

# WATER SUPPLY OUTLOOK for the

# UPPER COLORADO

**COLORADO BASIN** 

RIVER FORECAST CENTER

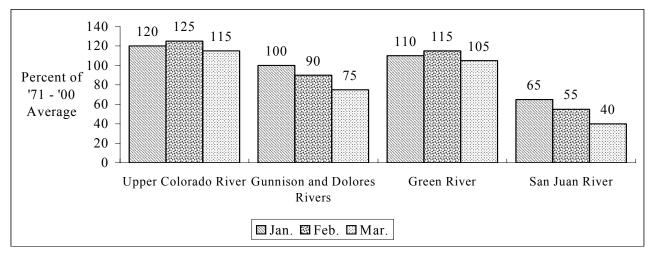


NATIONAL WEATHER SERVICE, SALT LAKE CITY, UT

## MARCH 1, 2006

February precipitation was below normal over most of Western Colorado except for a few sections of the Yampa/White headwaters where above normal precipitation occurred. This resulted in decreases to most April-July runoff forecasts.

### **APRIL - JULY VOLUME FORECASTS**

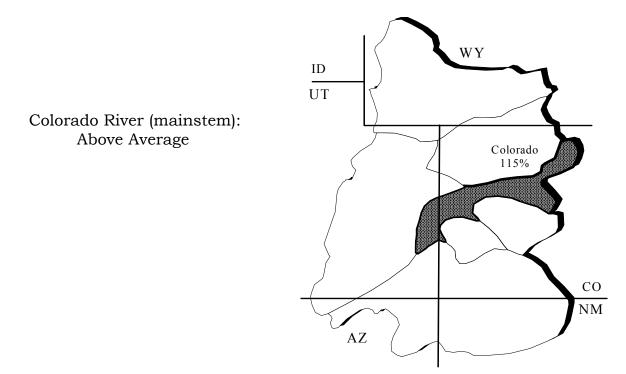


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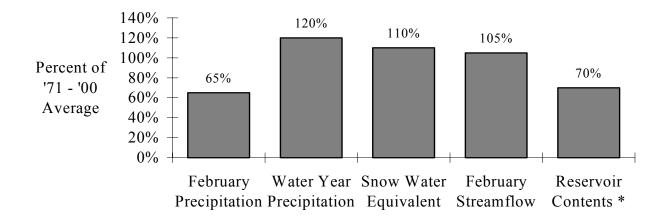
#### UPPER COLORADO MAINSTEM

February precipitation was below normal with overall snowpack, as a percent of normal dropping 15 percent. This resulted in decreases in the April-July forecasts for this area with forecasts now ranging from 70% to 134% of average.

April-July streamflow forecasts for the Upper Colorado Mainstem are as follows:



## Basin Conditions - March 1, 2006



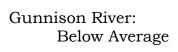
<sup>\*</sup> Percent usable capacity, not percent average contents.

Specific site forecasts are listed beginning on page 6.

#### GUNNISON AND DOLORES RIVERS

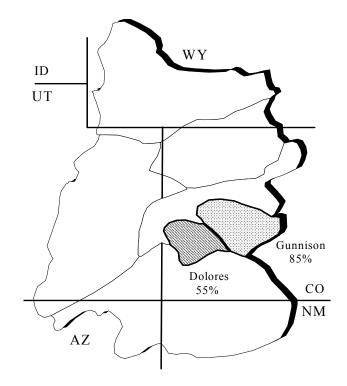
February precipitation was below normal with overall snowpack, as a percent of normal dropping 15 percent in the Gunnison Basin and around 5% in the Dolores/San Miguel Basin. This resulted in decreases in the April-July forecasts for this area with forecasts now ranging from 44% to 114% of average.

