CACHE LA POUUDRE	10.0	1.4	2.2	7.2	SAINT VRAIN BASIN	4	94	55
CARTER	108.9	34.7	94.1	84.6	UPPER SOUTH PLATTE BASIN	15	92	53
CHAMBERS LAKE	9.0	6.1	2.6	3.0	TOTAL SOUTH PLATTE BASIN	43	102	65
CHEESMAN	79.0	59.3	48.2	59.7				
COBB LAKE	34.0	5.2	2.5	13.9				
ELEVEN MILE	97.8	71.0	44.5	95.9				
EMPIRE	38.0	20.8	15.2	22.8				
FOSSIL CREEK	12.0	4.6	5.0	6.8				
GROSS	41.8	27.4	17.8	26.0				
HALLIGAN	6.4	3.8	2.5	4.3				
HORSECREEK	16.0	10.1	1.1	11.6				
HORSETOOTH	149.7	111.6	15.5	99.0				
JACKSON	35.0	23.8	24.1	26.1				
JULESBURG	28.0	15.2	15.8	18.8				
LAKE LOVELAND	14.0	10.6	8.0	8.7				
LONE TREE	9.0	6.9	5.9	6.4				
MARIANO	6.0	0.9	0.5	4.2				
MARSHALL	10.0	6.0	3.3	5.1				
MARSTON	13.0	15.4	4.8	12.8				
MILTON	24.0	8.2	3.0	15.5				
POINT OF ROCKS	70.0	34.3	18.9	57.0				
PREWITT	33.0	6.4	2.3	19.3				
RIVERSIDE	63.1	34.6	18.0	41.7				
SPINNEY MOUNTAIN	48.7	24.1	14.5	33.3				
STANDLEY	42.0	38.8	19.8	33.1				
TERRY LAKE	8.0	5.8	1.4	5.3				
UNION	13.0	10.1	5.6	10.6				
WINDSOR	19.0	8.8	0.4	10.8				

* 90%, 70%, 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, 2004



*Based on selected stations

January ended up being the lowest snow accumulation month so far this season in these basins. Monthly accumulation was so low that the measurements went from about 8% above average and the highest percent of average in the state on January 1, to only 86% of average on February 1. Measurements range from only 77% of average in the Laramie River Basin, to 97% of average in the White River Basin. Precipitation in these basins during January was only 56% of average, which brought the water year total down to only 87% of average. Most of the precipitation fell either during the very early part of January, or the very end with an extremely quiet period in between. The two major reservoirs in these basins are at 110% of average storage volume for this time of year, which is 124% of the storage volume last year at this time. Streamflow forecasts for the runoff season are near average at most of the forecasted streamflow points. Forecasts range from only 77% of average on the Elkhead Creek near Elkhead, to 99% of average at Little Snake River near Dixon.

YAMPA, WHITE, AND NORTH PLATTE RIVER BASINS
Streamflow Forecasts - February 1, 2004

Forecast Point	Forecast Period	Future Conditions						30-Yr Avg. (1000AF)
		<<----- Drier ----->>		Future Conditions		----- Wetter ----->>		
		90% (1000AF)	70% (1000AF)	Chance Of Exceeding * 50% (Most Probable) (1000AF) (% AVG.)		30% (1000AF)	10% (1000AF)	
NORTH PLATTE RIVER nr Northgate	APR-SEP	118	185	230	85	275	340	270
LARAMIE RIVER nr Woods	APR-SEP	36	75	102	76	129	168	135
Yampa R abv Stagecoach Res	APR-JUL	11.6	19.0	24	83	29	36	29
Yampa River at Steamboat Springs	APR-JUL	139	185	220	79	255	300	280
Elk River nr Milner	APR-JUL	182	238	280	86	326	399	325
Elkhead Creek nr Elkhead	APR-JUL	16.4	24	30	77	38	55	39
ELKHEAD CREEK blw Maynard Gulch	APR-JUL	21	38	50	85	62	79	59
Fortification Ck nr Fortification	MAR-JUN	2.26	4.70	6.40	85	8.10	10.50	7.50
Yampa River nr Maybell	APR-JUL	470	665	800	81	935	1130	990
Little Snake River nr Slater	APR-JUL	110	136	156	98	177	210	159
LITTLE SNAKE R nr Dixon	APR-JUL	204	275	325	99	375	445	330
LITTLE SNAKE R nr Lily	APR-JUL	230	305	355	97	405	480	365
White River nr Meeker	APR-JUL	165	206	240	83	279	349	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, 2004

