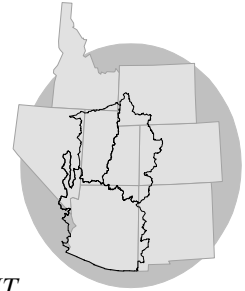


# WATER SUPPLY OUTLOOK

## for the UPPER COLORADO

### *COLORADO BASIN RIVER FORECAST CENTER*

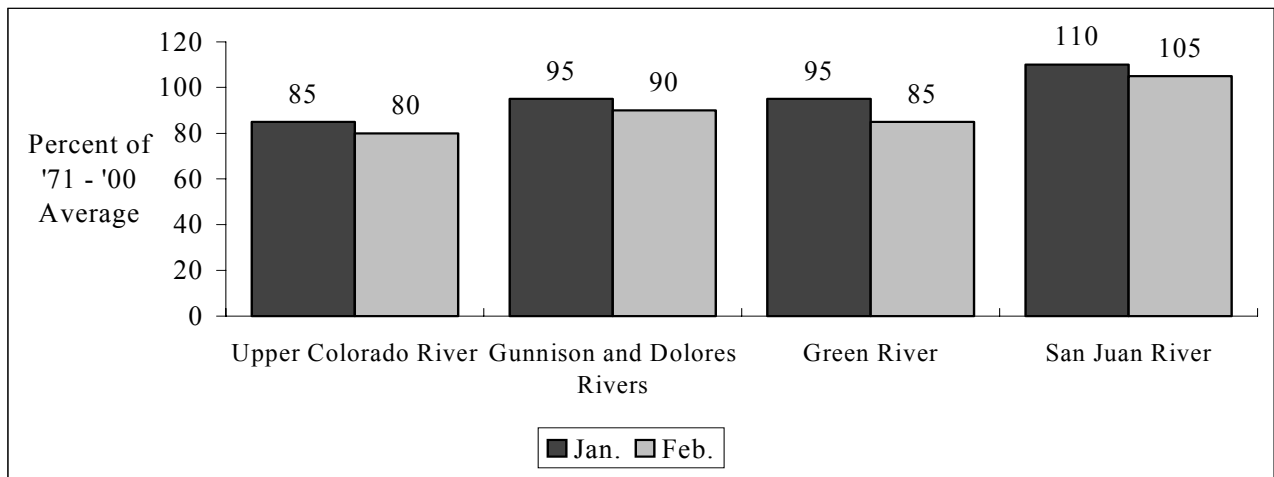
NATIONAL WEATHER SERVICE, SALT LAKE CITY, UT



## FEBRUARY 1, 2004

After a very heavy snow event over most of the basin the first few days of January, weather patterns turned dry until the last week or so of the month. Therefore, most areas experienced below normal precipitation in January. The exceptions were the Gunnison and Dolores basins where precipitation was near normal. Therefore, in general, forecasts for the April-July runoff period were reduced 5 to 15 percent.

### APRIL - JULY VOLUME FORECASTS

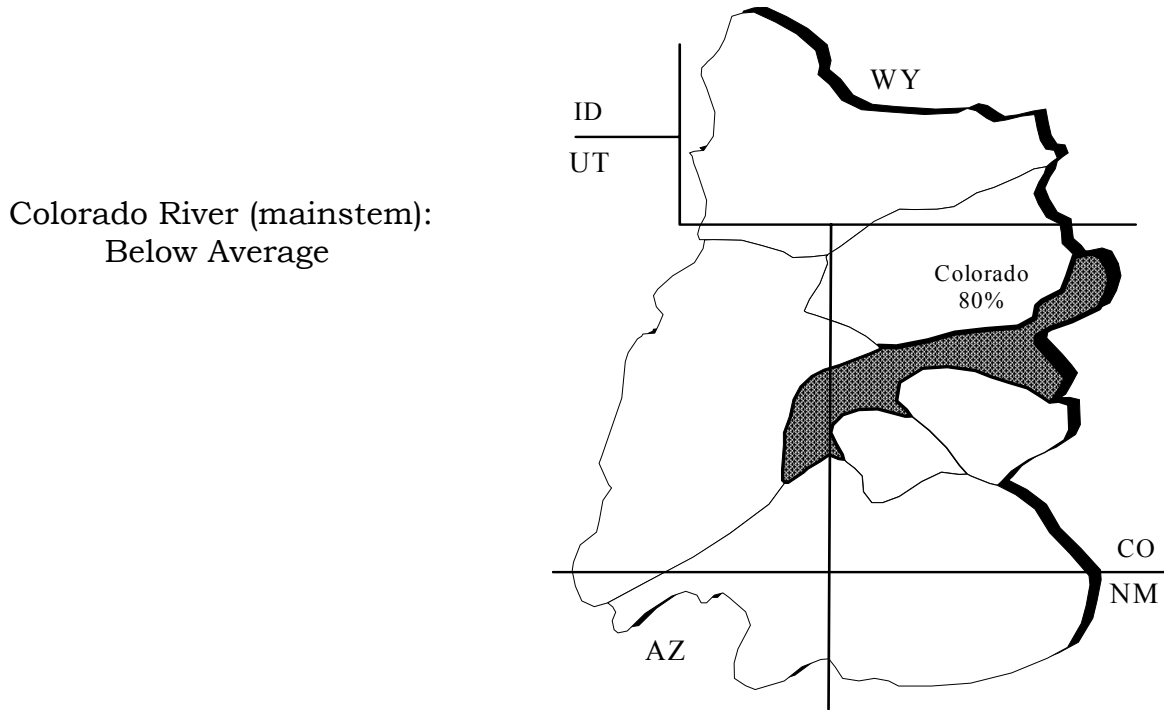


<b>INSIDE</b>	
Summary	1
Upper Colorado Mainstem	2
Gunnison and Dolores Rivers	3
Green River	4
San Juan River	5
Specific Site Forecasts	6
Flood Control Forecasts	11
Res. Monthly Infl. Forecasts	12
EOM Reservoir Contents	13
Monthly Streamflows	14
Precipitation Maps	16,17
Additional Information	18