April-July streamflow forecasts for the Gunnison and Dolores Rivers are as follows:

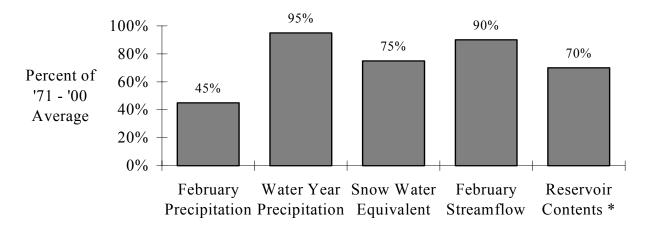


Dolores River:

Much Below Average



## Basin Conditions - March 1, 2006



<sup>\*</sup> Percent usable capacity, not percent average contents.

Specific site forecasts are listed beginning on page 7.

#### GREEN RIVER

February's precipitation was much below average in the Green River Basin. As a result, April though July runoff forecasts have dropped for much of the area. Forecasts now range from 130% in the upper Yampa drainage to near 80% in the Eastern Unitas.

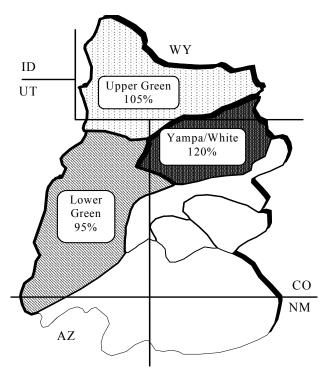
April-July streamflow forecasts for the Green River are as follows:

Upper Green River: Near Average

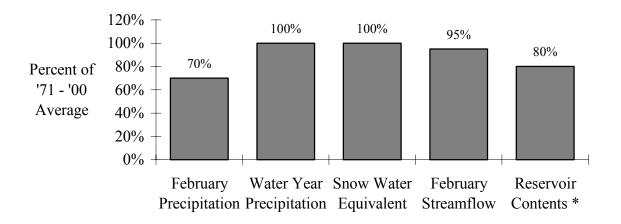
Yampa/White Rivers: Above Average

Lower Green River (blo Flaming Gorge):

Near Average



## BASIN CONDITIONS - MARCH 1, 2006



<sup>\*</sup> Percent usable capacity, not percent average contents.

Specific site forecasts are listed beginning on page 8.

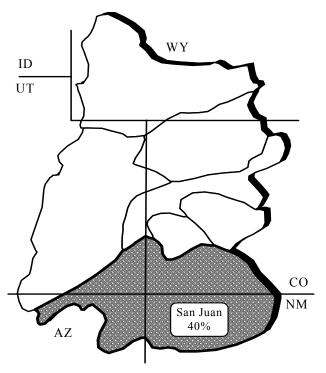
#### San Juan River

February snow and rain totals took conditions from bad to worse.. Current seasonal precipitation is 50% of average, snowpack is 45% of average and monthly flow 55% of average. Climate forecasts indicate a continuing possibility for above normal temperatures and below normal precipitation. April through July forecasts decreased and now range from 5% of average in Blanding to 62% on the Animas.

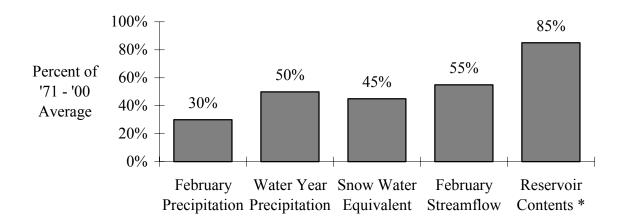
April-July streamflow forecasts for the San Juan Basin are as follows:

San Juan River:

Much Below Average



## BASIN CONDITIONS - MARCH 1, 2006



<sup>\*</sup> Percent usable capacity, not percent average contents.

Specific site forecasts are listed beginning on page 10.