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	29.0	25.4	25.1	LARAMIE RIVER BASIN	3	127	77
YAMCOLO	9.1	5.5	2.5	6.2	NORTH PLATTE RIVER BASIN	11	108	82
					TOTAL NORTH PLATTE BASIN	13	111	82
					ELK RIVER BASIN	2	127	93
					YAMPA RIVER BASIN	12	112	89
					WHITE RIVER BASIN	6	135	97
					TOTAL YAMPA AND WHITE RIV	17	117	90
					LITTLE SNAKE RIVER BASIN	8	132	100

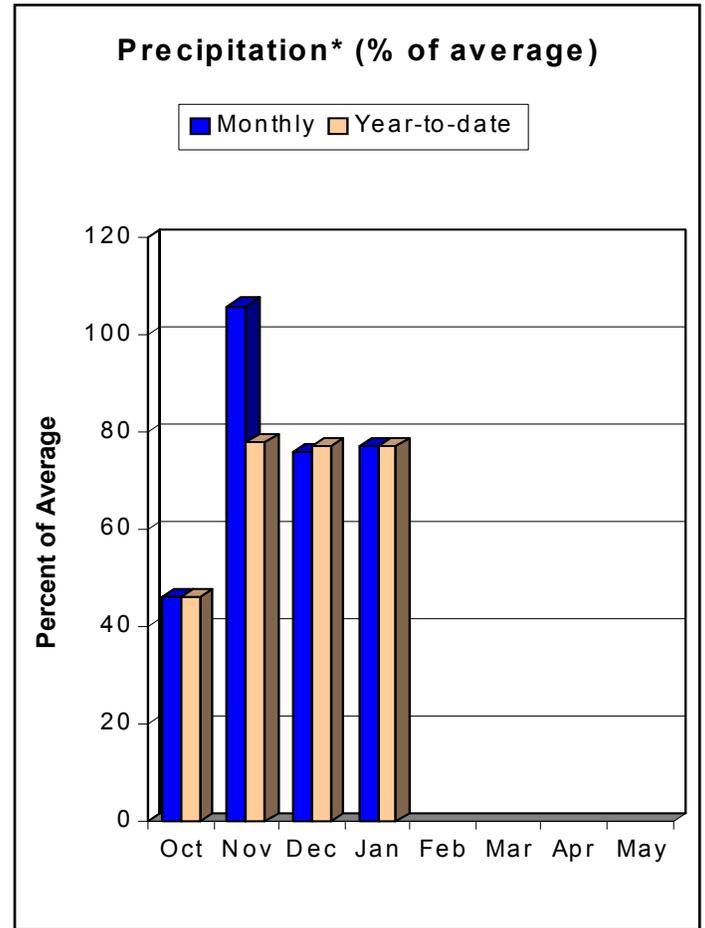
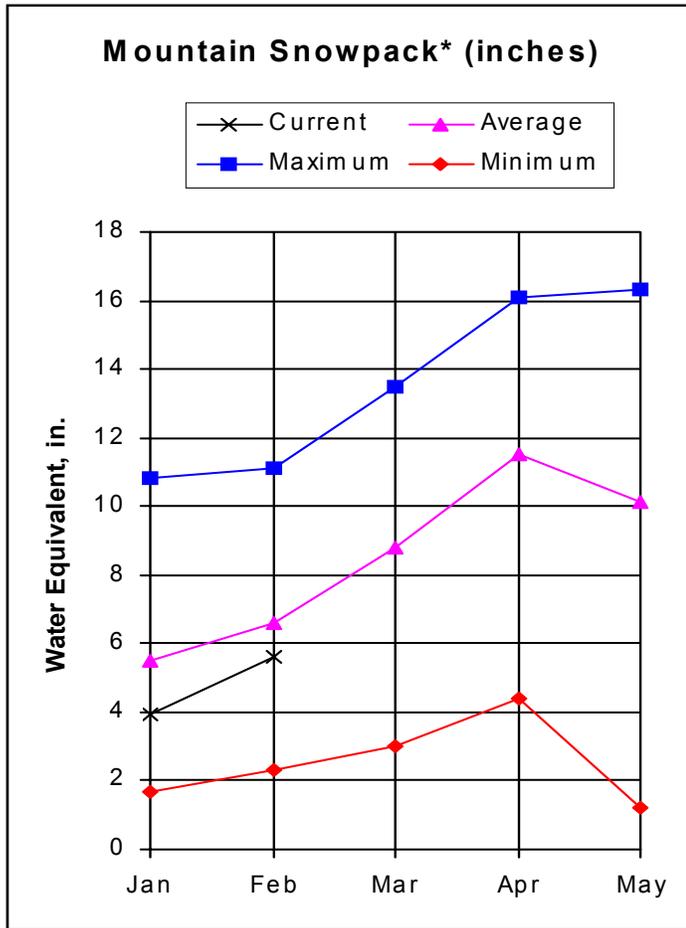
* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