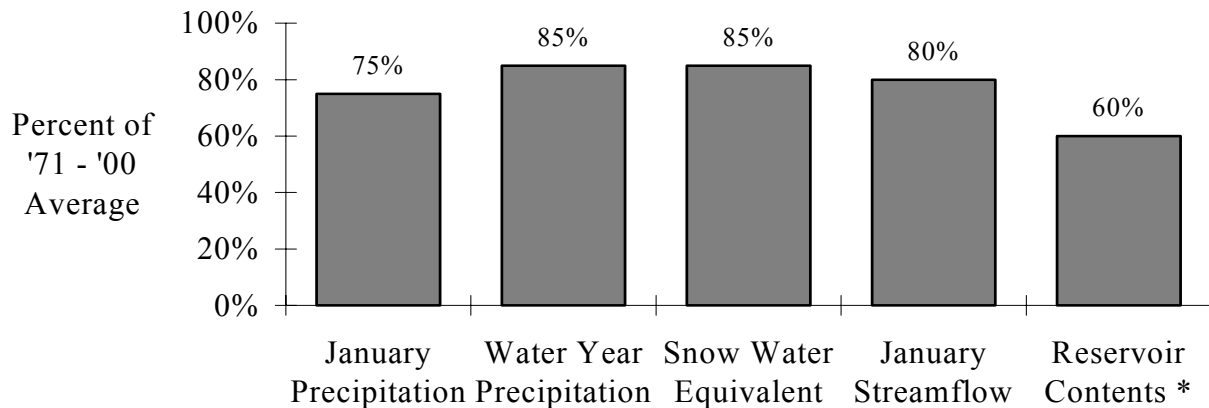
## UPPER COLORADO MAINSTEM

With below normal precipitation in January, the snowpack as a percent of average dropped about 5 percent. This led to a reduction in most April-July runoff forecasts of 5% to 10%. April-July runoff forecasts range from 73% to 96% of average.

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



## BASIN CONDITIONS - February 1, 2004



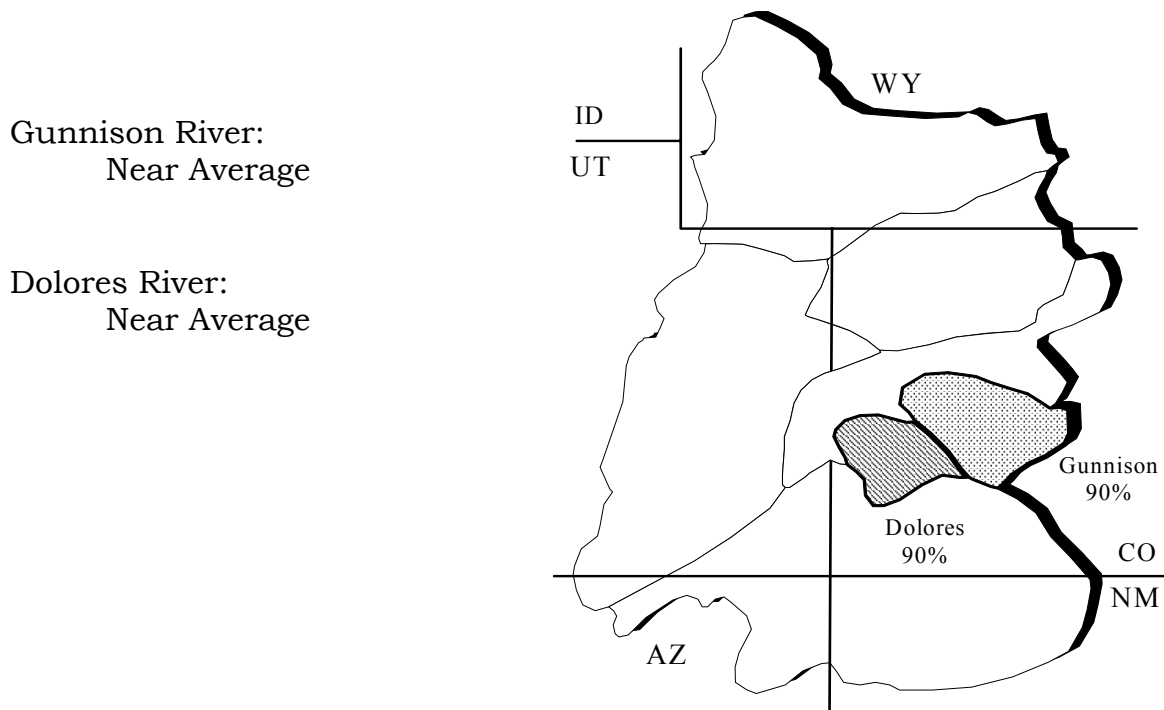
\* Percent usable capacity, not percent average contents.

Specific site forecasts are listed beginning on page 6.

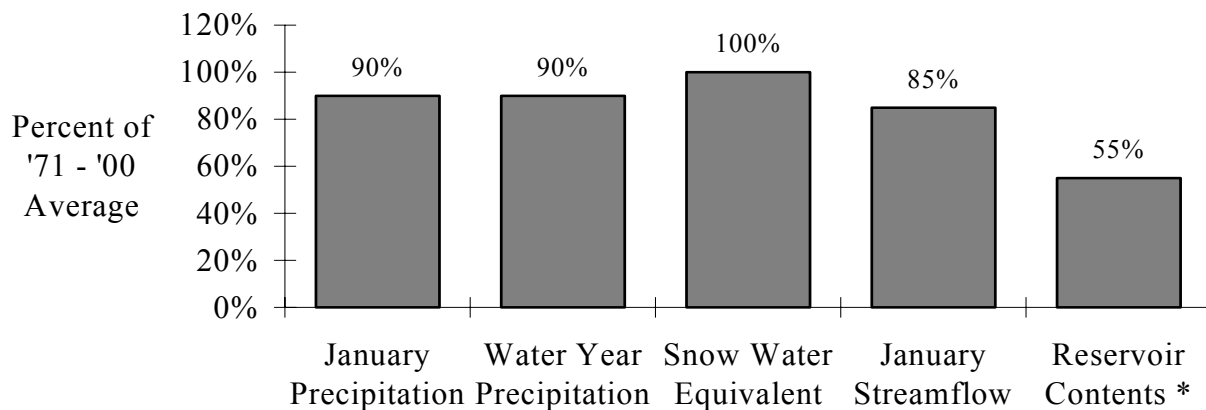
## GUNNISON AND DOLORES RIVERS

The snow water equivalent on February 1st was near average in both the Gunnison and Dolores river basins. This is a decrease of about 20% from January 5th values. Overall, the April-July streamflow forecasts decreased 5% from the January forecasts and now range between 74% and 100% of average.

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



## BASIN CONDITIONS - February 1, 2004



\* Percent usable capacity, not percent average contents.

Specific site forecasts are listed beginning on page 7.

