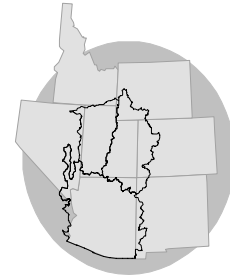


WATER SUPPLY OUTLOOK

for the LOWER COLORADO COLORADO BASIN RIVER FORECAST CENTER

NATIONAL WEATHER SERVICE, SALT LAKE CITY, UT

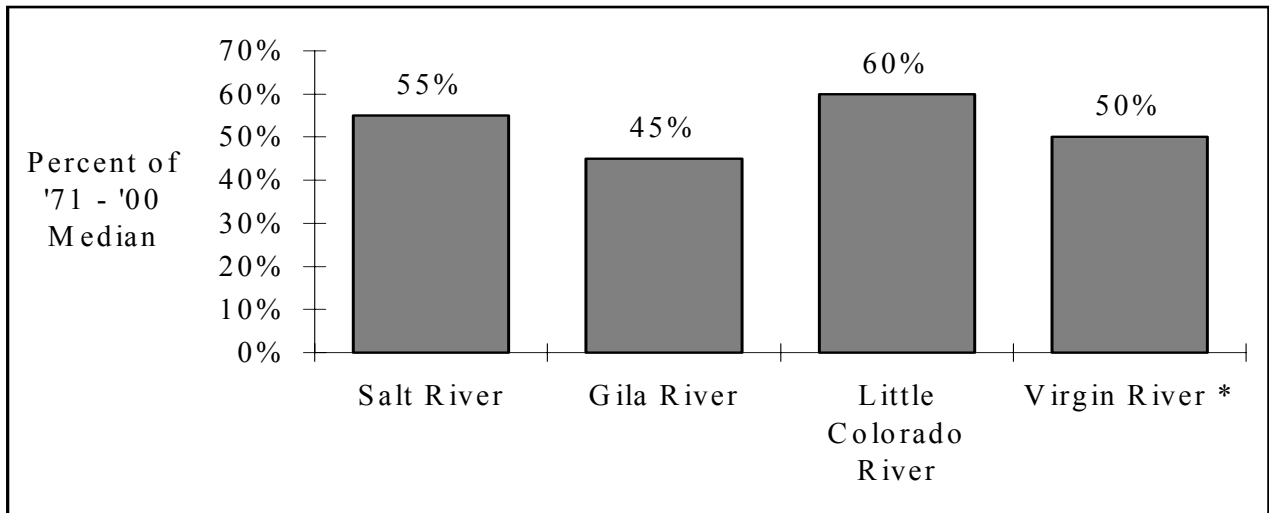


FEBRUARY 1, 2003

SUMMARY

The forecast runoff volumes for February through May are significantly lower than last month's forecasts. In general, the Lower Colorado Watershed is forecasted to receive much below median flows. A weakening in El Nino conditions, and a basinwide drop in snowpack, has caused an adjustment downward in all forecasts. However, it is anticipated that the area will receive some much needed precipitation in the coming months.

FEBRUARY - MAY VOLUME FORECASTS



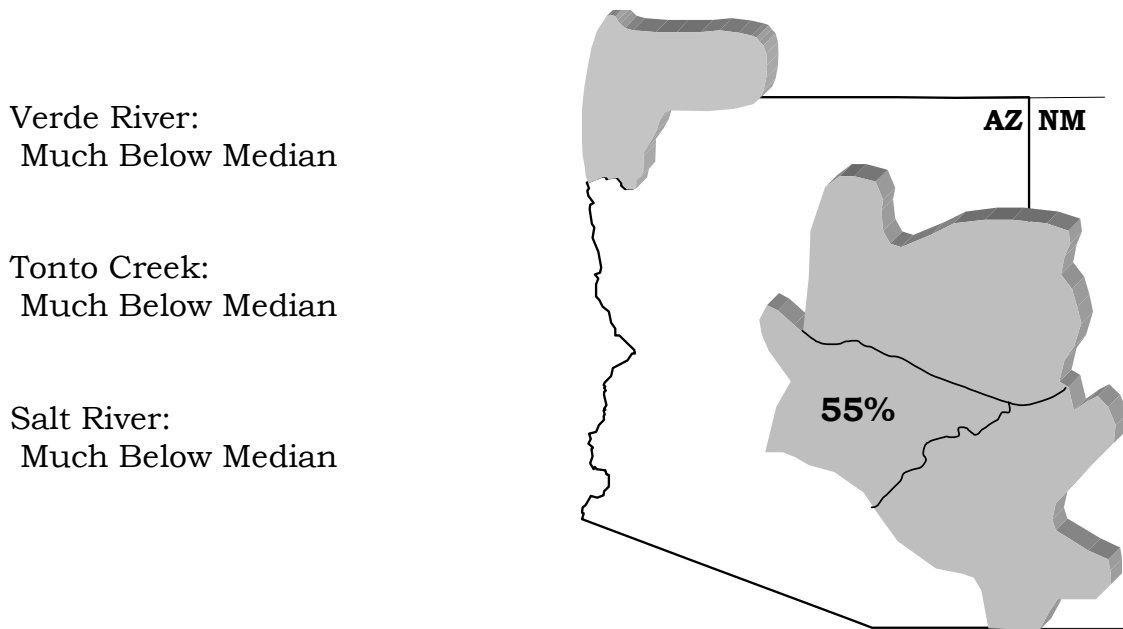
INSIDE	
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* Virgin River Basin forecasts are for the April through July period and expressed in percent of average.