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.

ARKANSAS RIVER BASIN

as of February 1, 2004



*Based on selected stations

While the snow accumulation during January was not all that many probably had hoped for in the Arkansas Basin, there was enough to help raise the measurements from only 69% of average last month, to 76% of average on February 1. Measurements range from 75% of average in both the Upper Arkansas Watershed and the Pugatoire Watershed, to 82% of average in the Cucharas and Huerfano watersheds. The precipitation during January was only 77% of average, which was very nearly the same as last month's amount. The water year total remains at only 77% of average. The combined reservoir storage is only 53%, which is nearly the same as last month. There is 16% more water stored than there was last year at this time. Unfortunately, the below average snowpack has translated into below average streamflow forecasts at all of the forecasted stream gages. Forecasts range from only 62% of average in the Cucharas River near La Veta, to 89% of average at Chalk Creek near Nathrop.

ARKANSAS RIVER BASIN
Streamflow Forecasts - February 1, 2004

Forecast Point	Forecast Period	Future Conditions						30-Yr Avg. (1000AF)
		<<----- Drier ----->>		Future Conditions		----- Wetter ----->>		
		90% (1000AF)	70% (1000AF)	Chance Of Exceeding * 50% (Most Probable) (1000AF) (% AVG.)		30% (1000AF)	10% (1000AF)	
Chalk Creek nr Nathrop	APR-SEP	7.1	17.0	24	89	31	41	27
Arkansas River at Salida	APR-SEP	132	200	250	81	300	370	310
Grape Creek nr Westcliffe	APR-SEP	2.0	7.7	16.0	82	24	36	19.6
Pueblo Reservoir Inflow	APR-SEP	170	270	335	78	400	500	430
Huerfano River nr Redwing	APR-SEP	2.0	7.9	12.0	77	16.1	22	15.5
Cucharas River nr La Veta	APR-SEP	1.9	3.3	8.0	62	12.7	19.6	13.0
Trinidad Lake Inflow	APR-SEP	4.4	18.0	33	75	48	71	44