# GREEN RIVER

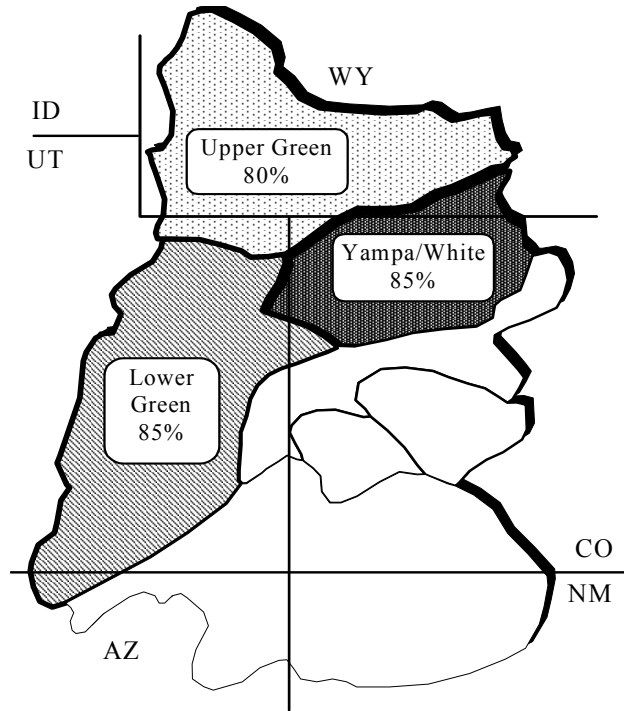
Runoff forecasts throughout the Green River Basin were reduced slightly following a dry January. Snowpack conditions as of February 1st range from near 75% to 110% of average with the best conditions in the Little Snake and eastern Uinta Mountain drainages. April-July runoff volumes are expected to range from near 70% to 100% of average at most sites.

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

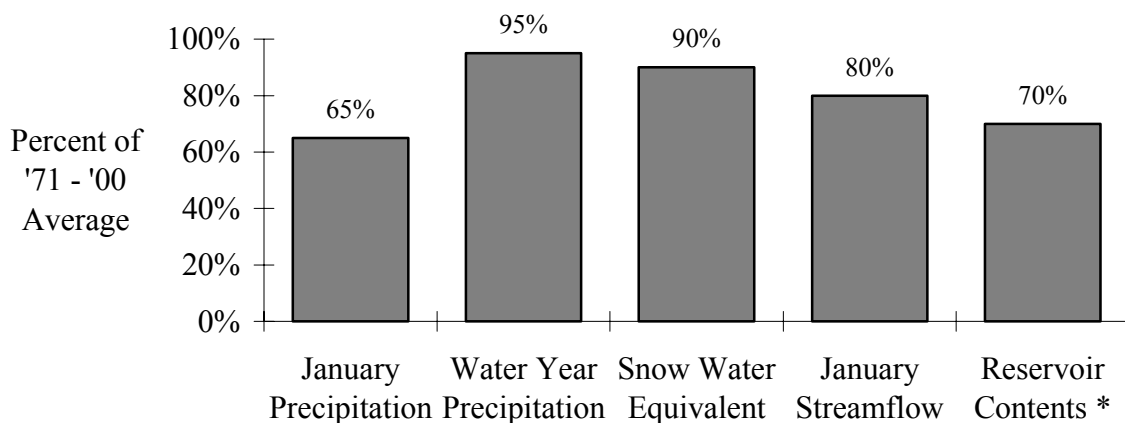
Upper Green River:  
Below Average

Yampa/White Rivers:  
Below Average

Lower Green River  
(below Flaming Gorge):  
Below Average



## BASIN CONDITIONS - February 1, 2004



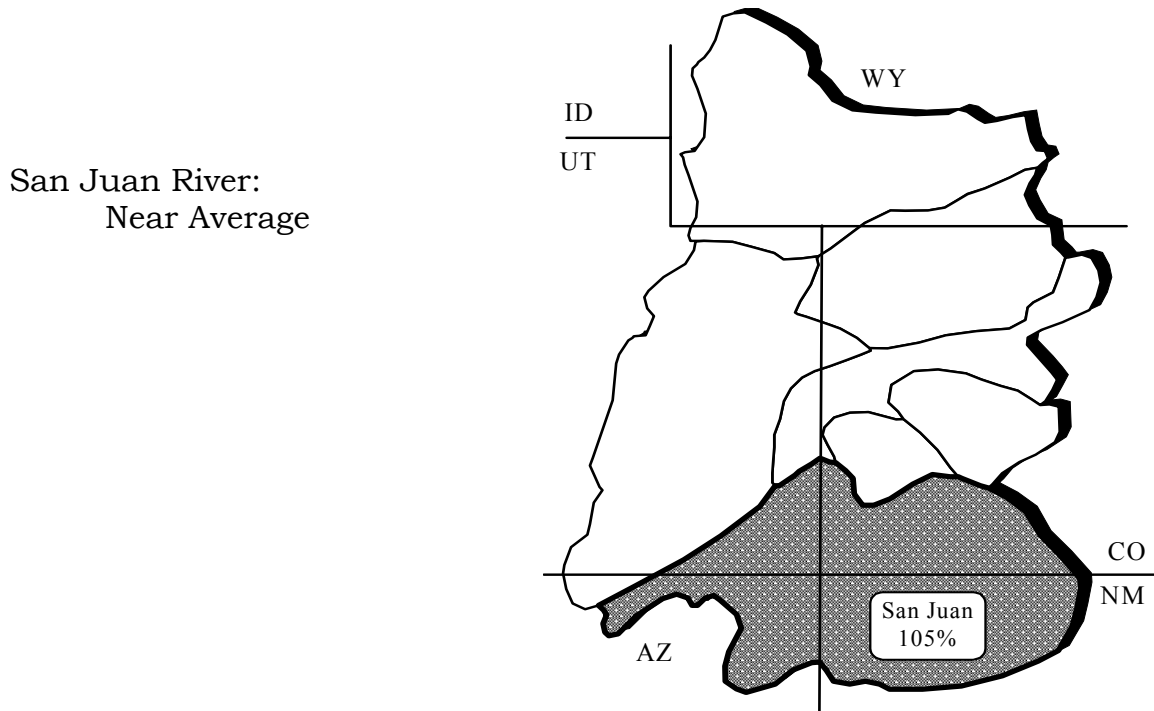
\* Percent usable capacity, not percent average contents.

Specific site forecasts are listed beginning on page 8.