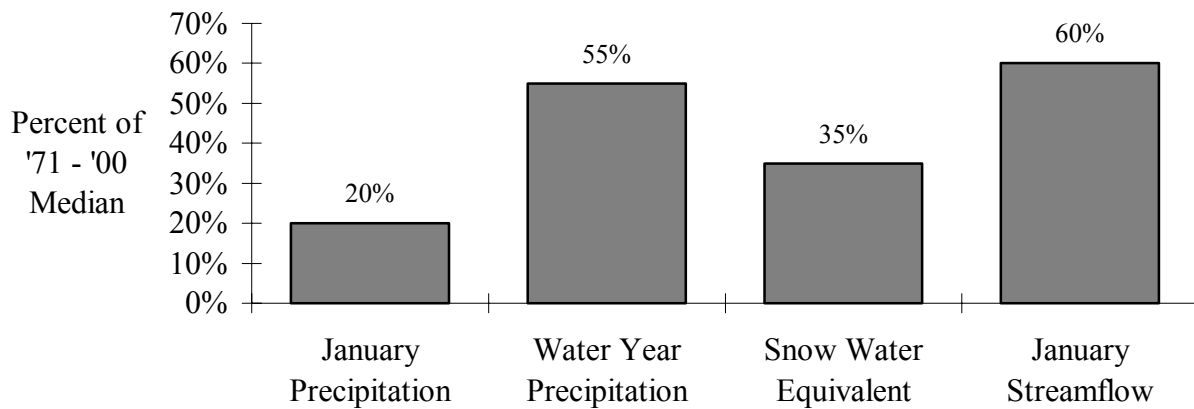
SALT RIVER

The 2003 Water Year is now forecasted to be only slightly wetter than the 2002 Water Year. The overall snow coverage has dropped from above median in January to much below median in February. The remaining runoff season is forecasted to be much below median.

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



BASIN CONDITIONS - FEBRUARY 1, 2003



Specific site forecasts are listed on page 6.

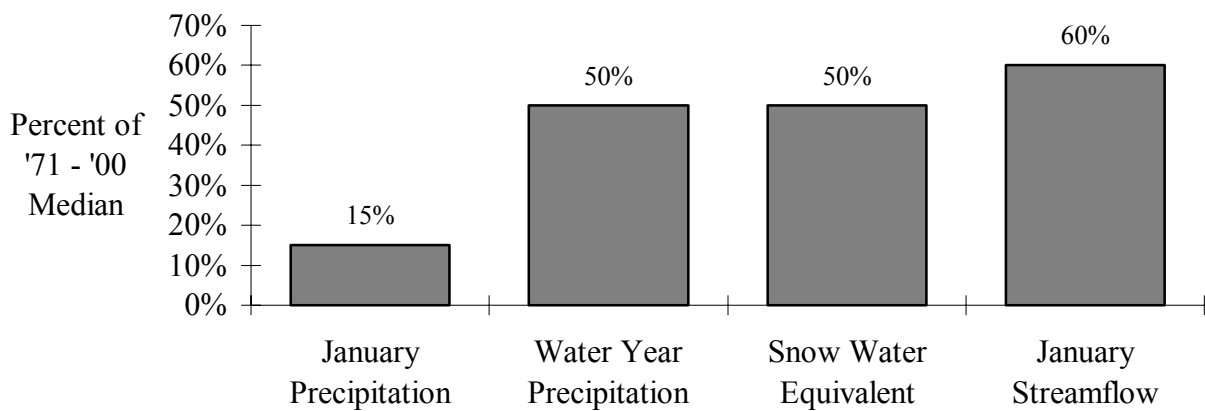
GILA RIVER

The 2003 Water Year in the Gila watershed began dry, improved in December, but is now dry again. The forecasted stream flows are now all much below median, with the exception of the San Pedro. The San Pedro is forecasted at 86% of median.