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

ARKANSAS RIVER BASIN
Watershed Snowpack Analysis - February 1, 2004

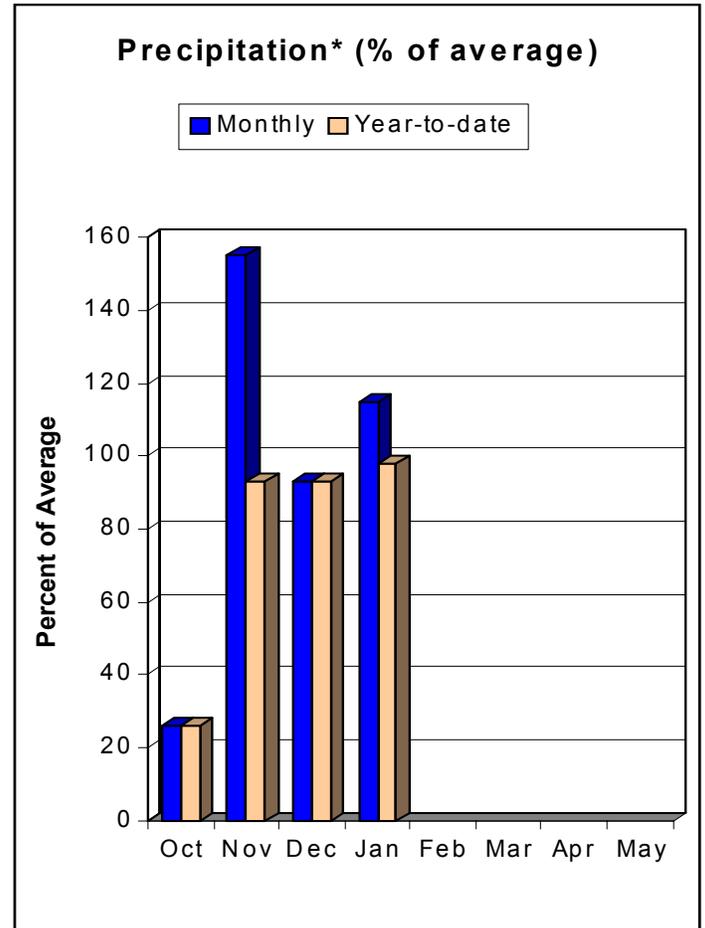
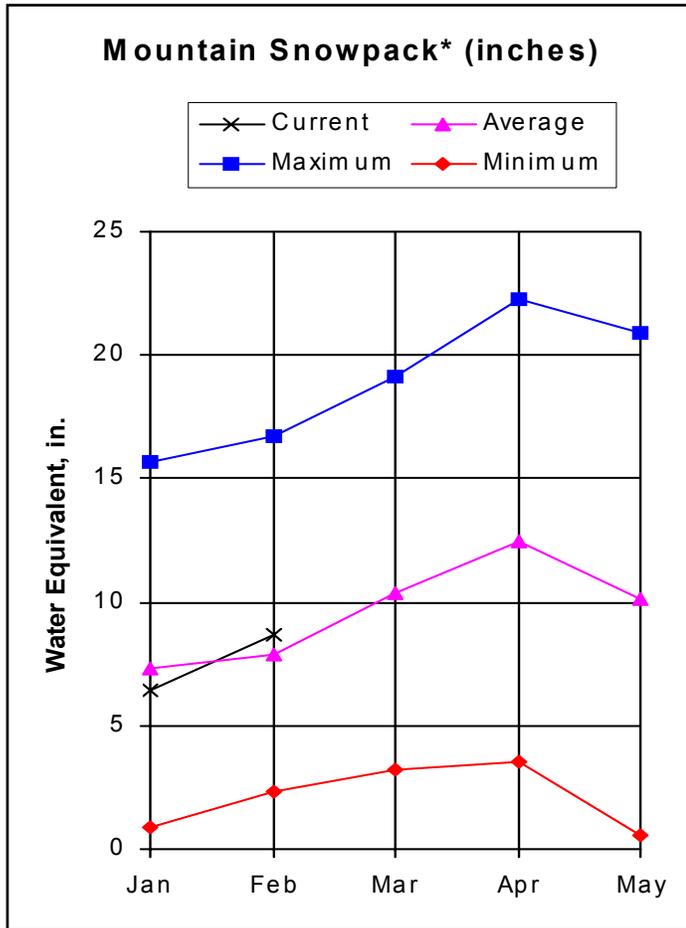
Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
ADOBE	70.0	0.0	0.0	31.1	UPPER ARKANSAS BASIN	8	97	75
CLEAR CREEK	11.0	8.0	6.7	6.4	CUCHARAS & HUERFANO RIVER	4	145	82
GREAT PLAINS	150.0	0.0	4.8	35.2	PURGATOIRE RIVER BASIN	2	108	75
HOLBROOK	7.0	0.0	1.7	3.9	TOTAL ARKANSAS RIVER BASIN	13	110	76
HORSE CREEK	28.0	0.0	0.0	12.2				
JOHN MARTIN	335.7	31.1	32.8	120.9				
LAKE HENRY	8.0	4.3	1.2	4.1				
MEREDITH	42.0	13.4	11.7	16.2				
PUEBLO	236.7	97.5	98.6	158.3				
TRINIDAD	72.3	16.5	15.6	25.3				
TURQUOISE	126.6	67.4	41.2	82.7				
TWIN LAKES	86.0	48.8	33.5	44.8				

* 90%, 70%, 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 RIO GRANDE BASIN as of February 1, 2004