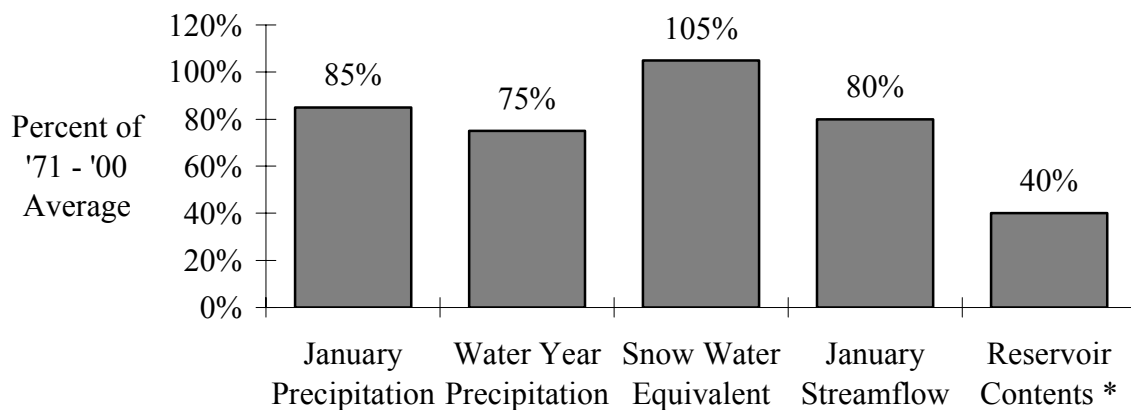
## SAN JUAN RIVER

Runoff forecasts throughout the San Juan River Basin were reduced slightly based on January data. Snowpack conditions as of February 1st range from near 62% to 124% of average. The best conditions are in the Upper San Juan above Navajo. April-July runoff volumes are expected to range from near 82% to 110% of average.

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



### BASIN CONDITIONS - February 1, 2004



\* 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 Probable	Percent Avg.	Reas. Max	Reas. Min
COLORADO	LAKE GRANBY, GRANBY, NR	175	78	245	126
	DOTSERO, NR	1100	76	1680	525
	GLENWOOD SPRINGS, BLO	1750	81	2400	1100
	CAMEO, NR	1900	79	2780	1020
	CISCO, NR	3800	82	5460	2140
WILLOW CK	WILLOW CK RES, GRANBY, NR	37	73	53	24
FRASER	WINTER PARK	15	75	21	9.3
WILLIAMS FORK	WILLIAMS FORK RES, PARSHALL, N	80	84	105	59
MUDDY CK	WOLFORD MTN RES, BLO	53	88	92	31
BLUE	DILLON RES	125	75	191	58
	GREEN MTN RES	225	80	285	172
EAGLE	GYPSUM, BLO	265	79	410	170
FRYING PAN	RUEDI RES, BASALT, NR	120	85	171	84
ROARING FORK	GLENWOOD SPRINGS	650	92	860	470
PLATEAU CK	CAMEO, NR	110	96	193	27
MILL CK	MOAB, NR, SHELEY TUN, AT	5.7	114	8.9	2.5

## SPECIFIC SITE FORECASTS

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

Stream	Station	Most Probable	Percent Avg.	Reas. Max	Reas. Min
TAYLOR	TAYLOR PARK RES	92	89	133	51
	ALMONT	145	88	200	89
EAST	ALMONT	180	94	240	120
GUNNISON	GUNNISON, NR	350	90	480	220
TOMICHI CK	GUNNISON	60	74	113	24
LAKE FORK	GATEVIEW	115	91	170	60
GUNNISON	MORROW POINT RES	690	88	990	390
	CRYSTAL RES	775	85	1150	400
MUDDY CK	● PAONIA RES, BARDINE, NR	100	100	181	43
NF GUNNISON	SOMERSET, NR	300	98	435	189
SURFACE CK	CEDAREEDGE	17	99	26	11
UNCOMPAHGRE	RIDGWAY RES	95	93	136	66
	COLONA	123	88	175	80
	DELTA	100	85	181	55
GUNNISON	GRAND JUNCTION, NR	1400	90	2010	790
DOLORES	DOLORES	245	92	335	155
	MCPHEE RES	295	92	410	180
	CISCO, NR	465	84	795	134
SAN MIGUEL	PLACERVILLE, NR	125	95	170	80

● = March - June forecast period.

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

Stream	Station	Most Probable	Percent Avg.	Reas. Max	Reas. Min
GREEN	DANIEL, NR, WARREN BRIDGE, AT	230	87	290	169
	GREEN RIVER, WY, NR	660	75	905	385
	GREEN RIVER, UT	2580	81	3740	1420
PINE CK	FREMONT LK, ABV	87	84	105	69
NEW FORK	BIG PINEY, NR	320	81	445	195
BIG SANDY	FARSON, NR	47	81	65	29
BLACKS FORK	ROBERTSON, NR	77	81	107	47
EF SMITHS FORK	ROBERTSON, NR	23	74	36	15.6
HAMS FORK	FRONTIER, NR, POLE CK, BLO	50	77	76	29
	VIVA NAUGHTON RES	64	72	101	27
YAMPA	STAGECOACH RSVR, ABV	24	83	36	11.6
	STEAMBOAT SPRINGS	220	79	300	139
	MAYBELL, NR	800	81	1130	470
ELK	MILNER, NR	280	86	400	182
ELKHEAD CK	ELKHEAD, NR	30	77	55	16.4
	MAYNARD GULCH, BLO	50	85	79	21
FORTIFICATION CK	● FORTIFICATION, NR	6.4	85	10.5	2.3
LITTLE SNAKE	SLATER, NR	156	98	210	110
	DIXON, NR	325	98	445	205
	LILY, NR	355	97	480	230

● = March - June forecast period.



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

Stream	Station	Most Probable	Percent Avg.	Reas. Max	Reas. Min
BIG BRUSH CK	VERNAL, NR, RED FLEET RES, ABV	22	105	29	14.8
ASHLEY CK	VERNAL, NR	55	106	83	27
WF DUCHESNE	HANNA, NR	22	92	33	13.2
ROCK CK	UPPER STILLWATER RES	70	85	96	44
	MOUNTAIN HOME, NR	74	83	97	51
DUCHESNE	TABIONA, NR	92	88	119	65
	DUCHESNE, NR, KNIGHT DIV, ABV	155	82	215	94
	MYTON	205	77	325	86
	RANDLETT, NR	240	74	490	33
STRAWBERRY	SOLDIER SPRINGS, NR	55	93	86	30
	DUCHESNE, NR	105	86	157	53
CURRANT CK	CURRANT CK RES	22	88	30	14.8
LAKE FORK	MOON LAKE RES, MTN HOME, NR	61	90	82	40
YELLOWSTONE	ALTONAH, NR	56	90	82	30
WHITEROCKS	WHITEROCKS, NR	50	89	83	17
WHITE	MEEKER, NR	240	83	350	165
	WATSON, NR	250	82	390	112
GOOSEBERRY CK	SCOFIELD, NR	10.3	87	15.4	5.2
PRICE	SCOFIELD RES, SCOFIELD, NR	42	91	56	28
WHITE	BLO TABBYUNE CK, SOLDIER SUMMI	13.4	77	24	5.9
HUNTINGTON CK	ELECTRIC LAKE	11.6	74	21	5.7
	HUNTINGTON, NR	37	74	54	19.8
SEELEY CK	JOES VLY RES, ORANGEVILLE, NR	50	86	75	25
FERRON CK	FERRON, NR	34	87	50	21
SEVEN MILE CK	FISH LAKE, NR	7.2	103	11.7	2.7
MUDDY CK	EMERY, NR	18.3	92	30	7