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



BASIN CONDITIONS - FEBRUARY 1, 2003

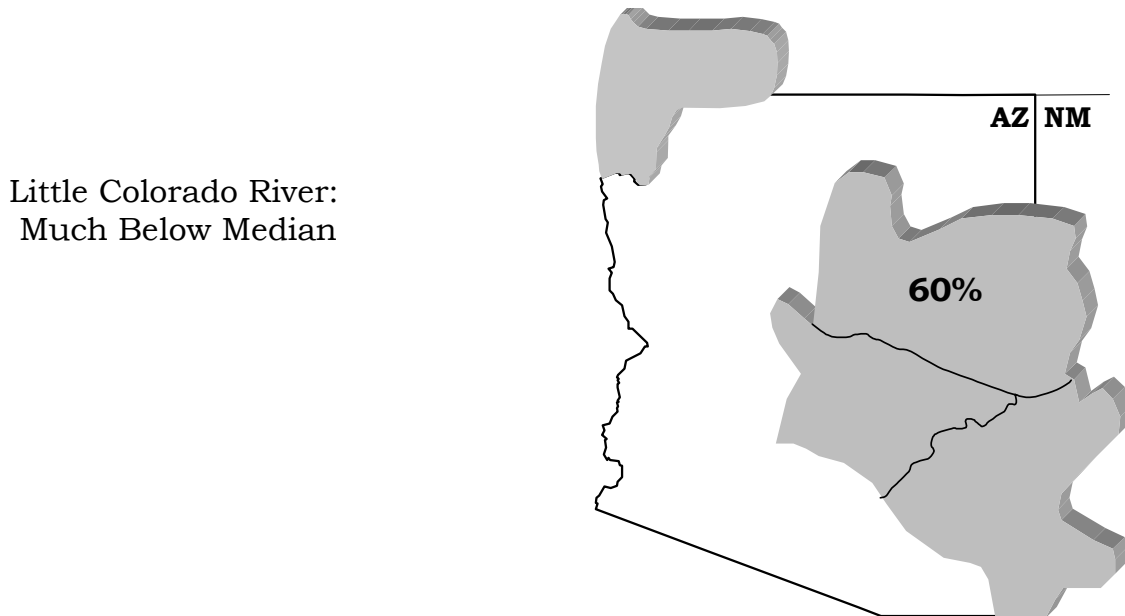


Specific site forecasts are listed on page 6.

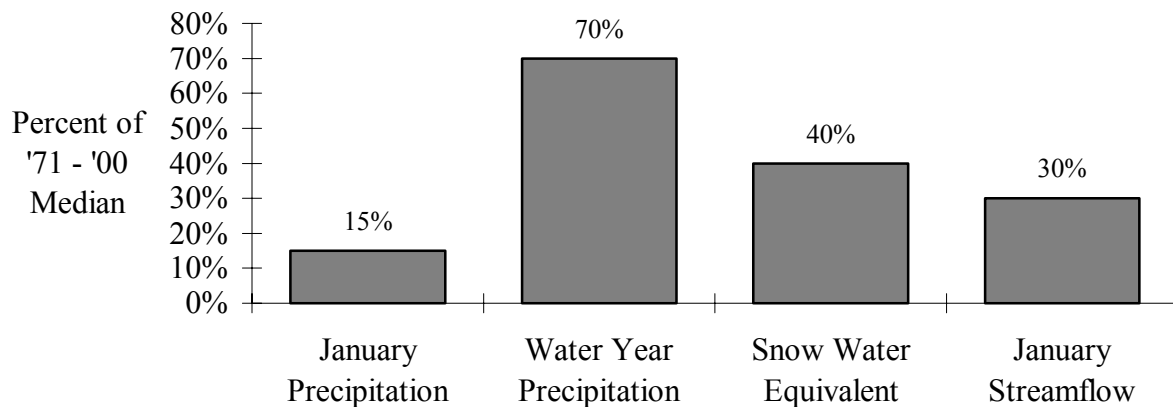
LITTLE COLORADO RIVER

The snowpack within the Little Colorado watershed dropped from above median to much below. Forecasted runoff now ranges from 37% to 61% of median.