*Based on selected stations

The Rio Grande Basin continues to be extremely fortunate in receiving well above average amounts of snow during January. The snowpack measurements in the Upper Rio Grande Basin are up to 106% of average, which is the highest percent of average on February 1 since 1997. There is 81% more snow than there was last year at this time. Measurements range from only 73% of average in the Culebra and Trinchera Creek watersheds, to 123% of average in the Alamosa Creek Watershed. The precipitation during January was a much appreciated 115% of average, and the water year total is now 141% of average. Reservoir storage in the six major reservoirs combined remains extremely low at only 40% of average, which is only 67% of last year's storage. Hopefully, the above average snowpack will continue into the runoff season to help provide much needed additional storage. Streamflow forecasts are extremely variable depending on location and snowpack conditions. They range from only 66% of average at the Inflow to Costilla Reservoir, to 114% of average on the South Fork Rio Grande at South Fork..

UPPER RIO GRANDE BASIN
Streamflow Forecasts - February 1, 2004

Forecast Point	Forecast Period	Future Conditions						30-Yr Avg. (1000AF)
		<<----- Drier ----->>		----->>		----->>		
		90% (1000AF)	70% (1000AF)	Chance Of Exceeding *		30% (1000AF)	10% (1000AF)	
		50% (Most Probable) (1000AF)	(% AVG.)					
Rio Grande at Thirty Mile Bridge	APR-SEP	90	112	130	96	151	189	136
Rio Grande Reservoir Inflow	APR-JUL	80	99	115	98	133	166	118
Rio Grande at Wagon Wheel Gap	APR-SEP	220	300	350	101	400	480	345
South Fork Rio Grande at South Fork	APR-SEP	102	131	150	114	169	199	132
Rio Grande nr Del Norte	APR-SEP	350	480	570	107	660	790	531
Saguache Creek nr Saguache	APR-SEP	11.2	22	29	88	36	47	33
Alamosa Creek abv Terrace Reservoir	APR-SEP	47	64	75	107	86	103	70
La Jara Creek nr Capulin	MAR-JUL	4.10	7.30	9.50	109	11.70	14.90	8.70
Trinchera Creek	APR-SEP	2.6	6.4	9.0	75	11.6	15.4	12.0
Sangre de Cristo Creek	APR-SEP	1.32	3.70	6.60	75	9.50	13.80	8.80
Ute Creek	APR-SEP	2.2	6.3	9.0	74	11.7	15.8	12.2
Platoro Reservoir Inflow	APR-JUL	51	62	70	109	78	89	64
	APR-SEP	56	69	77	109	85	98	71
Conejos River nr Mogote	APR-SEP	133	179	210	105	240	285	200
San Antonio River at Ortiz	APR-SEP	5.7	11.2	16.0	98	22	32	16.4
Los Pinos River nr Ortiz	APR-SEP	37	59	74	100	89	111	74
Culebra Creek at San Luis	APR-SEP	3.0	10.3	17.0	74	24	34	23
Costilla Reservoir inflow	MAR-JUL	2.3	5.1	7.0	66	8.9	11.7	10.6
Costilla Creek nr Costilla	MAR-JUL	5.7	12.4	17.0	65	22	28	26

