

## WATER SUPPLY OUTLOOK

for the

## LOWER COLORADO

COLORADO BASIN RIVER FORECAST CENTER

NATIONAL WEATHER SERVICE, SALT LAKE CITY, UT

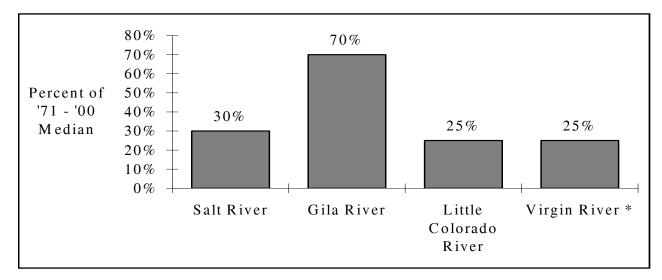


## **A**PRIL 1, 2007

### SUMMARY

The 2007 Lower Colorado Water Supply Outlook remains dry. In the Virgin River Basin forecasted flows range from 20% to 36% of average. In the Gila River Basin forecasted flows range from 71% to 83% of median in New Mexico, and range from 49% to 80% of median in Arizona. In the rest of the Lower Colorado Basin forecasted flows range from 16% to 45% of median.

### April - May Volume Forecasts



	Inside
Summary	1
Salt River	2
Gila River	3
Little Colorado River	4
Virgin River	5
Specific Site Forecasts	6
EOM Reservoir Contents	7
Monthly Streamflows	8,9
Precipitation Maps	10,11
Additional Information	12

\* Virgin River Basin forecasts are for the April through July period and expressed in percent of average.

### SALT RIVER

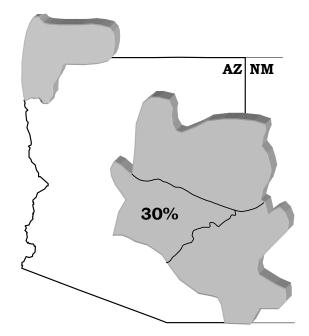
The 2007 Water Year is dry in the Salt River drainage. Therefore, forecasted stream flows remain much below median. The rivers have peaked, there is very little snow left, and the forecasts for precipitation is below normal for the next two months (April-May).

April-May stream flow forecasts for the Salt River are as follows:

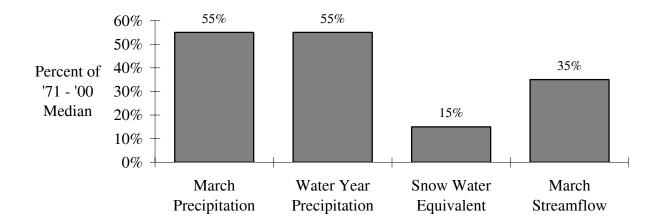
Verde River: Much Below Median

Tonto Creek: Much Below Median

Salt River: Much Below Median



## Basin Conditions - April 1, 2007

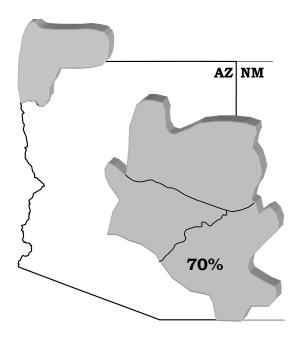


### GILA RIVER

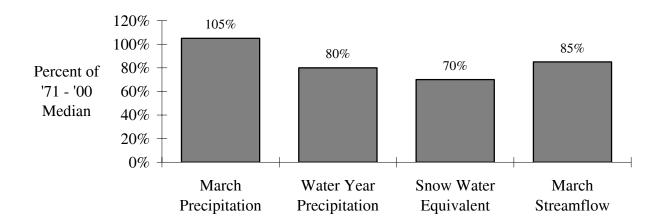
The 2007 Water Year is dry in the Gila River drainage. Forecasted stream flows range from 49% to 83% of median. March precipitation has helped these rivers forecasted flows remain at below median, while elsewhere in Arizona the forecasted flows for rivers are much below median.