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

Stream	Station	Most Probable	Percent Avg.	Reas. Max	Reas. Min
SAN JUAN	PAGOSA SPRINGS	245	109	335	126
	CARRACAS, NR	430	106	650	255
	FARMINGTON	1240	102	1770	745
	BLUFF, NR	1290	105	1760	820
RIO BLANCO	PAGOSA SPRINGS, NR, BLANCO DAM	55	104	80	30
NAVAJO	CHROMO, NR, OSO DIV DAM, BLO	70	101	101	39
PIEDRA	ARBOLES, NR	245	107	330	159
LOS PINOS	VALLECITO RES, BAYFIELD, NR	205	100	270	139
ANIMAS	DURANGO	440	100	600	280
FLORIDA	LEMON RES, DURANGO, NR	57	98	81	33
LA PLATA	HESPERUS	20	80	31	9.2
MANCOS	MANCOS, NR	33	82	54	12.4
SOUTH CK	◆ LLOYD'S RSVR NR MONTICELLO, AB	1.5	155	2.9	0.56
RECAPTURE CK	◆ BLANDING, NR, JOHNSON CK, BLO	5.5	110	9.6	1.4

◆ = March - July forecast period.

# FLOOD CONTROL FORECASTS

**MOST PROBABLE FORECASTS**  
**2004 APRIL - JULY INFLOW VOLUMES**  
 (% OF '71 - '00 AVERAGE)

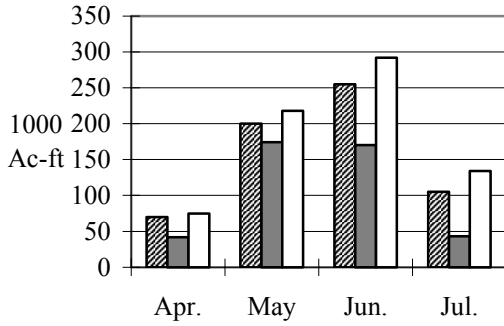


NOTE: Colorado River flood control forecasts account for a smaller set of upstream adjustments than water supply forecast points.

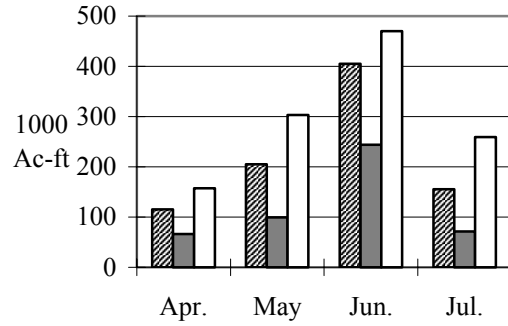
# RESERVOIR MONTHLY INFLOW FORECASTS



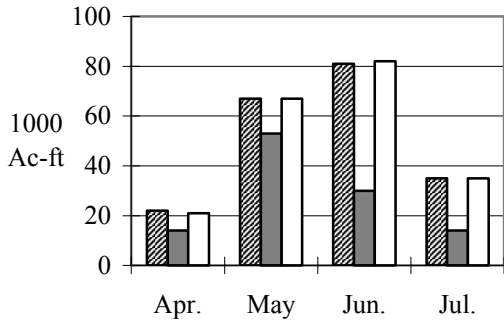
**Blue Mesa Reservoir Inflow**



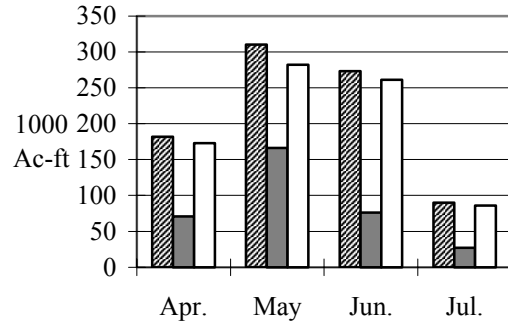
**Flaming Gorge Reservoir Inflow**



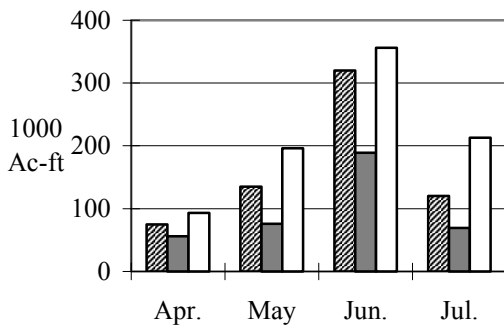
**Vallecito Reservoir Inflow**



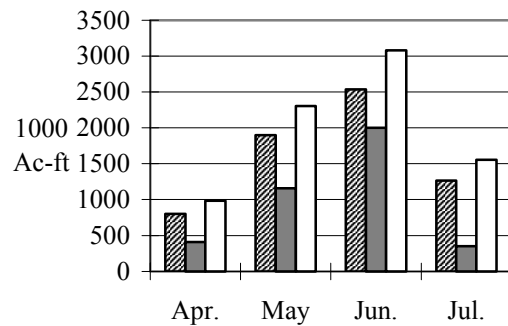
**Navajo Reservoir Inflow**



**Fontenelle Reservoir Inflow**

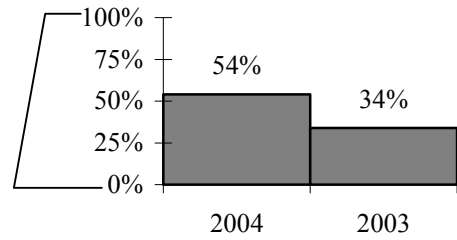
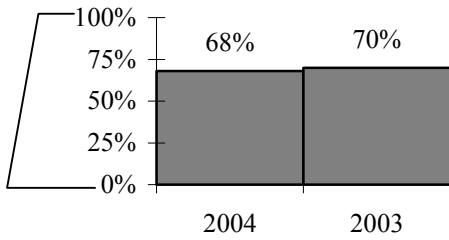