## SPECIFIC SITE FORECASTS

**Upper Colorado Mainstem:** April through July volume (kaf) forecasts (except where noted).

Stream	Station	Most	Percent	Reas.	Reas.
		Probable	Avg.	Max	Min
COLORADO	LAKE GRANBY, GRANBY, NR	230	102	285	180
	DOTSERO, NR	1750	122	2200	1360
	GLENWOOD SPRINGS, BLO	2500	116	3110	1890
	CAMEO, NR	2800	116	3610	1990
	CISCO, NR	4550	98	6780	2320
WILLOW CK	WILLOW CK RES, GRANBY, NR	53	104	71	38
FRASER	WINTER PARK	22	110	27	16.6
WILLIAMS FORK	WILLIAMS FORK RES, PARSHALL, N	110	116	139	86
MUDDY CK	WOLFORD MTN RES, BLO	75	125	106	51
BLUE	DILLON RES	220	132	275	172
	GREEN MTN RES	360	129	450	280
EAGLE	GYPSUM, BLO	450	134	565	345
FRYING PAN	RUEDI RES, BASALT, NR	165	117	205	128
ROARING FORK	GLENWOOD SPRINGS	750	106	970	560
PLATEAU CK	CAMEO, NR	80	70	163	10
MILL CK	MOAB, NR, SHELEY TUN, AT	2.8	56	4.4	1.6

## SPECIFIC SITE FORECASTS

Gunnison and Dolores Basins: April through July volume (kaf) forecasts (except where noted).

Stream	Station		Percent	Reas.	Reas.
		Probable	Avg.	Max	Min
TAYLOR	TAYLOR PARK RES	105	102	131	82
	ALMONT	165	100	210	120
EAST	ALMONT	195	102	250	148
GUNNISON	GUNNISON, NR	400	103	520	295
TOMICHI CK	GUNNISON	61	75	103	32
LAKE FORK	GATEVIEW	105	83	140	75
GUNNISON	MORROW POINT RES	750	96	1000	515
	CRYSTAL RES	820	90	1130	505
MUDDY CK	* PAONIA RES, BARDINE, NR	72	72	111	43
NF GUNNISON	SOMERSET, NR	235	77	335	158
SURFACE CK	CEDAREDGE	11.5	67	16.9	7.4
UNCOMPAHGRE	RIDGWAY RES	80	78	117	52
	COLONA	100	72	165	55
	DELTA	80	68	159	35
GUNNISON	GRAND JUNCTION, NR	1350	87	2040	660
DOLORES	DOLORES	150	57	235	88
	MCPHEE RES	180	56	280	107
	CISCO, NR	270	44	560	25
SAN MIGUEL	PLACERVILLE, NR	90	68	138	55

 $<sup>\</sup>star$  = March - June forecast period.

Green River Basin: April through July volume (kaf) forecasts (except where noted).

Stream		Station	Most	Percent	Reas.	Reas.
			Probable	Avg.	Max	Min
GREEN		DANIEL, NR, WARREN BRIDGE, AT	270	102	330	215
		GREEN RIVER, WY, NR	915	105	1250	630
		GREEN RIVER, UT	3300	104	4540	2060
PINE CK		FREMONT LK, ABV	106	102	124	90
NEW FORK		BIG PINEY, NR	405	103	530	295
BIG SANDY		FARSON, NR	58	100	77	42
BLACKS FORK		ROBERTSON, NR	92	97	125	64
EF SMITHS FORK		ROBERTSON, NR	28	90	40	18.2
HAMS FORK		FRONTIER, NR, POLE CK, BLO	80	123	107	57
		VIVA NAUGHTON RES	110	124	151	75
YAMPA		STAGECOACH RSVR, ABV	43	148	64	27
		STEAMBOAT SPRINGS	350	125	445	265
		MAYBELL, NR	1220	123	1580	905
ELK		MILNER, NR	410	126	515	315
ELKHEAD CK		ELKHEAD, NR	44	113	62	29
		MAYNARD GULCH, BLO	72	122	101	43
FORTIFICATION CK	★ FORTIFICATION, NR		8.5	113	17.1	3.4
LITTLE SNAKE		SLATER, NR	185	116	240	136
		DIXON, NR	380	115	530	255
		LILY, NR	420	115	600	270

<sup>★=</sup> March - June forecast period.

