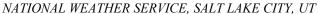


# WATER SUPPLY OUTLOOK

### for the

## LOWER COLORADO

COLORADO BASIN RIVER FORECAST CENTER



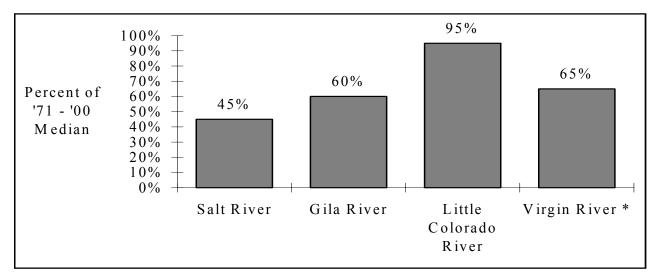


### January 1, 2002

#### SUMMARY

The forecast runoff volumes for January through May are much below median in the Salt and Gila River Basins. The forecast volumes for April through July are much below average in the Virgin River Basin. Within the Little Colorado River Basin, January through May forecast runoff volumes vary from much above median in the east to much below median in the west.

### JANUARY - MAY VOLUME FORECASTS



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Little Colorado River	4
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\* Virgin River Basin forecasts are for the April through July period and expressed in percent of average.

# SALT RIVER

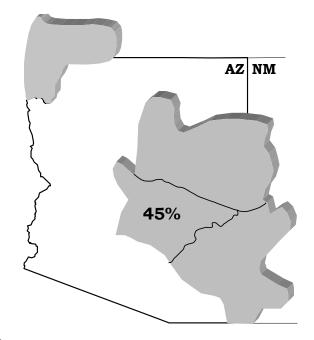
The 2002 Water Year in the Salt and Verde watersheds has been dry. The forecast streamflows are all much below median.

January-May streamflow forecasts for the Salt River are as follows:

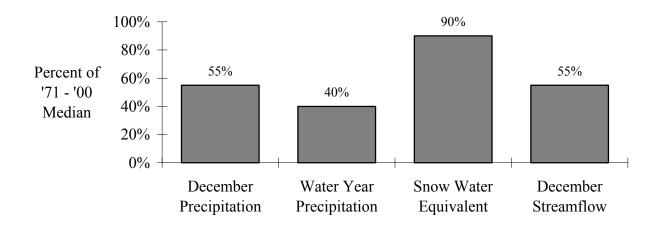
Verde River: Much Below Median

Tonto Creek: Much Below Median

Salt River: Much Below Median



# Basin Conditions - January 1, 2002



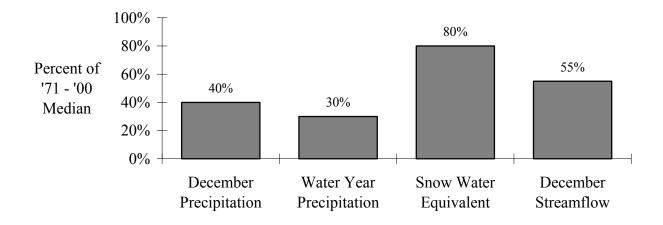
### GILA RIVER

The 2002 Water Year in the Gila watershed has been dry. The forecast streamflows are all much below median.

January-May streamflow forecasts for the Gila River are as follows:



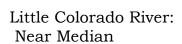
## Basin Conditions - January 1, 2002

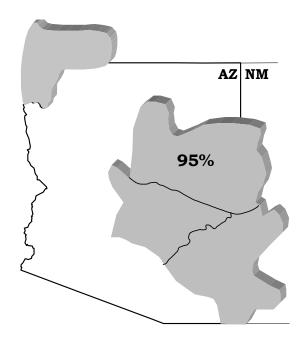


#### LITTLE COLORADO RIVER

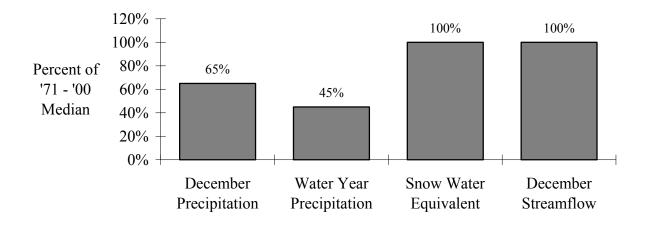
The snow pack within the Little Colorado watershed varies greatly. In general, the snow pack is greatest in the eastern part of the basin which lies within New Mexico. Forecast runoff ranges from 58% to 169% of median.