**Lake Powell Inflow**

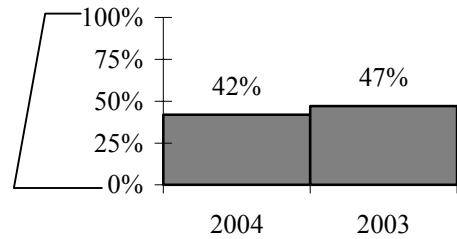
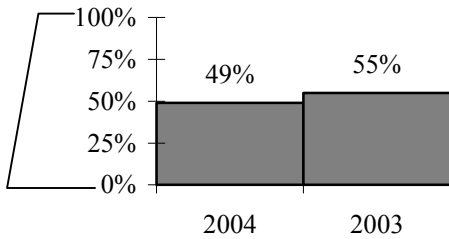


# END OF MONTH RESERVOIR CONTENTS

## Percent of Usable Capacity



Green  
 Combined  
 Upper Colorado, Gunnison, and Dolores  
 San Juan



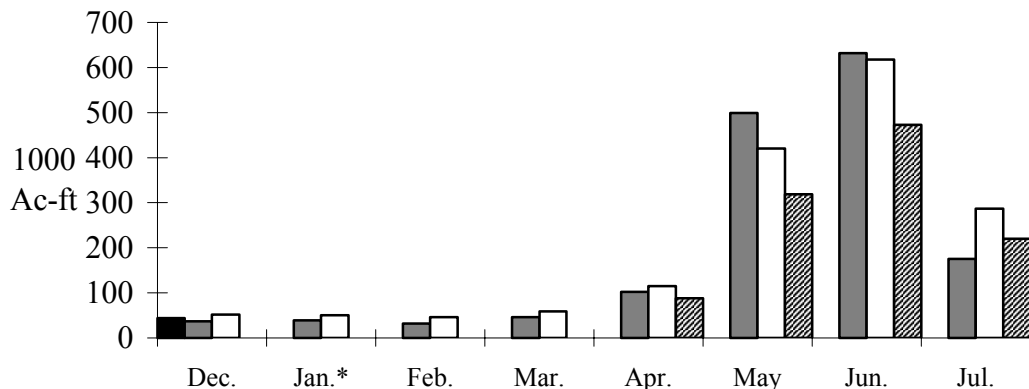
RESERVOIR (vol. in 1000 ac-ft)	Reservoir status	Usable Capacity	EOM Usable Contents	Percent Usable Capacity
Fontenelle	1,4	344.8	176.5	51
Flaming Gorge	1,4	3749	2600.3	69
Strawberry	1,4	1105.9	777.7	70
Starvation	1,4	165.3	132.3	80
Lake Granby	2,4	490.3	246.8	50
Dillon	2,4	254	221.5	87
Green Mountain	2,4	146.9	69	47
Taylor Park	2,4	106.2	71.8	68
Blue Mesa	2,4	829.5	383.4	46
Ridgway	2,4	83.2	70.9	85
McPhee	2,4	381.1	170.8	45
Vallecito	3,4	125.4	52.7	42
Navajo	3,4	1696	706.8	42
Lake Powell	4	24322	10984.2	45

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

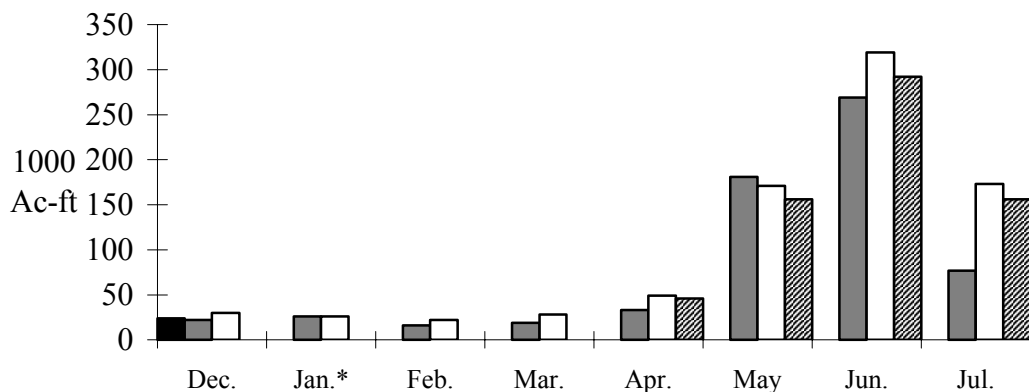
# MONTHLY STREAMFLOWS



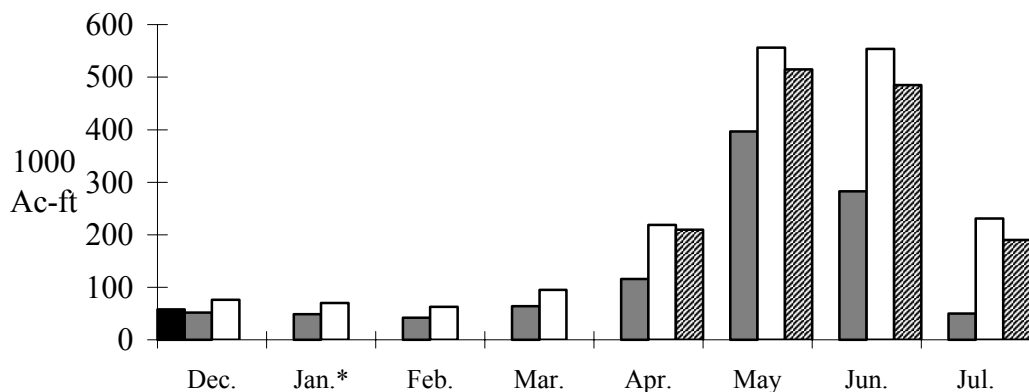
## Colorado - Dotsero, nr:



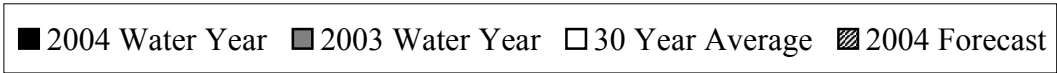
## Roaring Fork - Glenwood Springs:



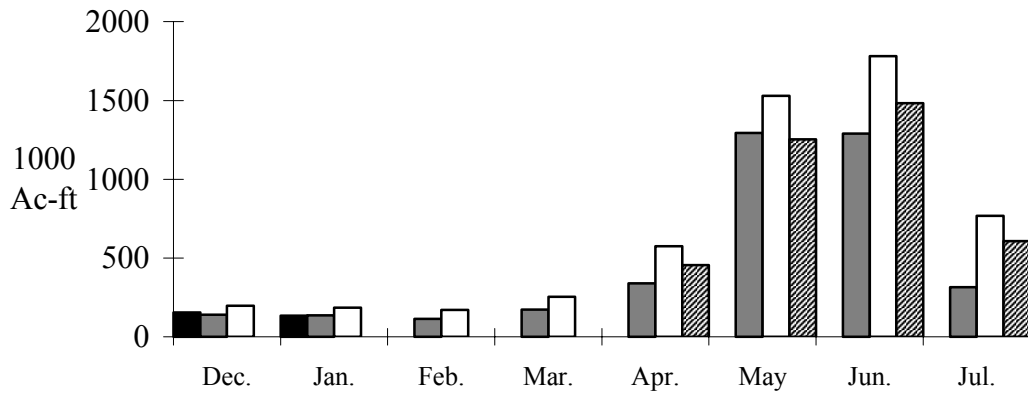
## Gunnison - Grand Junction, nr:



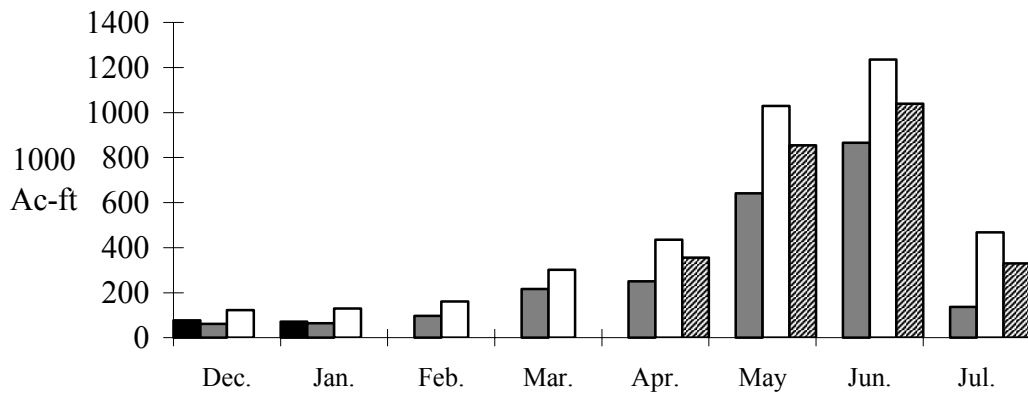
\* Data Not Available



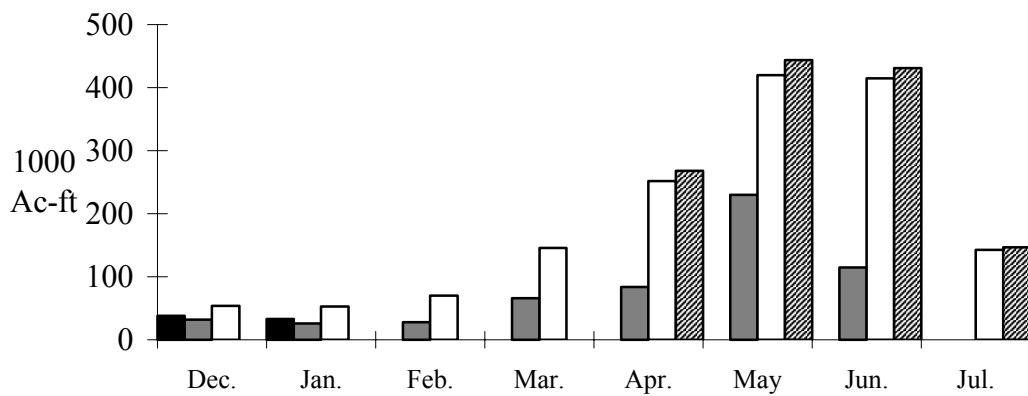
**Colorado - Cisco, nr:**



**Green - Green River, UT:**



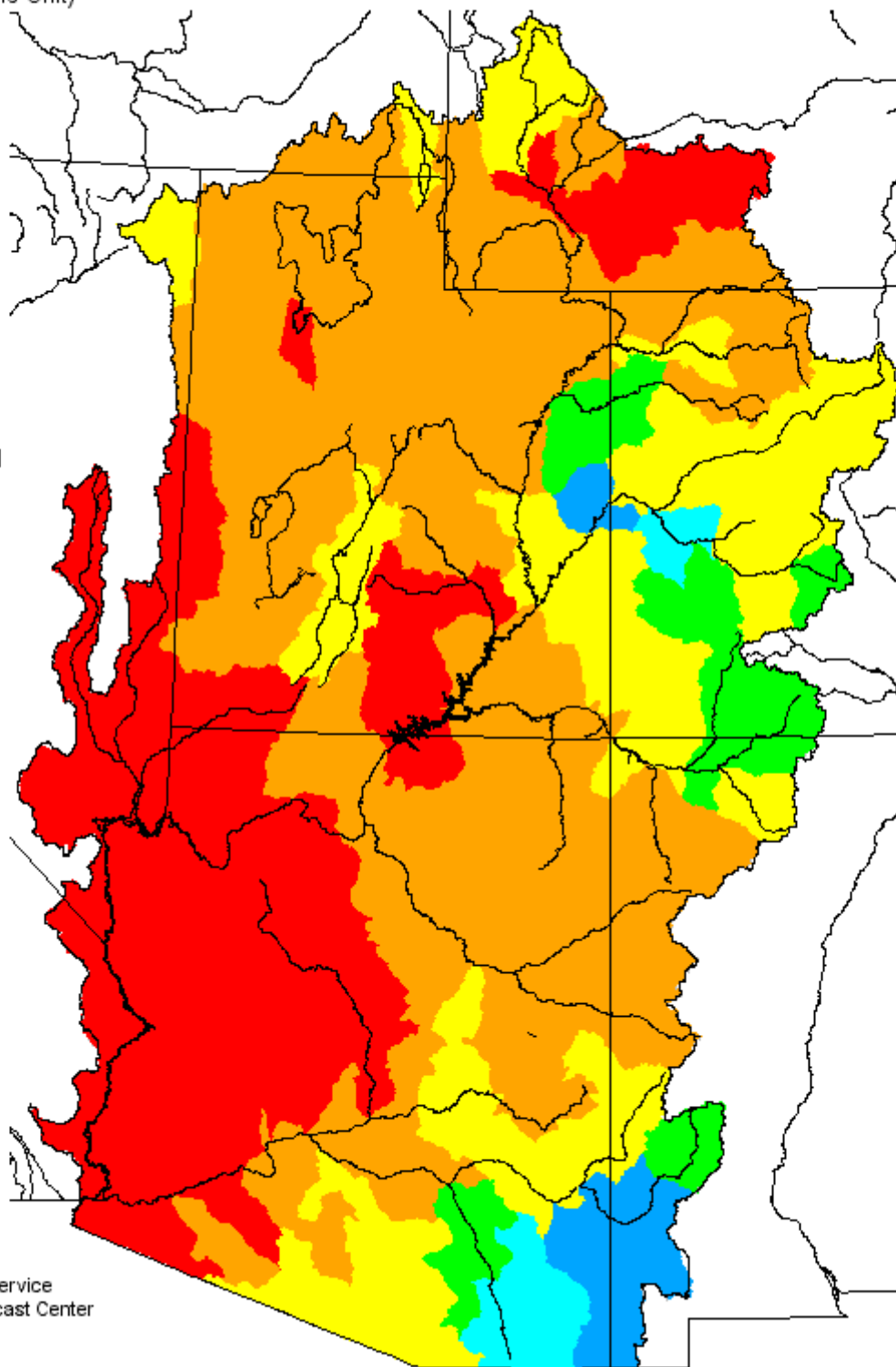
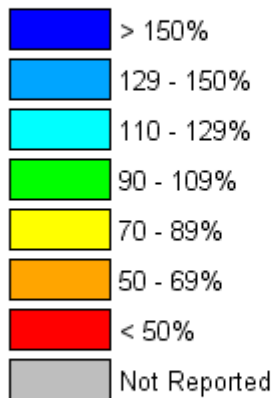
**San Juan - Bluff, nr:**



