

## WATER SUPPLY OUTLOOK

for the

## LOWER COLORADO

COLORADO BASIN RIVER FORECAST CENTER



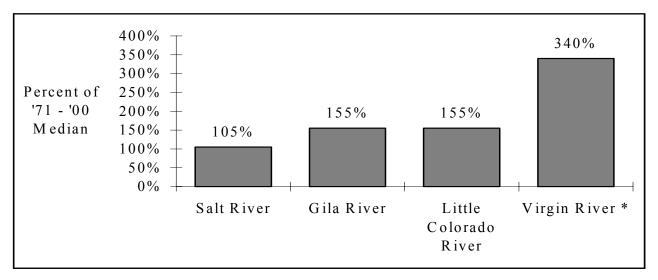


## **A**PRIL 1, 2005

## SUMMARY

The 2005 Lower Colorado Water Supply Outlook has been wet through March. Above normal temperatures are expected during April, May, and June. However, above normal precipitation is expected to continue only for the upper Gila and upper Little Colorado River basins. The Salt River forecast has dropped to above median from much above median; and the Tonto River and Verde River forecasts have dropped from much above median to near median.

### April - May Volume Forecasts

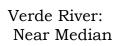


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\* Virgin River Basin forecasts are for the April through July period and expressed in percent of average.

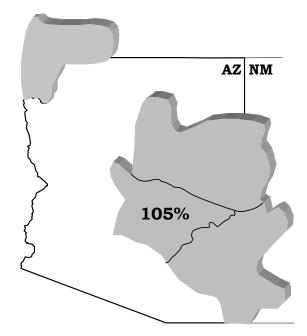
**SALT RIVER** The 2005 Water Year started a wet year in Arizona but is now returning to normal in the Salt River drainage. Above normal temperatures are expected during April, May and June. The snow pack is almost gone in the Verde River basin and the river has peaked.

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

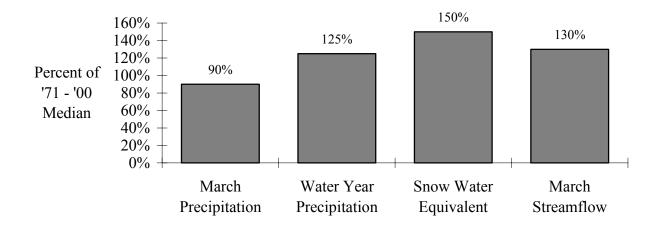


Tonto Creek: Near Median

Salt River: Above Median



## Basin Conditions - April 1, 2005

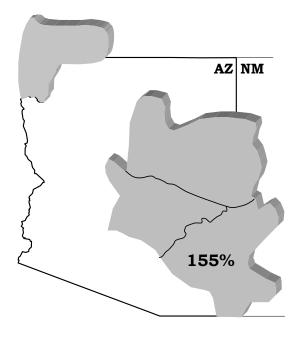


## GILA RIVER The 2005 Water Year continues to be wet in most of eastern Arizona and

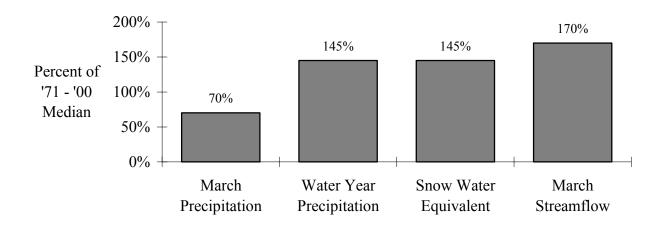
Southwest New Mexico. For the upper Gila River basin above normal temperature and above normal precipitation is expected during April, May, and June. Stream flows are high and are expected to continue being high through April then returning to near median in May.