January-May streamflow forecasts for the Little Colorado River are as follows:





# Basin Conditions - January 1, 2002

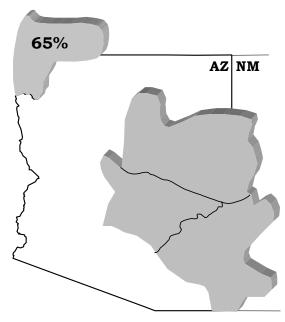


### VIRGIN RIVER

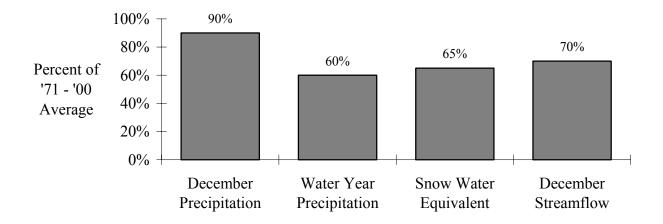
With the Virgin River watershed, snow pack is below average and new snow is not in the immediate forecast. Therefore, streamflow forecasts for April-July are for much below average.

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





# Basin Conditions - January 1, 2002



# Specific Site Forecasts—Water Year 2002

January 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	5	68	12.7	1.3
	WOODRUFF	3	83	8.5	1.2
RIO NUTRIA	RAMAH, NR	4	129	12.6	1.6
ZUNI	BLACK ROCK RES, ABV	2.5	169	4.1	1.4
CEBOLLA CK	RAMAH RES	2	117	7.3	0.9
EAST CLEAR CK	BLUE RIDGE RES, PINE, NR	12.5	73	27	3.7
CLEAR CK	WINSLOW, NR	26	76	84	3
CHEVELON CK	WINSLOW, NR, WILDCAT CYN, BLO	3	75	32	0.5
WALNUT CK	LAKE MARY	2.9	58	5.2	1.4
SANTA CLARA	≯ PINE VALLEY, NR	3.8	69	9.2	1.6
VIRGIN	× VIRGIN	46	72	100	18.5
	> HURRICANE, NR	46	67	83	23
		40	54	76	21
GILA	GILA, NR	39	65	70	19.1
	VIRDEN, NR, BLUE CK, BLO	50	60	109	14.4
	SOLOMON, NR, HEAD OF SAFFORD V	90	55	240	35
	SAN CARLOS RES, COOLIDGE DAM,	72	50	178	30
SAN FRANCISCO	GLENWOOD, NR	17.6	65	29	9.5
	CLIFTON	42	60	103	16.8
SAN PEDRO	CHARLESTON	3.2	82	6.5	2
SALT	ROOSEVELT, NR	200	52	450	66
TONTO CK	ROOSEVELT, NR, GUN CK, ABV	20	36	80	4.5
VERDE	HORSESHOE DAM, ABV, TANGLE CK,	115	52	285	57
COLORADO	LAKE POWELL, GLEN CYN DAM, AT	5200	66		

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

NA = Not Available.

#### Special Notes:

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

 $<sup>\</sup>nearrow$  = April-July forecast period.

# DECEMBER 2001 END OF MONTH RESERVOIR CONTENTS

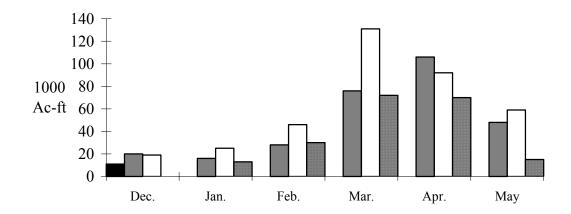
RESERVOIR	Usable	EOM Usable	Percent Usable
(vol. in 1000 ac-ft)	Capacity	Contents	Capacity (%)
Roosevelt	1653.0	392.0	24%
Horse Mesa	245.0	223.0	91%
Mormon Flat	58.0	54.0	93%
Stewart Mountain	70.0	62.0	89%
Horseshoe	131.0	1.5	1%
Bartlett	178.0	63.0	35%
Total SRP Reservoirs	2335.0	795.5	34%
San Carlos	867.0	NA	NA
Waddell	1145.0	573.0	50%
Painted Rock	2476.0	0.0	0%
Alamo	1045.0	97.0	9%
Lyman	31.0	5.0	16%
Lake Powell	24322.0	17995.0	74%
Mead	27380.0	19797.0	72%
Mohave	1810.0	1623.0	90%
Havasu	619.0	552.0	89%

NA = Not Available.

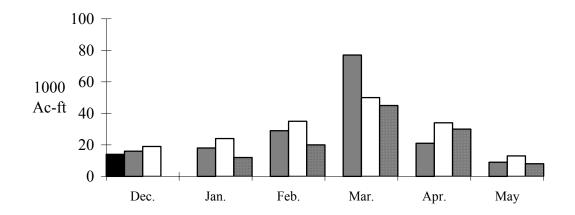
### Monthly Streamflows

■ 2002 Water Year ■ 2001 Water Year □ 30 Year Median ■ 2002 Forecast

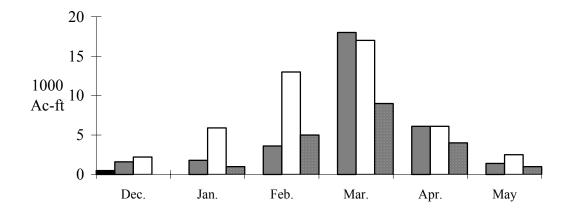
#### Salt - Roosevelt:

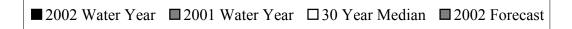


Verde - Horseshoe Dam, abv, Tangle Ck, blo:

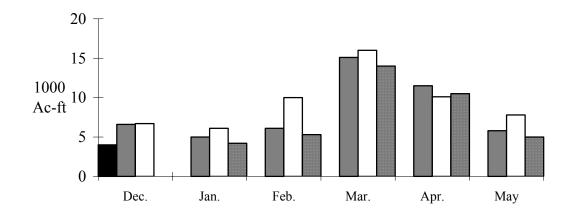


Tonto Ck - Roosevelt, nr, Gun Ck, abv:

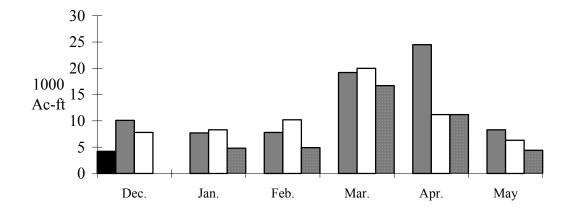




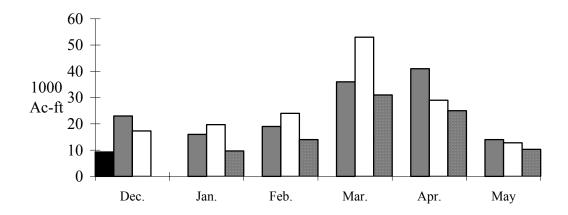
#### Gila - Gila, nr:



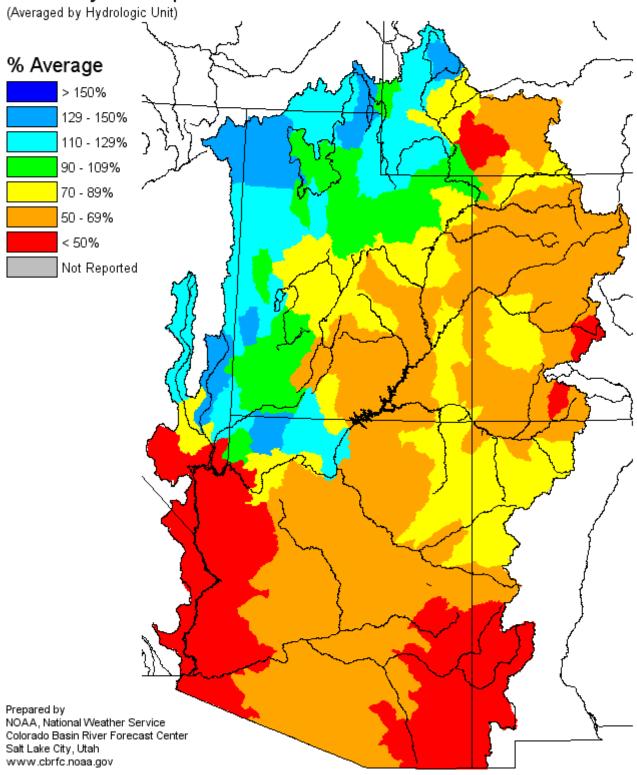
#### San Francisco - Clifton:



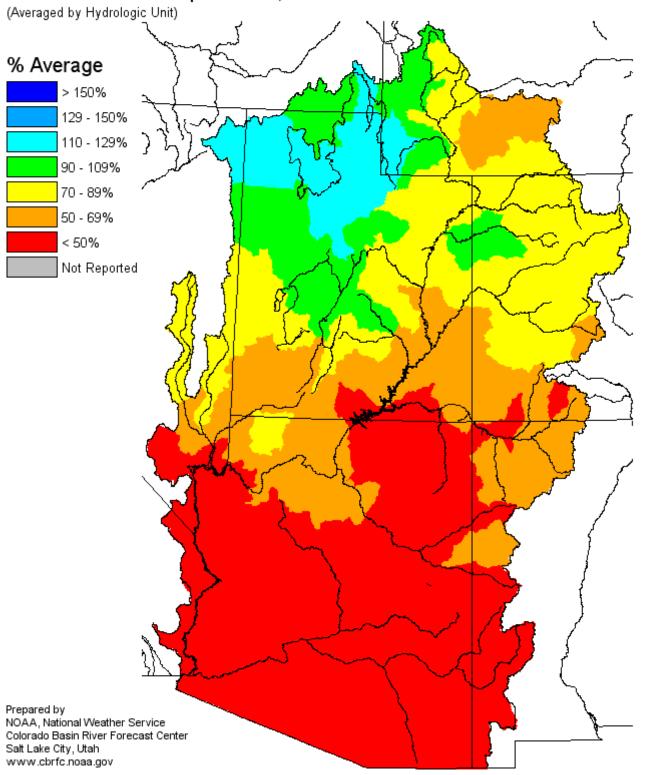
Gila - Solomon:



# Monthly Precipitation for December 2001



# Seasonal Precipitation, October 2001 - December 2001



#### 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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