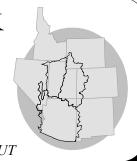


# WATER SUPPLY OUTLOOK for the

# **UPPER COLORADO**



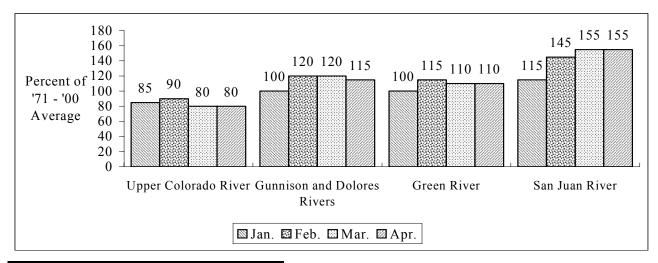
NATIONAL WEATHER SERVICE, SALT LAKE CITY, UT



## APRIL 1, 2005

March precipitation generally ranged from near to slightly below normal over most headwater areas of Western Colorado with the first half of the month dry and the second half wet. Most April-July runoff forecasts varied little when compared to last month, with some areas increasing slightly and some decreasing slightly.

## **APRIL - JULY VOLUME FORECASTS**

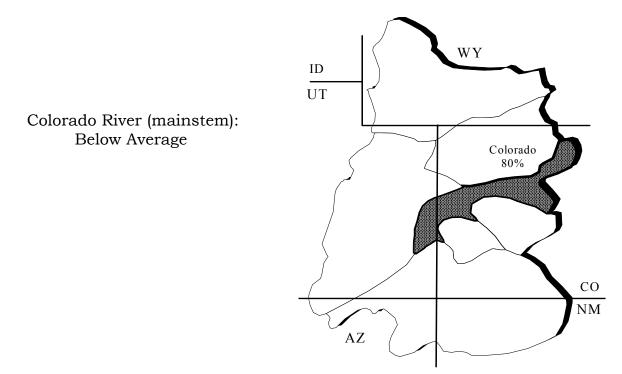


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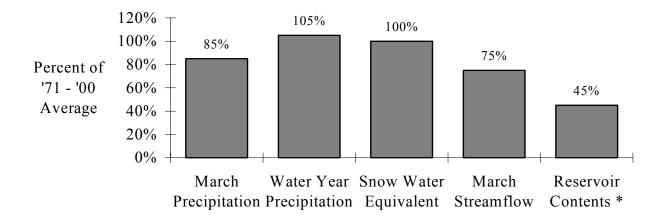
#### UPPER COLORADO MAINSTEM

March precipitation varied from near to slightly below average. Overall snowpack changed little over the Upper Colorado headwaters but dropped slightly over the Roaring Fork Basin. Streamflow forecasts for the April-July runoff when compared to those issued March 1st changed little or dropped a bit and now range from 70% to 174% of average.

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



## Basin Conditions - April 1, 2005



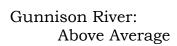
<sup>\*</sup> Percent usable capacity, not percent average contents.

Specific site forecasts are listed beginning on page 6.

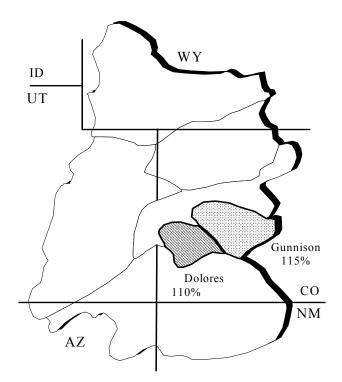
#### GUNNISON AND DOLORES RIVERS

The Gunnison and Dolores overall snow pack was at 130% of average as of April 1st, down 10% from March 1st. This one number is misleading as snow in most of the Gunnison Basin is 115%, while the North Fork Gunnison is at 160%. The April-July streamflow forecasts now range between 100% and 160% of average.