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

Gila River: Much Above Median

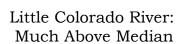


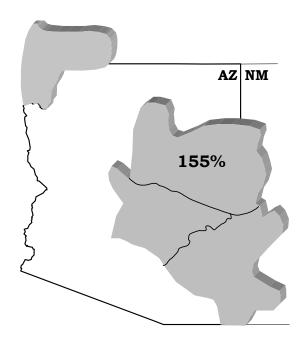
## Basin Conditions - April 1, 2005



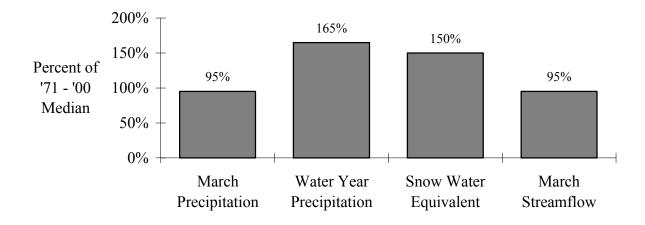
# **LITTLE COLORADO RIVER** The 2005 Water Year continues to be wet with a pocket of dry persisting at the northeastern edge of this basin. For the southern basin above normal temperatures and precipitation are expected during April, May, and June. Stream flow forecasts range from much above median in the south to much below median in the north.

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



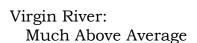


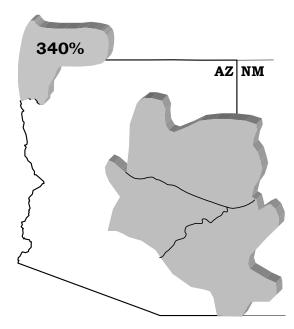
## Basin Conditions - April 1, 2005



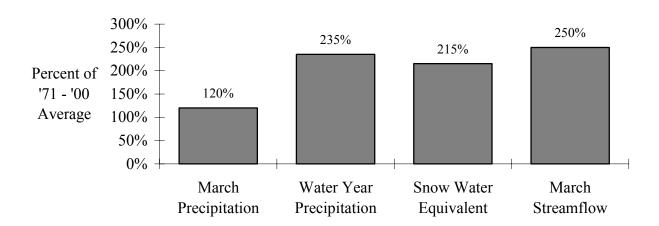
**VIRGIN RIVER** Snow is 215% of average for the Virgin River Basin on April 1st and the snow appears to be at or near peak for the season. Above normal temperatures are expected during April, May, and June. The 2005 April-July runoff season for the upper Virgin River basin is expected to be a record setting year.

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





## Basin Conditions - April 1, 2005



## Specific Site Forecasts—Water Year 2005

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	11	256	20	5.5
		WOODRUFF	2.2	262	3.9	1.08
RIONUTRIA		RAMAH, NR	0.5	96	1.5	0.1
ZUNI		BLACK ROCK RES, ABV	0.44	69	1.7	0.01
CEBOLLA CK		RAMAH RES	0.2	69	1.2	0.08
EAST CLEAR CK		BLUE RIDGE RES, PINE, NR	6	122	10	3
CLEAR CK		WINSLOW, NR	24	120	41	12.2
CHEVELON CK		WINSLOW, NR, WILDCAT CYN, BLO	4.5	304	7.5	1.5
WALNUT CK		LAKE MARY	1.78	122	2.8	0.74
SANTA CLARA	×	PINE VALLEY, NR	19	345	29	9
VIRGIN	×	VIRGIN	195	305	260	150
	×	HURRICANE, NR	230	333	305	170
	×	LITTLEFIELD	260	351	355	180
GILA		GILA, NR	30	173	55	18
		VIRDEN, NR, BLUE CK, BLO	35	146	56	20
		SOLOMON, NR, HEAD OF SAFFORD V	50	119	86	25
		CALVA	35	135	60	9
		SAN CARLOS RES, COOLIDGE DAM,	35	227	60	9
SAN FRANCISCO		GLENWOOD, NR	14	179	26	6
		CLIFTON	27	146	47	14
SAN PEDRO		CHARLESTON	1.2	103	1.57	0.83
SALT		ROOSEVELT, NR	175	122	350	91
TONTO CK		ROOSEVELT, NR, GUN CK, ABV	8	95	13	4
VERDE		BLO TANGLE CK, ABV HORSEHOE DA	45	102	85	20
COLORADO	×	LAKE POWELL, GLEN CYN DAM, AT	8500	107		