## Green River Basin continued: April through July volume (kaf) forecasts (except where noted).

Stream	Station		Percent	Reas.	Reas.
		Probable	Avg.	Max	Min
BIG BRUSH CK	VERNAL, NR, RED FLEET RES, ABV	15.5	74	25	8.6
ASHLEY CK	VERNAL, NR	36	69	55	21
WF DUCHESNE	HANNA, NR	27	112	37	18.4
ROCK CK	UPPER STILLWATER RES	83	101	104	64
	MOUNTAIN HOME, NR	89	100	114	67
DUCHESNE	TABIONA, NR	110	105	152	75
	DUCHESNE, NR, KNIGHT DIV, ABV	185	98	245	133
	MYTON	250	94	425	122
	RANDLETT, NR	305	94	520	146
STRAWBERRY	SOLDIER SPRINGS, NR	62	105	98	34
	DUCHESNE, NR	120	98	186	69
CURRANT CK	CURRANT CK RES	26	104	46	11.7
LAKE FORK	MOON LAKE RES, MTN HOME, NR	64	94	83	47
YELLOWSTONE	ALTONAH, NR	59	95	81	40
WHITEROCKS	WHITEROCKS, NR	39	70	61	22
WHITE	MEEKER, NR	300	103	400	215
	WATSON, NR	325	107	460	191
GOOSEBERRY CK	SCOFIELD, NR	11.2	94	15.7	7.4
PRICE	SCOFIELD RES, SCOFIELD, NR	39	85	60	17.5
WHITE	BLO TABBYUNE CK, SOLDIER SUMMI	14.4	83	23	7.7
HUNTINGTON CK	ELECTRIC LAKE	15.7	100	23	9.8
	HUNTINGTON, NR	44	90	63	25
SEELEY CK	JOES VLY RES, ORANGEVILLE, NR	58	100	85	36
FERRON CK	FERRON, NR	38	97	52	26
SEVEN MILE CK	FISH LAKE, NR	5.6	80	8.6	3.3
MUDDY CK	EMERY, NR	20	101	28	13.2

San Juan River Basin: April through July volume (kaf) forecasts (except where noted).

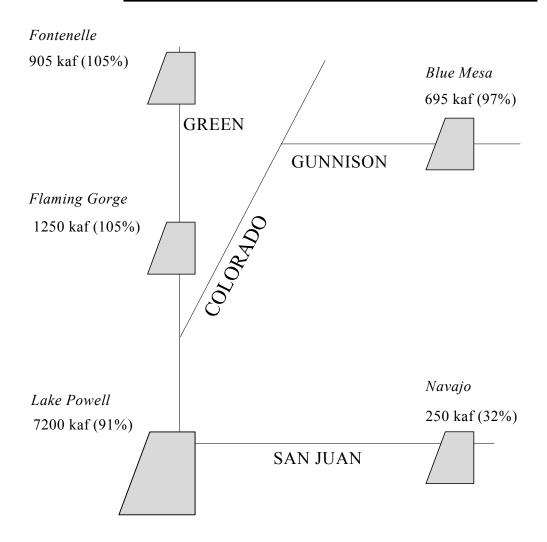
Stream	Station		Most	Percent	Reas.	Reas.
			Probable	Avg.	Max	Min
SAN JUAN		PAGOSA SPRINGS	90	40	179	68
		CARRACAS, NR	165	41	270	91
		FARMINGTON	380	31	925	160
		BLUFF, NR	375	30	930	157
RIO BLANCO		PAGOSA SPRINGS, NR, BLANCO DAM	27	51	43	18.5
NAVAJO		CHROMO, NR, OSO DIV DAM, BLO	34	49	52	21
PIEDRA		ARBOLES, NR	80	35	140	40
LOS PINOS		VALLECITO RES, BAYFIELD, NR	115	56	162	78
ANIMAS		DURANGO	275	62	405	177
FLORIDA		LEMON RES, DURANGO, NR	30	52	42	21
LA PLATA		HESPERUS	11	44	17.7	6.2
MANCOS, NR		MANCOS, NR	19	48	42	6
SOUTH CK	TH CK ★ LLOYD'S RSVR NR MONTICELLO, AB		0.08	6	0.37	0.01
RECAPTURE CK * BLANDING, NR, JOHNSON CK, BLO		BLANDING, NR, JOHNSON CK, BLO	0.28	5	1.31	0.05

 $<sup>\</sup>star$  = March - July forecast period.