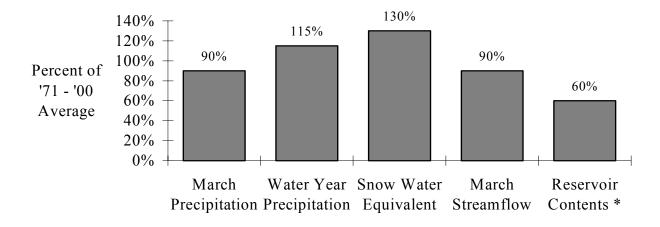
April-July streamflow forecasts for the Gunnison and Dolores Rivers are as follows:



Dolores River:
Near Average



## BASIN CONDITIONS - APRIL 1, 2005



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

Specific site forecasts are listed beginning on page 7.

#### GREEN RIVER

As of April 1st a very significant snowpack remains in place in the Duchesne Basin. The snowpack is above average in the Muddy, Escalante and Price drainages and near to below average in the Upper Green and Yampa/White basins. April-July runoff volumes are expected to range from near 120% to 200% of average in Duchesne and 65% to 110% elsewhere.

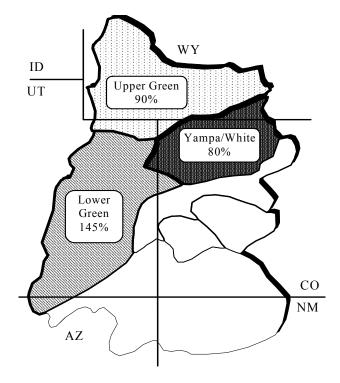
April-July streamflow forecasts for the Green River are as follows:

Upper Green River: Near Average

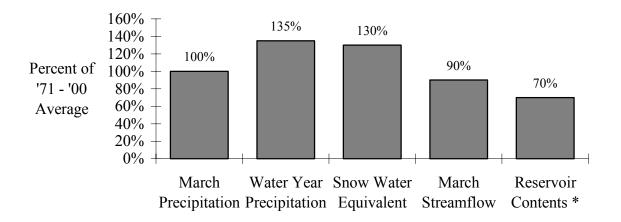
Yampa/White Rivers: Below Average

Lower Green River (blo Flaming Gorge):

Much Above Average



## Basin Conditions - April 1, 2005



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

Specific site forecasts are listed beginning on page 8.

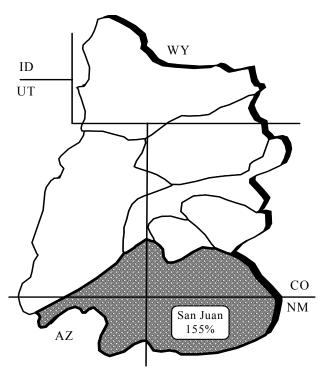
## San Juan River

As of April 1st the San Juan Basin snowpacks are persisting despite the warm beginning to March. March precipitation was slightly below average at 88%. Snow sites accumulated at average rates and are now 148% of average above Navajo, 143% in the Animas and 140% basinwide. April through July forecasts were within 5% of the March values ranging from 123 % to 359% of average with a median of 155%.

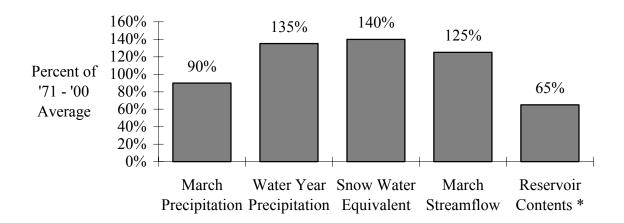
April-July streamflow forecasts for the San Juan Basin are as follows:

San Juan River:

Much Above Average



## Basin Conditions - April 1, 2005



<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	190	84	240	149
	DOTSERO, NR	1100	76	1570	630
	GLENWOOD SPRINGS, BLO	1830	85	2440	1260
	CAMEO, NR	2030	84	2760	1300
	CISCO, NR	4500	97	5790	3210
WILLOW CK	WILLOW CK RES, GRANBY, NR	50	98	70	34
FRASER	WINTER PARK	17.5	88	23	12.2
WILLIAMS FORK	WILLIAMS FORK RES, PARSHALL, N	75	79	105	51
MUDDY CK	WOLFORD MTN RES, BLO	42	70	64	28
BLUE	DILLON RES	125	75	162	94
	GREEN MTN RES	225	80	280	179
EAGLE	GYPSUM, BLO	250	75	310	200
FRYING PAN	RUEDI RES, BASALT, NR	105	74	144	72
ROARING FORK	GLENWOOD SPRINGS	700	99	875	545
PLATEAU CK	CAMEO, NR	200	174	280	120
MILL CK	MOAB, NR, SHELEY TUN, AT	6.7	134	10.1	4.2