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

UPPER RIO GRANDE BASIN
Watershed Snowpack Analysis - February 1, 2004

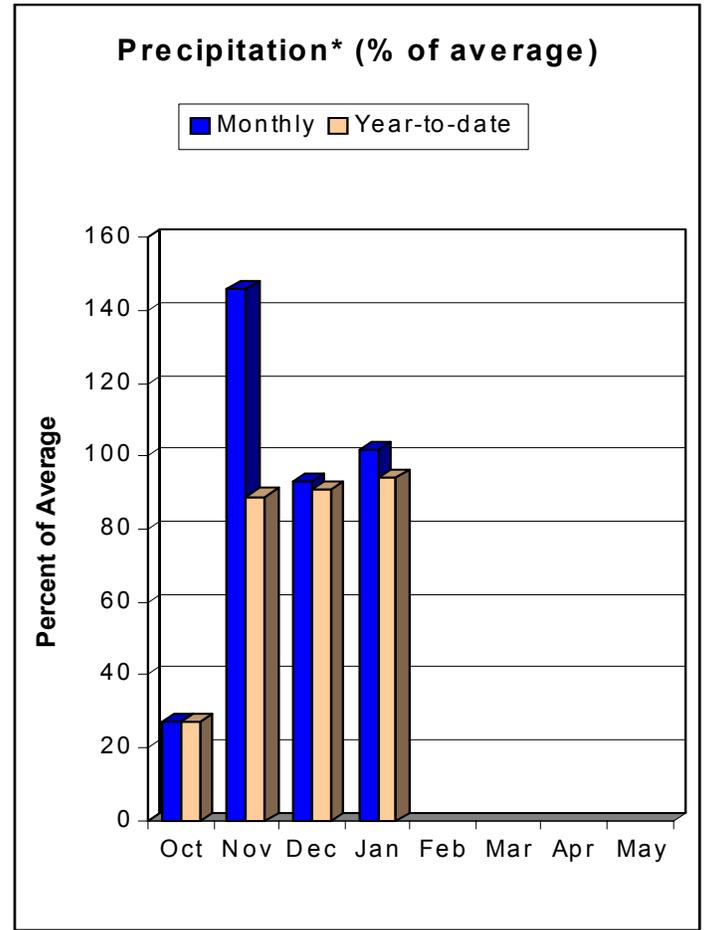
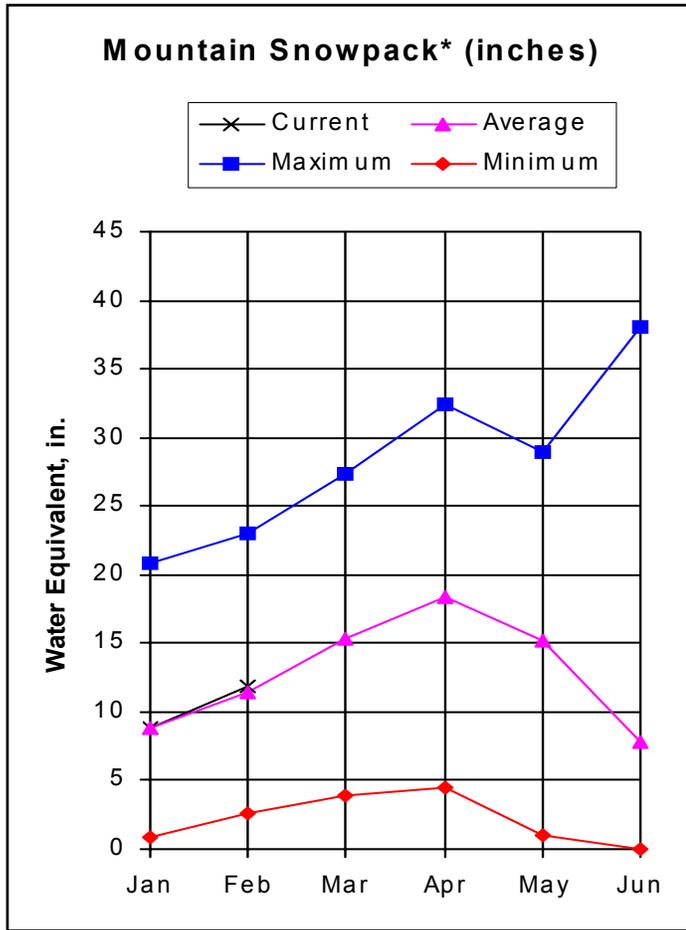
Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
CONTINENTAL	15.0	2.8	2.7	5.8	ALAMOSA CREEK BASIN	2	247	123
PLATORO	53.7	5.1	7.8	24.7	CONEJOS & RIO SAN ANTONIO	4	177	115
RIO GRANDE	51.0	9.9	17.7	16.5	CULEBRA & TRINCHERA CREEK	5	113	73
SANCHEZ	103.0	12.7	11.3	24.1	UPPER RIO GRANDE BASIN	12	212	114
SANTA MARIA	45.0	5.0	11.1	10.5	TOTAL UPPER RIO GRANDE BA	23	181	106
TERRACE	13.1	0.0	2.1	6.1				

* 90%, 70%, 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.