April-May stream flow forecasts for the Gila River are as follows:

Gila River: Below Median



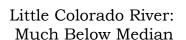
## Basin Conditions - April 1, 2007

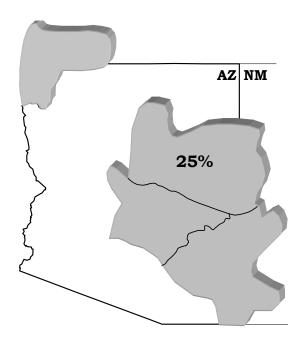


### LITTLE COLORADO RIVER

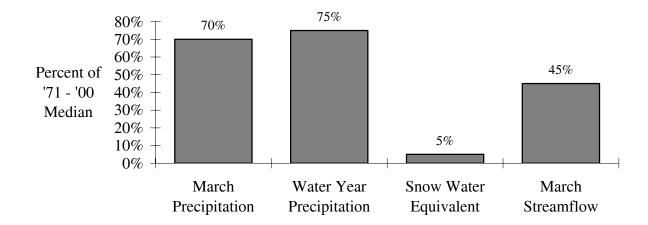
The 2007 Water Year is dry in the Little Colorado River drainage. Forecasted stream flows range from 16% to 43% of median. The rivers have peaked, there is essentially no snow left, and the forecasts for precipitation is below normal for the next two months (April-May).

April-May stream flow forecasts for the Little Colorado River are as follows:





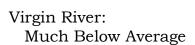
## Basin Conditions - April 1, 2007

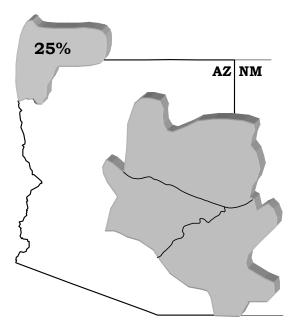


### VIRGIN RIVER

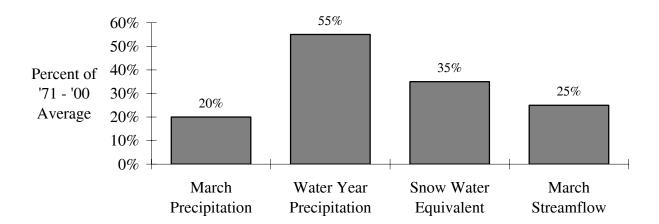
On the Virgin River Basin the snow pack level averages about 35% of normal. Forecasted April-July stream flows are 23% to 36% of average along the main stem of the Virgin River, and to 20% of average on the Santa Clara River. The snow pack level has dropped significantly while the flows for February and March have remained level at 25% of average.

April-July stream flow forecasts for the Virgin River are as follows:





## Basin Conditions - April 1, 2007



## Specific Site Forecasts—Water Year 2007

April through May volume (kaf) forecasts (except where noted).

Stream		Station	Most	Percent	Reas.	Reas.
			Probable	Med.	Max	Min
LITTLE COLORADO	•	LYMAN LK, ABV, ST. JOHNS, NR	1.35	31	3.7	0.3
		WOODRUFF	0.35	42	1.48	0.08
RIONUTRIA		RAMAH, NR	0.12	23	0.54	0.01
ZUNI		BLACK ROCK RES, ABV	0.13	20	0.64	0
CEBOLLACK		RAMAHRES	0.06	21	0.29	0
EAST CLEAR CK		BLUE RIDGE RES, PINE, NR	0.8	16	2.3	0.08
CLEAR CK		WINSLOW, NR	3.7	18	9.8	0.8
CHEVELONCK		WINSLOW, NR, WILDCAT CYN, BLO	0.64	43	1.28	0
WALNUTCK		LAKEMARY	0.5	34	1.41	0.1
SANTA CLARA	>	PINE VALLEY, NR	1.1	20	2.5	0.44
VIRGIN	>	VIRGIN	23	36	34	16.6
	>	HURRICANE, NR	21	30	35	13.8
	>	LITTLEFIELD	17	23	36	14.1
GILA		GILA, NR	14.4	83	22	8.6
		VIRDEN, NR, BLUE CK, BLO	17	71	35	6.7
		SOLOMON, NR, HEAD OF SAFFORD V	30	71	65	16.6
		SAN CARLOS RES, COOLIDGE DAM,	7.5	49	28	0.8
SAN FRANCISCO		GLENWOOD, NR	5.7	73	11.1	2.4
		CLIFION	13.4	72	30	6.3
SANPEDRO		CHARLESTON	0.94	80	1.31	0.57
SALT		ROOSEVELT, NR	37	26	63	20
TONTOCK		ROOSEVELT, NR, GUN CK, ABV	1.4	17	3.9	0.42
VERDE		BLO TANGLE CK, ABV HORSEHOE DA	20	45	35	15.8
COLORADO	>	LAKE POWELL, GLEN CYN DAM, AT	4000	50		

<sup>◆ =</sup> April-June forecast period.