## SPECIFIC SITE FORECASTS

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

Stream	ream Station		Percent	Reas.	Reas.
		Probable	Avg.	Max	Min
TAYLOR	TAYLOR PARK RES	105	102	130	80
	ALMONT	168	102	210	125
EAST	ALMONT	205	107	245	164
GUNNISON	GUNNISON, NR	410	105	495	325
TOMICHI CK	GUNNISON	81	100	126	48
LAKE FORK	GATEVIEW	145	115	185	107
GUNNISON	MORROW POINT RES	845	108	1060	630
	CRYSTAL RES	960	105	1250	690
MUDDY CK	⋆ PAONIA RES, BARDINE, NR	160	160	200	125
NF GUNNISON	SOMERSET, NR	450	148	550	360
SURFACE CK	CEDAREDGE	27	158	38	19.3
UNCOMPAHGRE	RIDGWAY RES	106	104	148	73
	COLONA	145	104	200	100
	DELTA	120	103	188	52
GUNNISON	GRAND JUNCTION, NR	1800	115	2210	1390
DOLORES	DOLORES	305	115	405	205
	MCPHEE RES	370	116	515	255
	CISCO, NR	615	111	845	385
SAN MIGUEL	PLACERVILLE, NR	140	106	190	99

 $<sup>\</sup>star$  = 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	220	83	265	177
		GREEN RIVER, WY, NR	750	86	965	535
		GREEN RIVER, UT	3120	98	4150	2090
PINE CK		FREMONT LK, ABV	95	91	110	80
NEW FORK		BIG PINEY, NR	345	87	450	240
BIG SANDY		FARSON, NR	60	103	77	43
BLACKS FORK		ROBERTSON, NR	105	111	128	82
EF SMITHS FORK		ROBERTSON, NR	32	103	40	25
HAMS FORK		FRONTIER, NR, POLE CK, BLO	64	98	85	46
		VIVA NAUGHTON RES	86	97	112	60
YAMPA		STAGECOACH RSVR, ABV	21	72	31	11.1
		STEAMBOAT SPRINGS	200	71	265	133
		MAYBELL, NR	740	75	1040	435
ELK		MILNER, NR	295	91	415	194
ELKHEAD CK		ELKHEAD, NR	32	82	61	16.8
		MAYNARD GULCH, BLO	50	85	70	30
FORTIFICATION CK	*	FORTIFICATION, NR	6.7	89	10.9	2.6
LITTLE SNAKE		SLATER, NR	145	91	197	101
		DIXON, NR	300	91	410	190
		LILY, NR	330	90	445	215

<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	33	157	40	26
ASHLEY CK	VERNAL, NR	94	181	111	77
WF DUCHESNE	HANNA, NR	30	125	42	20
ROCK CK	UPPER STILLWATER RES	130	159	150	108
	MOUNTAIN HOME, NR	143	161	162	124
DUCHESNE	TABIONA, NR	130	124	152	108
	DUCHESNE, NR, KNIGHT DIV, ABV	285	152	335	235
	MYTON	485	183	585	385
	RANDLETT, NR	680	209	920	445
STRAWBERRY	SOLDIER SPRINGS, NR	85	144	114	60
	DUCHESNE, NR	160	131	198	122
CURRANT CK	CURRANT CK RES	30	120	36	24
LAKE FORK	MOON LAKE RES, MTN HOME, NR	105	154	121	89
YELLOWSTONE	ALTONAH, NR	95	153	114	76
WHITEROCKS	WHITEROCKS, NR	110	196	129	91
WHITE	MEEKER, NR	190	66	270	134
	WATSON, NR	200	66	325	75
GOOSEBERRY CK	SCOFIELD, NR	12.5	105	15.3	9.7
PRICE	SCOFIELD RES, SCOFIELD, NR	46	100	54	38
WHITE	BLO TABBYUNE CK, SOLDIER SUMMI	20	115	28	13.2
HUNTINGTON CK	ELECTRIC LAKE	15	96	20	10.7
	HUNTINGTON, NR	46	92	55	37
SEELEY CK	JOES VLY RES, ORANGEVILLE, NR	60	103	77	43
FERRON CK	FERRON, NR	41	105	51	32
SEVEN MILE CK	FISH LAKE, NR	8	114	11.7	4.3
MUDDY CK	EMERY, NR	22	111	29	15.5