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



BASIN CONDITIONS - FEBRUARY 1, 2003

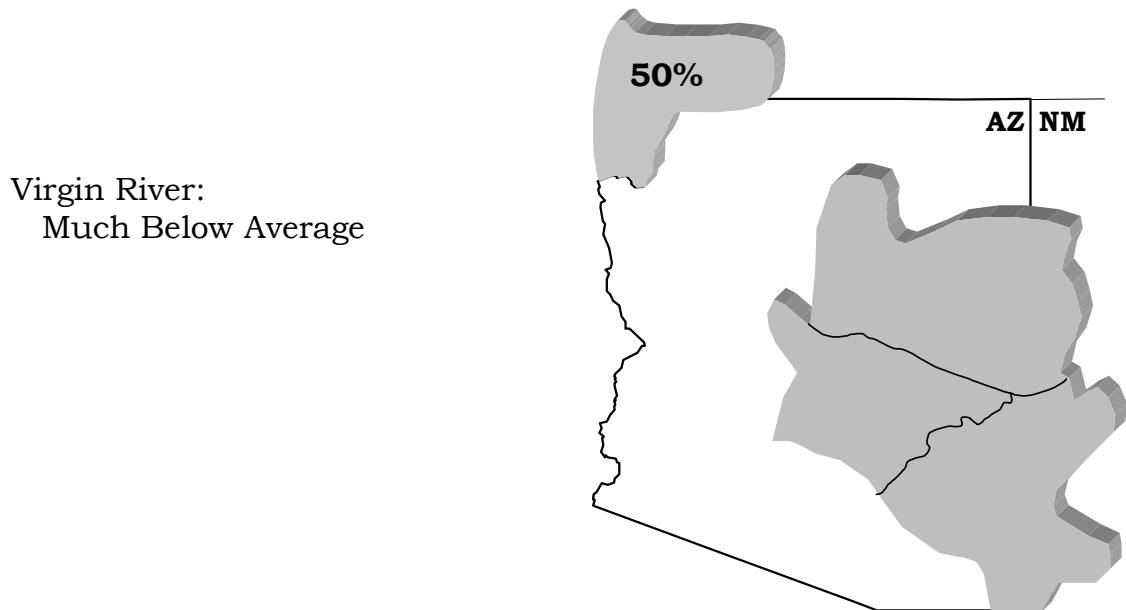


Specific site forecasts are listed on page 6.

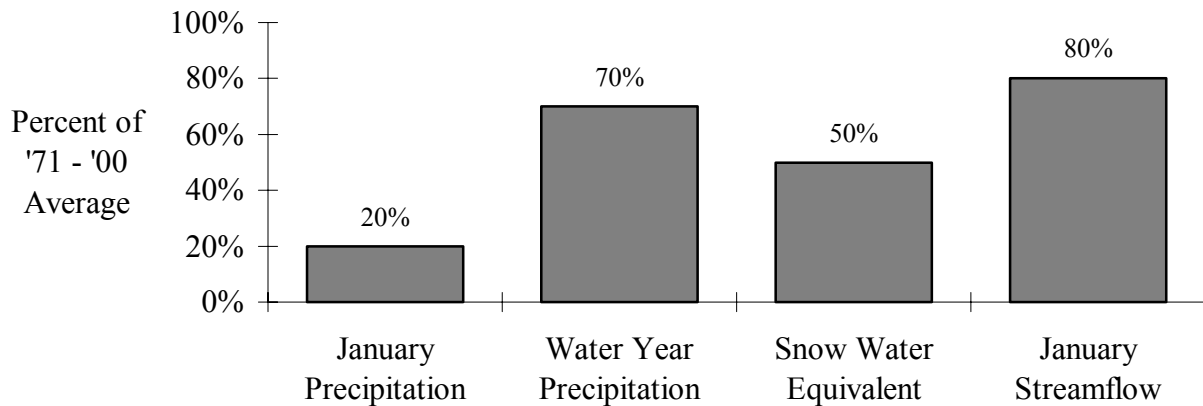
VIRGIN RIVER

The forecast is for much below average runoff; however, this is still a vast improvement over the almost nonexistent flows of last year. Snow coverage is still much below average and little change is expected in the upcoming months.

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



BASIN CONDITIONS - FEBRUARY 1, 2003



Specific site forecasts are listed on page 6.