#### Special Notes:

Lake Powell, Virgin and Santa Clara River forecasts use a 30 year percent of average (1971-2000).

<sup>&</sup>gt; = April-July forecast period.

## FEBRUARY 2007 END OF MONTH RESERVOIR CONTENTS

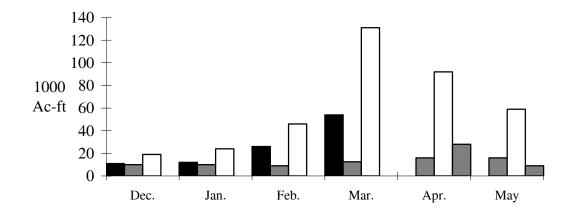
RESERVOIR	Usable	EOM Usable	Percent Usable
(vol. in 1000 ac-ft)	Capacity	Contents	Capacity (%)
Roosevelt	1653.0	1023.0	62%
Horse Mesa	245.0	223.0	91%
Mormon Flat	58.0	55.0	95%
Stewart Mountain	70.0	66.0	94%
Horseshoe	109.2	0.0	0%
Bartlett	178.0	75.0	42%
Total SRP Reservoirs	2313.2	1442.0	62%
San Carlos	867.0	279.0	32%
Waddell	1145.0	766.0	67%
Painted Rock	2476.0	0.0	0%
Alamo	1045.0	130.0	12%
Lyman	31.0	8.3	27%
Lake Powell	24322.0	11580.0	48%
Mead	27380.0	14021.0	51%
Mohave	1810.0	1649.0	91%
Havasu	619.0	563.0	91%

NA = Not Available.

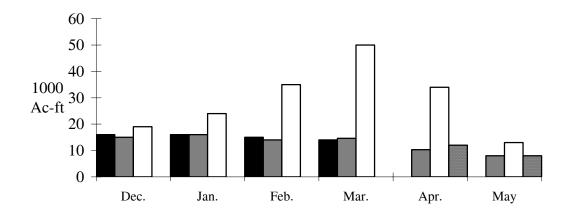
## Monthly Streamflows

■ 2007 Water Year ■ 2006 Water Year □ 30 Year Median ■ 2007 Forecast

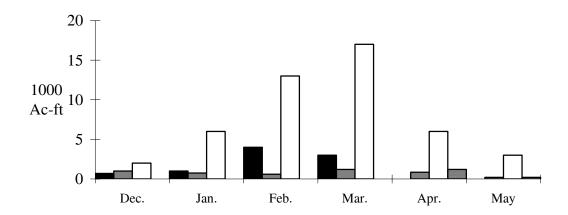
#### Salt - Roosevelt:

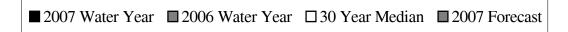


Verde - Horseshoe Dam, abv, Tangle Ck, blo:

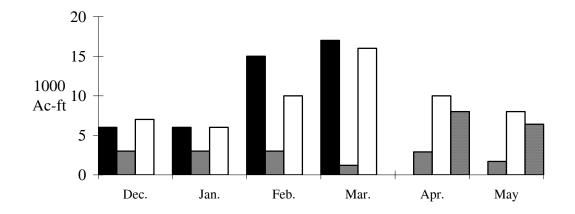


Tonto Ck - Roosevelt, nr, Gun Ck, abv:

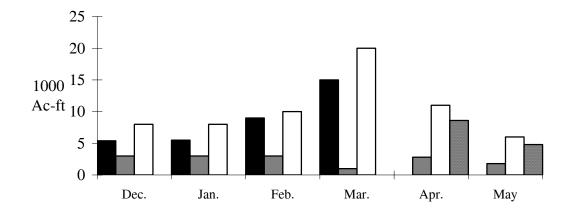




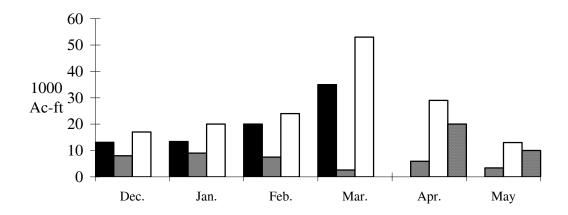
#### Gila - Gila, nr:



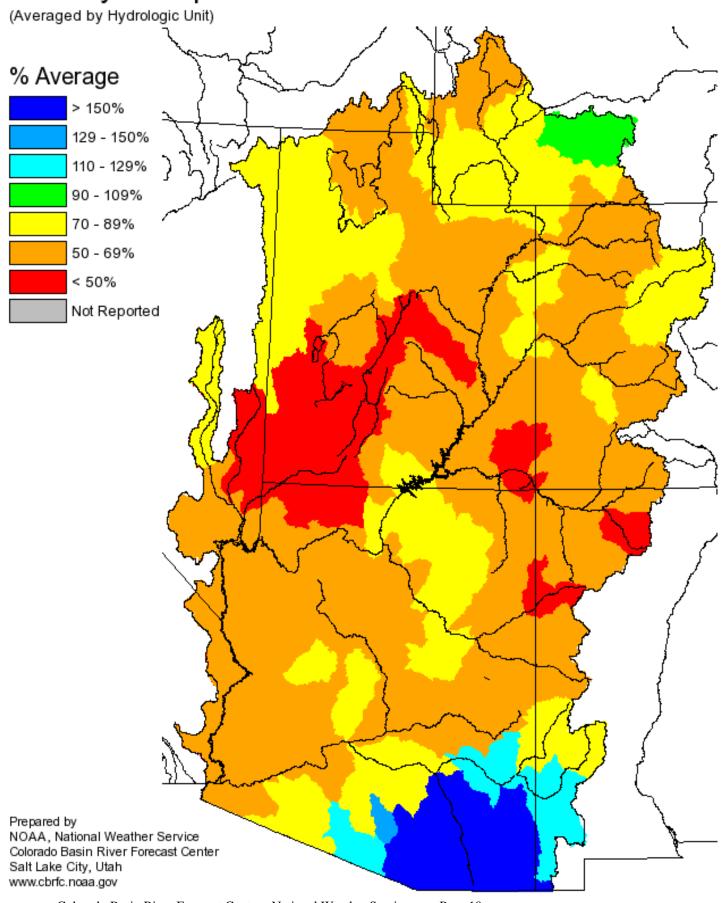
#### San Francisco - Clifton:



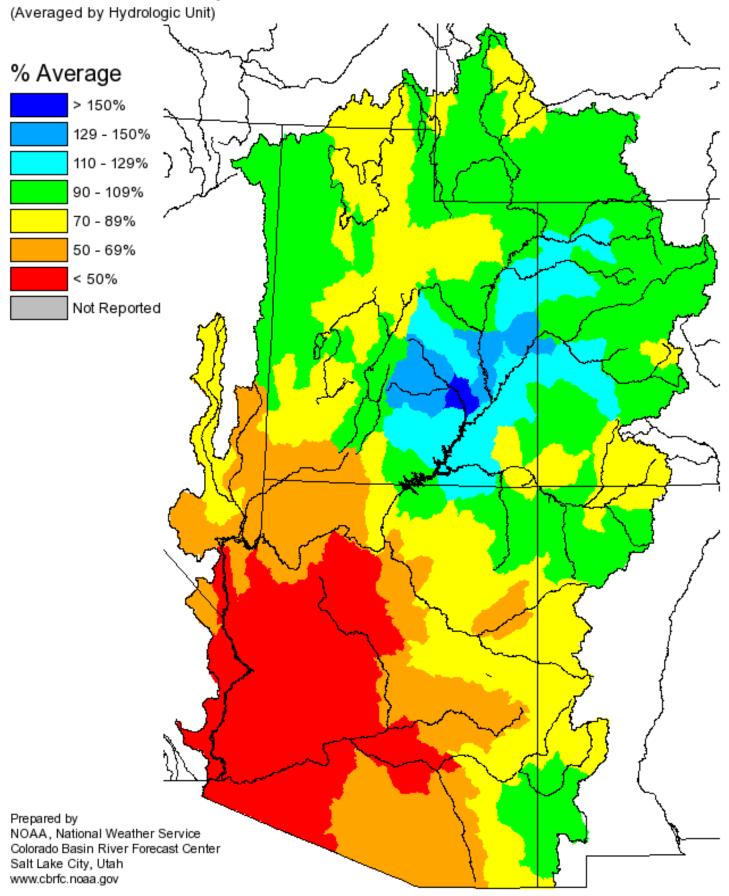
Gila - Solomon:



# Monthly Precipitation for March 2007



# Seasonal Precipitation, October 2006 - March 2007



#### **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 April 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, Salt River Project, 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 Median Above Median Near Median Below Median Much below Median Greater than 130% 111-130% 90-110% 70-89% Less than 70%

Forecast Period: Variable. Current month through May 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

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