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

#### Special Notes:

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

## MARCH 2005 END OF MONTH RESERVOIR CONTENTS

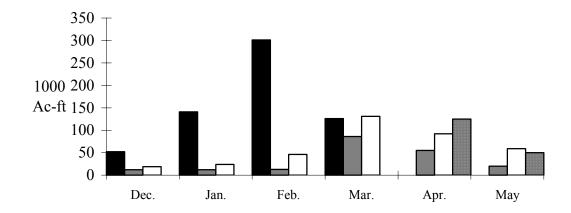
RESERVOIR	Usable	EOM Usable	Percent Usable
(vol. in 1000 ac-ft)	Capacity	Contents	Capacity (%)
Roosevelt	1653.0	1526.0	92%
Horse Mesa	245.0	241.0	98%
Mormon Flat	58.0	55.0	95%
Stewart Mountain	70.0	65.0	93%
Horseshoe	109.2	108.0	99%
Bartlett	178.0	177.0	99%
Total SRP Reservoirs	2313.2	2172.0	94%
San Carlos	867.0	438.0	51%
Waddell	1145.0	812.0	71%
Painted Rock	2476.0	221.0	9%
Alamo	1045.0	205.0	20%
Lyman	31.0	6.6	21%
Lake Powell	24322.0	8023.0	33%
Mead	27380.0	16221.0	59%
Mohave	1810.0	1691.0	93%
Havasu	619.0	551.0	89%

NA = Not Available.

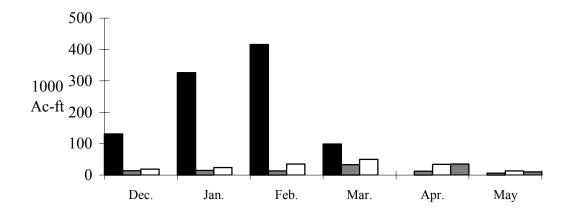
## Monthly Streamflows

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

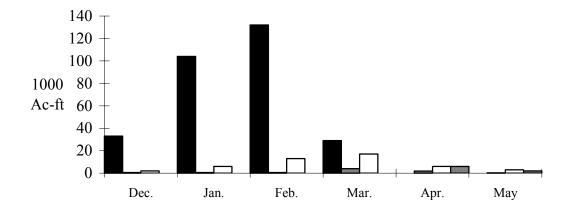
#### Salt - Roosevelt:

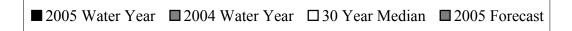


Verde - Horseshoe Dam, abv, Tangle Ck, blo:

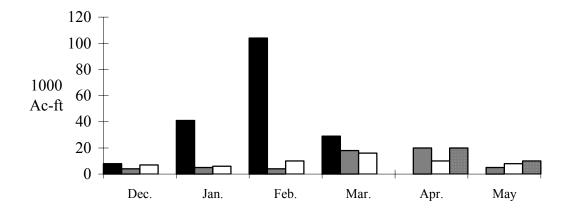


Tonto Ck - Roosevelt, nr, Gun Ck, abv:

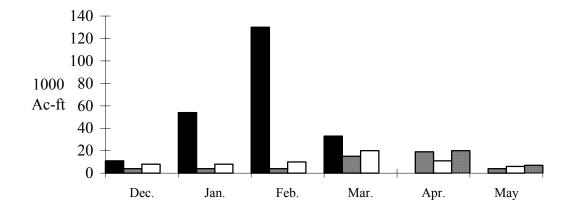




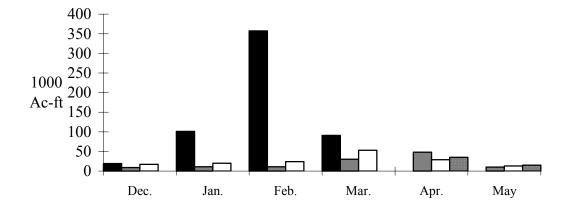
#### Gila - Gila, nr:



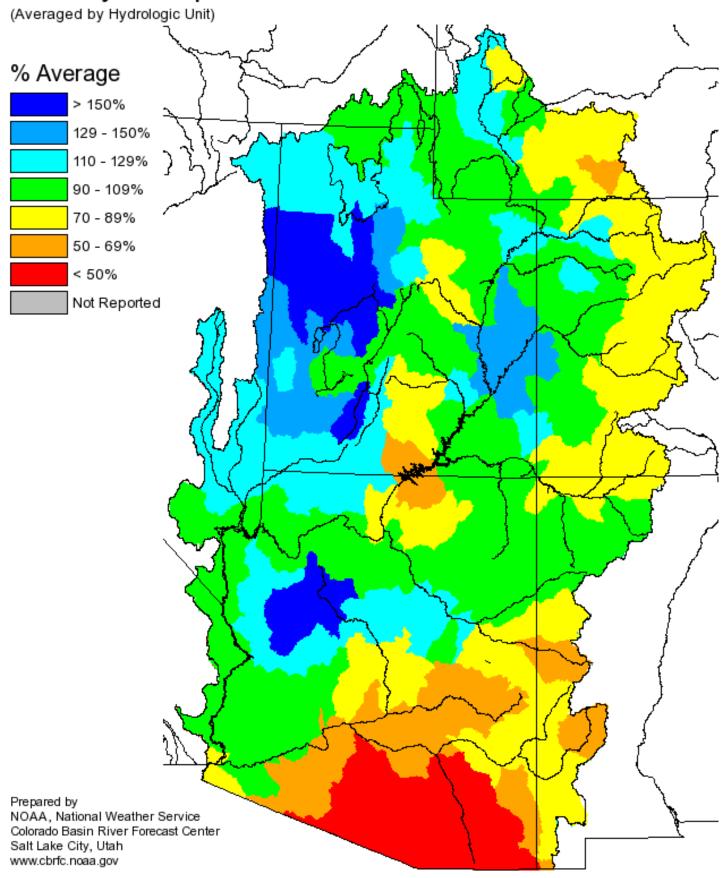
#### San Francisco - Clifton:



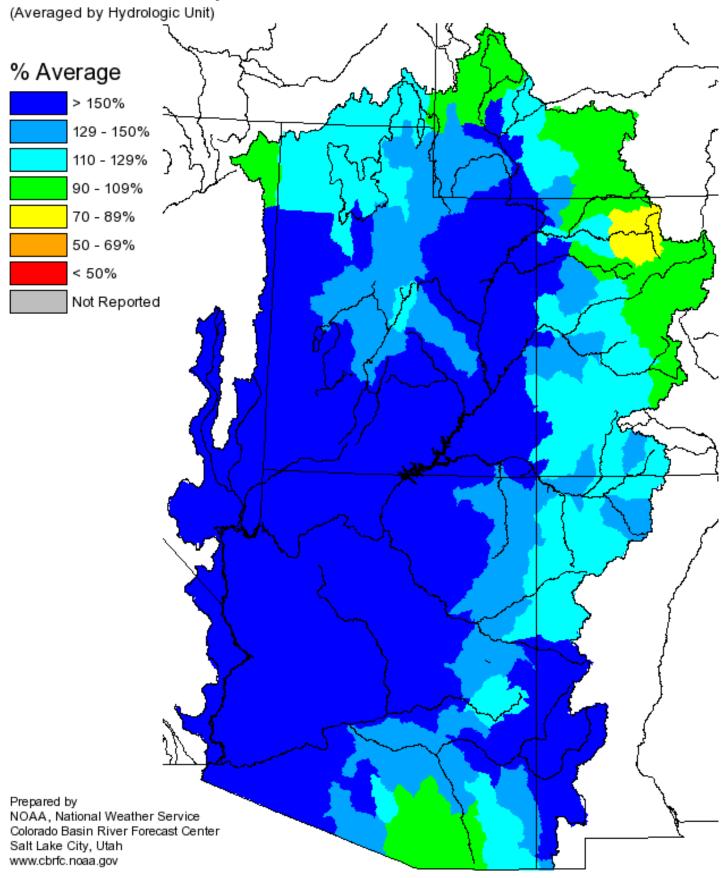
#### Gila - Solomon:



# Monthly Precipitation for March 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 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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