#### FLOOD CONTROL FORECASTS

#### MOST PROBABLE FORECASTS 2006 APRIL - JULY INFLOW VOLUMES

(% OF '71 - '00 AVERAGE)

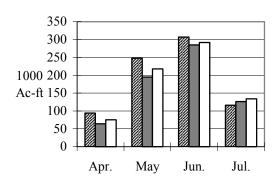


NOTE: Colorado River flood control forecasts account for a smaller set of upstream adjustments than water supply forecast points.

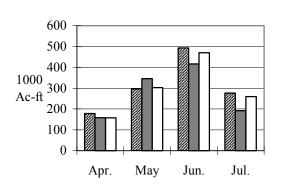
#### RESERVOIR MONTHLY INFLOW FORECASTS

2006 Forecast 2005 Observed 30 Year Average

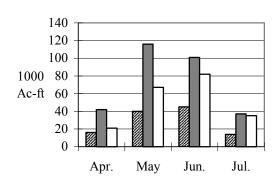
#### Blue Mesa Reservoir Inflow



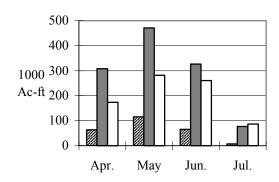
#### Flaming Gorge Reservoir Inflow



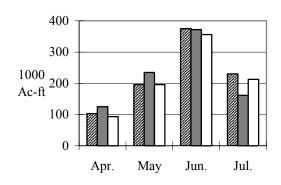
#### Vallecito Reservoir Inflow



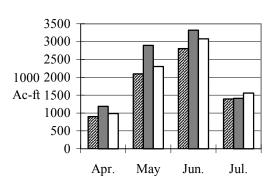
Navajo Reservoir Inflow



#### **Fontenelle Reservoir Inflow**

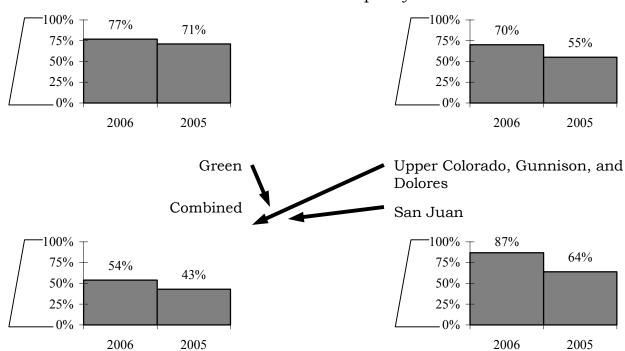


#### Lake Powell Inflow



## END OF MONTH RESERVOIR CONTENTS

#### Percent of Usable Capacity



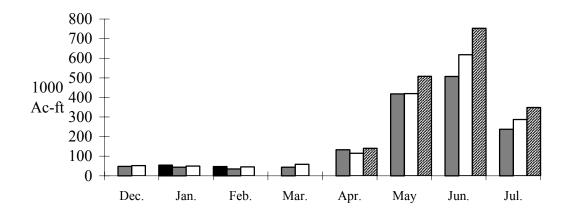
RESERVOIR	Reservoir	Usable	EOM Usable	Percent Usable
(vol. in 1000 ac-ft)	status	Capacity	Contents	Capacity
Fontenelle	1,4	344.8	146.6	43
Flaming Gorge	1,4	3749	3035.4	81
Strawberry	1,4	1105.9	838.1	76
Starvation	1,4	165.3	137.8	83
Lake Granby	2,4	490.3	300.7	61
Dillon	2,4	254	229.2	90
Green Mountain	2,4	146.9	75.6	51
Taylor Park	2,4	106.2	71.3	67
Blue Mesa	2,4	829.5	569.6	69
Ridgway	2,4	83.2	70	84
McPhee	2,4	381.1	291.3	76
Vallecito	3,4	125.4	75.9	61
Navajo	3,4	1696	1511.2	89
Lake Powell	4	24322	10793.4	44