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

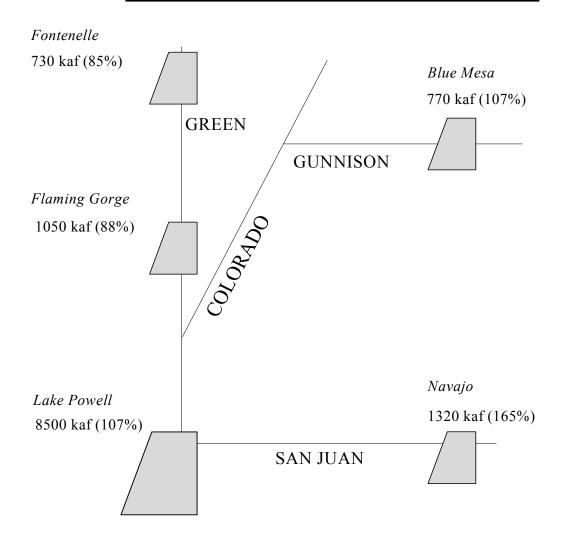
Stream	Station		Most	Percent	Reas.	Reas.
			Probable	Avg.	Max	Min
SAN JUAN		PAGOSA SPRINGS	350	156	440	300
		CARRACAS, NR	600	148	790	440
		FARMINGTON	1930	160	2400	1580
		BLUFF, NR	2070	168	2520	1550
RIO BLANCO		PAGOSA SPRINGS, NR, BLANCO DAM	75	142	99	55
NAVAJO		CHROMO, NR, OSO DIV DAM, BLO	85	123	117	60
PIEDRA		ARBOLES, NR	380	165	460	310
LOS PINOS		VALLECITO RES, BAYFIELD, NR	310	151	360	260
ANIMAS		DURANGO	620	141	765	495
FLORIDA		LEMON RES, DURANGO, NR	90	155	117	68
LA PLATA		HESPERUS	37	148	48	28
MANCOS, NR		MANCOS, NR	59	148	100	31
SOUTH CK	CK * LLOYD'S RSVR NR MONTICELLO, AB		4.7	359	6.7	3.1
RECAPTURE CK * BLANDING, NR, JOHNSON CK, BLO		BLANDING, NR, JOHNSON CK, BLO	17	279	19.9	14.3

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

## FLOOD CONTROL FORECASTS

#### MOST PROBABLE FORECASTS 2005 APRIL - JULY INFLOW VOLUMES

(% OF '71 - '00 AVERAGE)

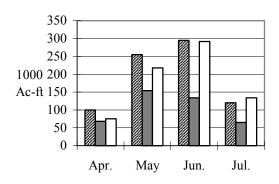


NOTE: Colorado River flood control forecasts account for a smaller set of upstream adjustments than water supply forecast points.