# Monthly Precipitation for January 2004

(Averaged by Hydrologic Unit)

## % Average



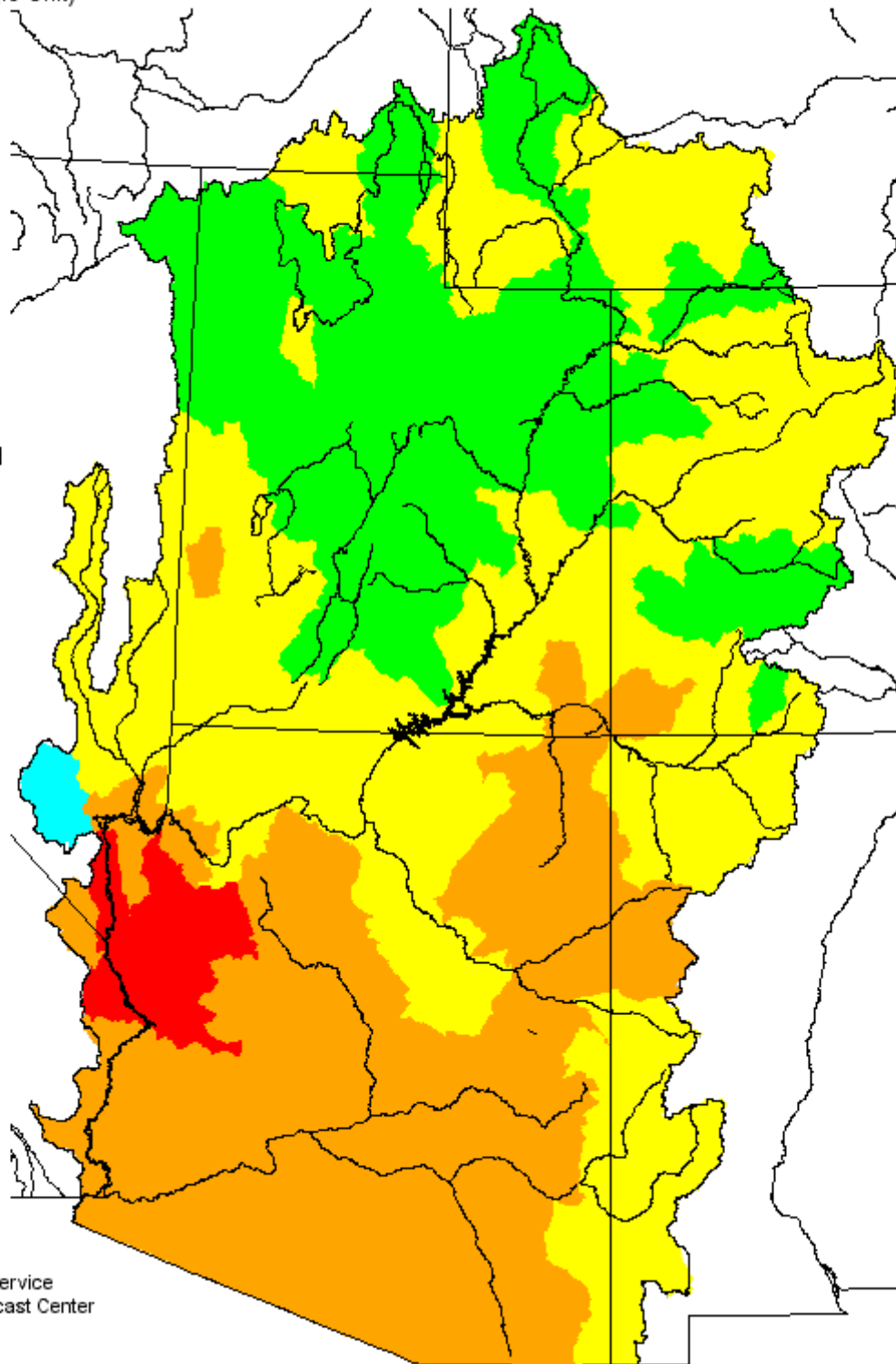
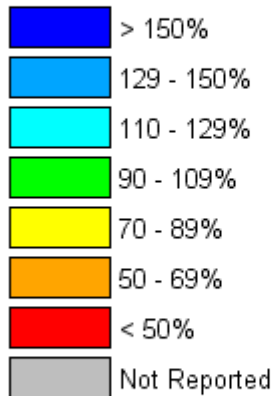
Prepared by  
NOAA, National Weather Service  
Colorado Basin River Forecast Center  
Salt Lake City, Utah  
[www.cbrfc.noaa.gov](http://www.cbrfc.noaa.gov)



# Seasonal Precipitation, October 2003 - January 2004

(Averaged by Hydrologic Unit)

## % Average



Prepared by  
NOAA, National Weather Service  
Colorado Basin River Forecast Center  
Salt Lake City, Utah  
[www.cbrfc.noaa.gov](http://www.cbrfc.noaa.gov)

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