- 1 = Green River reservoir status
- 2 = Upper Colorado River reservoir status
- 3 = San Juan River reservoir status
- 4 = Combined reservoir status

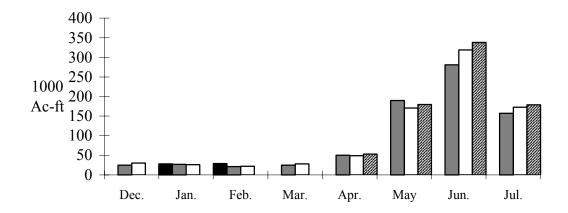
#### MONTHLY STREAMFLOWS

■ 2006 Water Year ■ 2005 Water Year □ 30 Year Average ■ 2006 Forecast

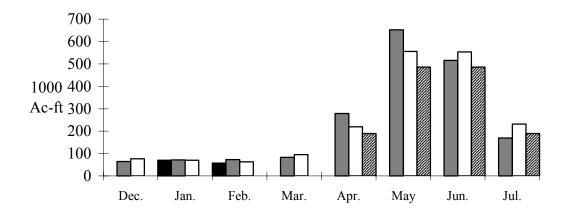
#### Colorado - Dotsero, nr:



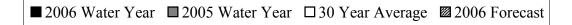
#### Roaring Fork - Glenwood Springs:



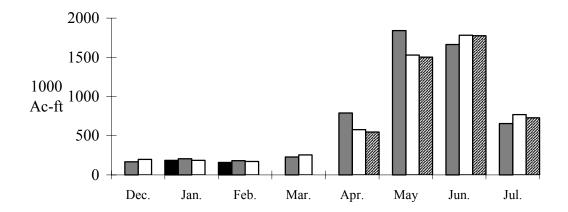
#### Gunnison - Grand Junction, nr:



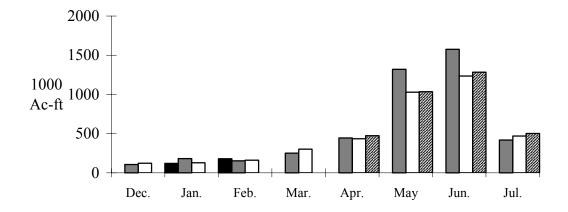
<sup>\*</sup> Data Not Available



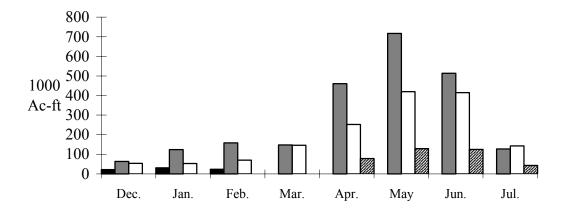
#### Colorado - Cisco, nr:



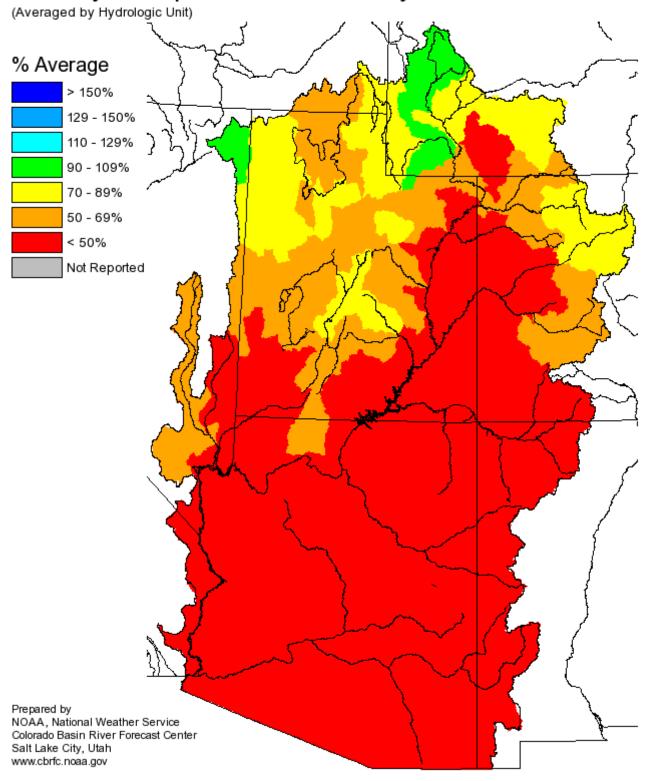
#### Green - Green River, UT:



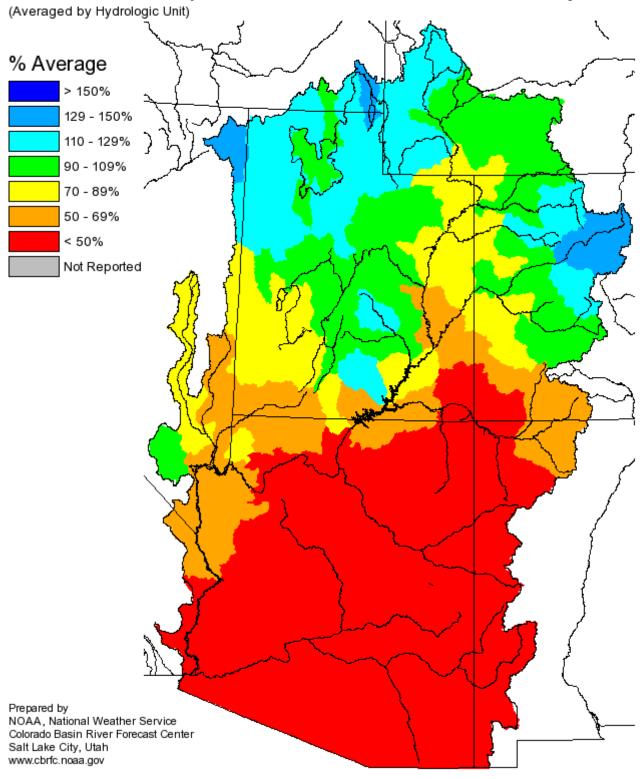
#### San Juan - Bluff, nr:



# Monthly Precipitation for February 2006



# Seasonal Precipitation, October 2005 - February 2006



#### Additional Information

Water supply forecasts take into consideration present hydrometeorological conditions and use average basin temperatures and precipitation for the forecast period. As the forecast season progresses, a greater portion of the future hydrologic and climatic uncertainty becomes known and monthly forecasts become more accurate.

Volume forecasts represent adjusted flows; that is, observed flows with upstream water use taken into account. Adjusted flows will closely approximate natural or unimpaired flows. However, not all upstream diversions or impoundments are measured or quantifiable. For specific adjustments used with each forecast point, consult the Guide to Water Supply Forecasting.

The Water Supply Outlook is issued monthly January through May by the Colorado Basin River Forecast Center, National Weather Service. It represents a coordinated effort between the National Weather Service, Natural Resources Conservation Service, Bureau of Reclamation, U.S. Geological Survey and local water district managers.

#### **DEFINITIONS:**

Acre-Foot:

The volume equal to one acre covered one foot deep (43,560 cubic feet).

Average:

The arithmetic mean. The sum of the values divided by the number of values.

Categories:

Much above Average Above Average Near Average Below Average Much Below Average-Greater than 130% 111-130% 90-110% 70-89% Less than 70%

Forecast Period:

The period from April 1 through July 31.

Median:

The middle value. One half of the observed values are higher and half of the values are lower than this.

Most Probable Forecast:

Given the current hydrometeorological conditions to date, this is the best estimate of what the runoff volume will be this season.

Reasonable Maximum Forecast:

Given the current hydrometeorological conditions, the seasonal runoff that has a ten percent (10%) chance of being exceeded.

Reasonable Minimum Forecast:

Given the current hydrometeorological conditions, the seasonal runoff that has a ninety percent (90%) chance of being exceeded.

Water Year:

The period from October 1 through September 30.

NOTE: Data used in this report are provisional and are subject to revision.

For more information, or to be included on the mailing list, please contact:

Colorado Basin River Forecast Center, National Weather Service

2442 West North Temple, Salt Lake City, UT 84116