SAN MIGUEL, DOLORES, ANIMAS, AND SAN JUAN RIVER BASINS as of February 1, 2004



*Based on selected stations

These basins managed to receive just slightly above average amounts of snowfall during January, and as a result the measurements have bumped up from 99% of average on January 1, to 102% of average on February 1. These are the highest February 1 measurements since 1997. The measurements range from 93% of average in the Dolores River Basin, to 129% of average in the San Juan River Basin. Precipitation during January was 102% of the average, and the water year total is now 94% of average. Reservoirs in the basins have a combined storage level of only 66% of average, but hopefully, if favorable snowpack conditions continue into the runoff season, this will improve significantly before the high water use season. Most of the streamflow forecasts for the upcoming runoff season are near to above average. They range from 80% of average at the La Plata River at Hesperus, to 107% of average at the Inflow to Navajo Reservoir.

SAN MIGUEL, DOLORES, ANIMAS, AND SAN JUAN RIVER BASINS
Streamflow Forecasts - February 1, 2004

Forecast Point	Forecast Period	Future Conditions						30-Yr Avg. (1000AF)
		<<----- Drier ----->>		Future Conditions		----- Wetter ----->>		
		90% (1000AF)	70% (1000AF)	Chance Of Exceeding * 50% (Most Probable) (1000AF) (% AVG.)		30% (1000AF)	10% (1000AF)	
Dolores River at Dolores	APR-JUL	155	210	245	93	280	335	265
McPhee Reservoir inflow	APR-JUL	180	250	295	92	340	410	320
San Miguel River nr Placerville	APR-JUL	80	107	125	95	143	170	132
Gurley Reservoir Inlet	APR-JUL	8.4	12.9	16.0	97	19.5	24	16.5
	APRIL			1.66	100			1.66
	MAY			8.50	96			8.83
	JUNE			4.50	96			4.67
	JULY			1.34	102			1.32
Cone Reservoir Inlet	APR-JUL	1.47	2.70	3.50	99	4.30	5.50	3.53
	APRIL			0.46	100			0.46
	MAY			1.62	99			1.64
	JUNE			1.04	100			1.04
	JULY			0.38	100			0.38
Lilylands Reservoir Inlet	APR-JUL	1.42	2.20	2.70	94	3.20	4.00	2.86
	APRIL			0.40	100			0.40
	MAY			1.20	91			1.32
	JUNE			0.80	92			0.87
	JULY			0.30	111			0.27
Rio Blanco at Blanco Diversion	APR-JUL	30	45	55	104	65	80	53
Navajo River at Oso Diversion	APR-JUL	39	57	70	101	83	101	69
San Juan River nr Carracus	APR-JUL	257	354	430	106	513	648	405
Piedra River nr Arboles	APR-JUL	159	210	245	107	280	330	230
Vallecito Reservoir Inflow	APR-JUL	139	178	205	100	230	270	205
Navajo Reservoir Inflow	APR-JUL	520	720	855	107	990	1190	800
Animas River at Durango	APR-JUL	280	375	440	100	505	600	440
Lemon Reservoir Inflow	APR-JUL	33	47	57	98	67	81	58
La Plata River at Hesperus	APR-JUL	9.2	15.6	20	80	24	31	25
Mancos River nr Mancos	APR-JUL	12.4	25	33	83	41	54	40
	APRIL			6.00	103			5.80
	MAY			15.0	94			15.9
	JUNE			9.0	66			13.7
	JULY			3.00	65			4.60

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, 2004

Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
GROUNDHOG	21.7	7.0	3.8	12.0	ANIMAS RIVER BASIN	9	157	97
JACKSON GULCH	10.0	2.9	2.6	4.6	DOLORES RIVER BASIN	7	134	93
LEMON	40.0	9.4	6.3	20.2	SAN MIGUEL RIVER BASIN	5	146	98
MCPHEE	381.2	170.9	160.2	274.4	SAN JUAN RIVER BASIN	4	222	127
NARRAGUINNEP	19.0	10.9	7.8	12.7	TOTAL SAN MIGUEL, DOLORES	24	162	103
VALLECITO	126.0	52.4	35.6	59.4	AN JUAN RIVER BASINS			

* 90%, 70%, 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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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 National Resources Conservation Service web page at <http://www.wcc.nrcs.usda.gov/water/quantity/westwide.html>.

Issued by

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Basin Outlook Report
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