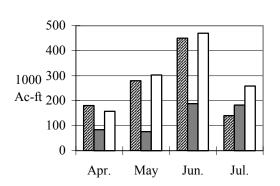
## RESERVOIR MONTHLY INFLOW FORECASTS

2005 Forecast 2004 Observed 30 Year Average

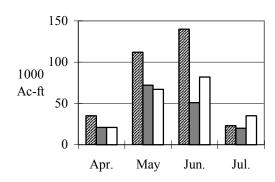
#### **Blue Mesa Reservoir Inflow**



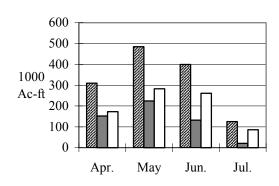
#### Flaming Gorge Reservoir Inflow



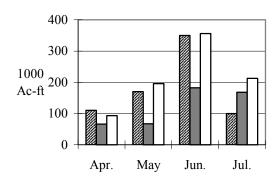
#### Vallecito Reservoir Inflow



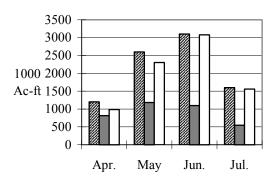
Navajo Reservoir Inflow



#### **Fontenelle Reservoir Inflow**

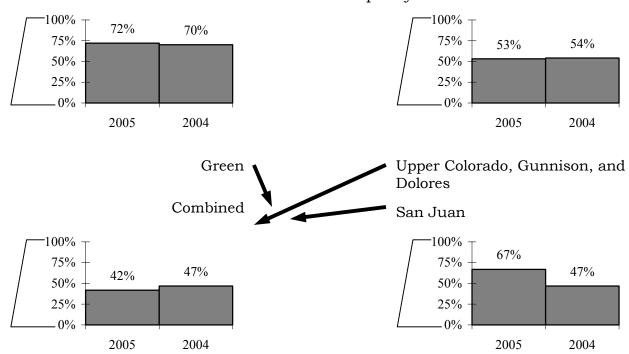


#### Lake Powell Inflow



## END OF MONTH RESERVOIR CONTENTS

### Percent of Usable Capacity



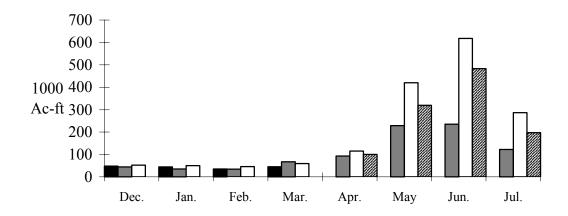
RESERVOIR	Reservoir	Usable	EOM Usable	Percent Usable
(vol. in 1000 ac-ft)	status	Capacity	Contents	Capacity
Fontenelle	1,4	344.8	137.7	40
Flaming Gorge	1,4	3749	2854.1	76
Strawberry	1,4	1105.9	712.4	64
Starvation	1,4	165.3	142.1	86
Lake Granby	2,4	490.3	136.2	28
Dillon	2,4	254	195.4	77
Green Mountain	2,4	146.9	71.2	48
Taylor Park	2,4	106.2	68.4	64
Blue Mesa	2,4	829.5	421	51
Ridgway	2,4	83.2	74.4	90
McPhee	2,4	381.1	240.5	63
Vallecito	3,4	125.4	35.1	28
Navajo	3,4	1696	1182	70
Lake Powell	4	24322	8015.2	33

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

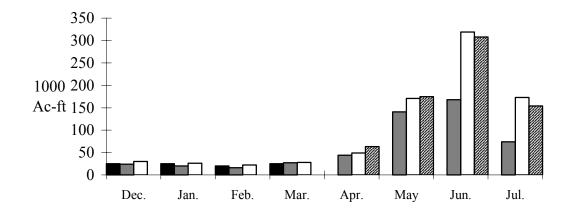
## MONTHLY STREAMFLOWS

■ 2005 Water Year ■ 2004 Water Year □ 30 Year Average ■ 2005 Forecast

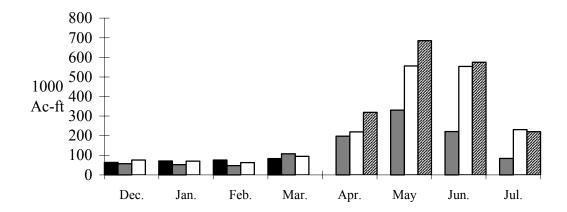
## Colorado - Dotsero, nr:



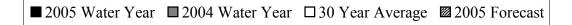
## Roaring Fork - Glenwood Springs:



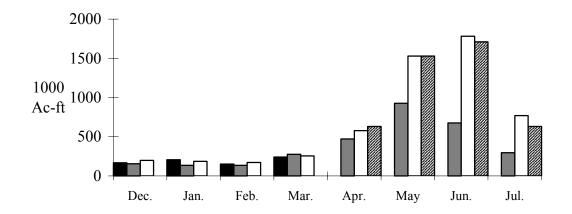
## Gunnison - Grand Junction, nr:



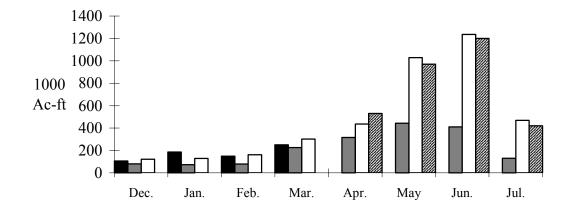
<sup>\*</sup> Data Not Available



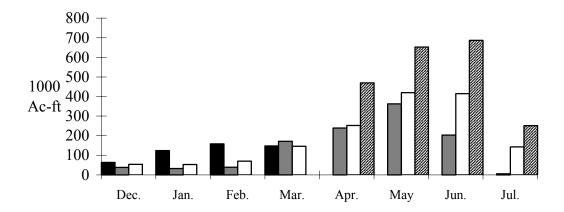
## Colorado - Cisco, nr:



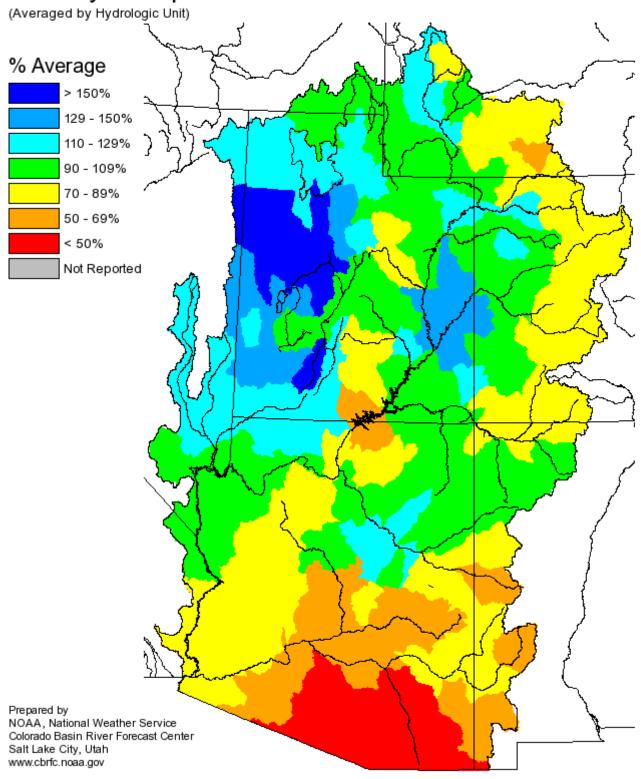
## Green - Green River, UT:



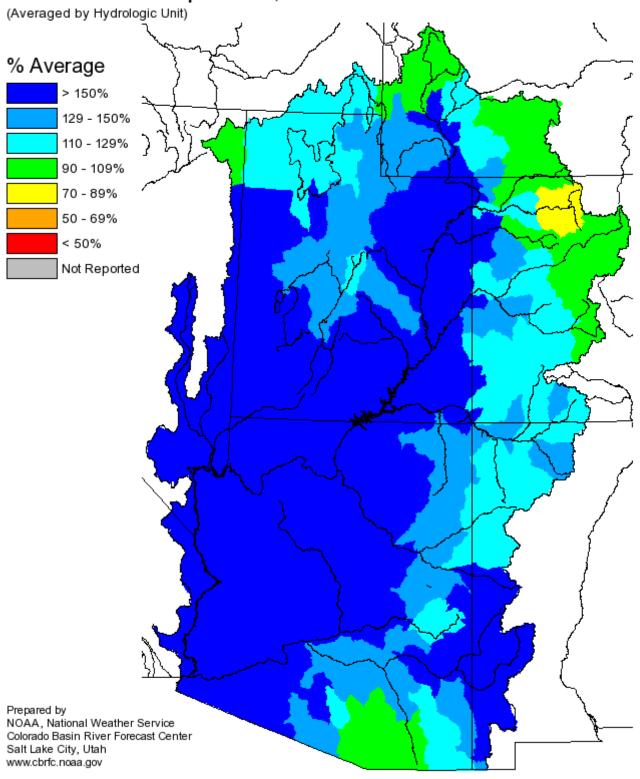
## San Juan - Bluff, nr:



# Monthly Precipitation for March 2005



# Seasonal Precipitation, October 2004 - March 2005



#### 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