SPECIFIC SITE FORECASTS—WATER YEAR 2003

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

Stream	Station	Most Probable	Percent Med.	Reas. Max	Reas. Min
LITTLE COLORADO	◆ LYMAN LK, ABV, ST. JOHNS, NR	4.3	61	11.6	0.97
	WOODRUFF	1.71	61	5.9	0.08
RIO NUTRIA	RAMAH, NR	1.8	60	8.2	0.07
ZUNI	BLACK ROCK RES, ABV	0.81	60	1.72	0.3
CEBOLLA CK	RAMAH RES	1	60	5.5	0.12
EAST CLEAR CK	BLUE RIDGE RES, PINE, NR	6	37	15.1	1
CLEAR CK	WINSLOW, NR	16.3	48	61	0.45
CHEVELON CK	WINSLOW, NR, WILDCAT CYN, BLO	2	50	19.4	0.01
WALNUT CK	LAKE MARY	2	42	5	0.54
SANTA CLARA	✧ PINE VALLEY, NR	2.6	47	6.5	0.47
VIRGIN	✧ VIRGIN	34	53	58	16.2
	✧ HURRICANE, NR	31	45	53	17
	✧ LITTLEFIELD	27	36	49	4.9
GILA	GILA, NR	30	57	51	15.5
	VIRDEN, NR, BLUE CK, BLO	32	43	86	8.3
	SOLOMON, NR, HEAD OF SAFFORD V	62	43	199	19
	CALVA	37	43	194	4
SAN FRANCISCO	SAN CARLOS RES, COOLIDGE DAM,	45	43	148	17.6
	GLENWOOD, NR	12	50	22	5.7
	CLIFTON	30	51	86	5.2
SAN PEDRO	CHARLESTON	2.5	86	5.5	1.6
SALT	ROOSEVELT, NR	195	55	405	73
TONTO CK	ROOSEVELT, NR, GUN CK, ABV	30	60	98	4.1
VERDE	HORSESHOE DAM, ABV, TANGLE CK,	110	55	230	41
COLORADO	✧ LAKE POWELL, GLEN CYN DAM, AT	4600	58		

◆ = February-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).

January 2003 END OF MONTH RESERVOIR CONTENTS

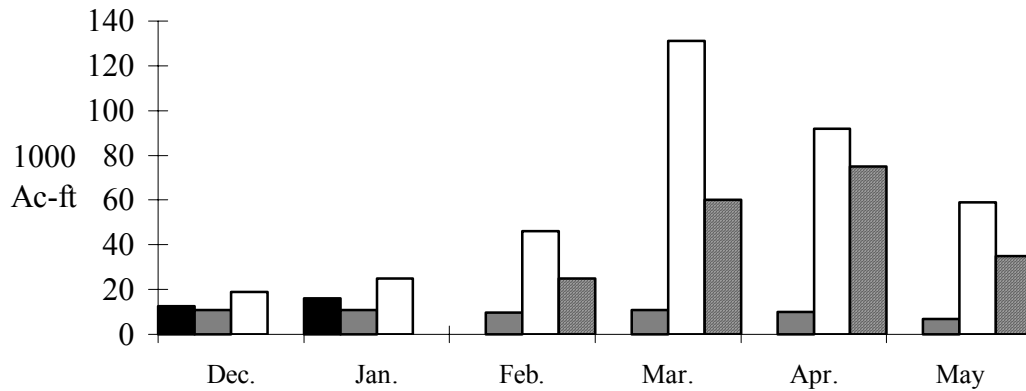
RESERVOIR (vol. in 1000 ac-ft)	Usable Capacity	EOM Usable Contents	Percent Usable Capacity (%)
Roosevelt	1653.0	224.0	14%
Horse Mesa	245.0	214.0	87%
Mormon Flat	58.0	55.0	95%
Stewart Mountain	70.0	65.0	93%
Horseshoe	109.2	0.0	0%
Bartlett	178.0	62.0	35%
Total SRP Reservoirs	2313.2	620.0	27%
San Carlos	867.0	NA	NA
Waddell	1145.0	498.0	43%
Painted Rock	2476.0	0.0	0%
Alamo	1045.0	71.0	7%
Lyman	31.0	2.0	6%
Lake Powell	24322.0	13269.0	55%
Mead	27380.0	16855.0	62%
Mohave	1810.0	1706.0	94%
Havasu	619.0	534.0	86%

NA = Not Available.

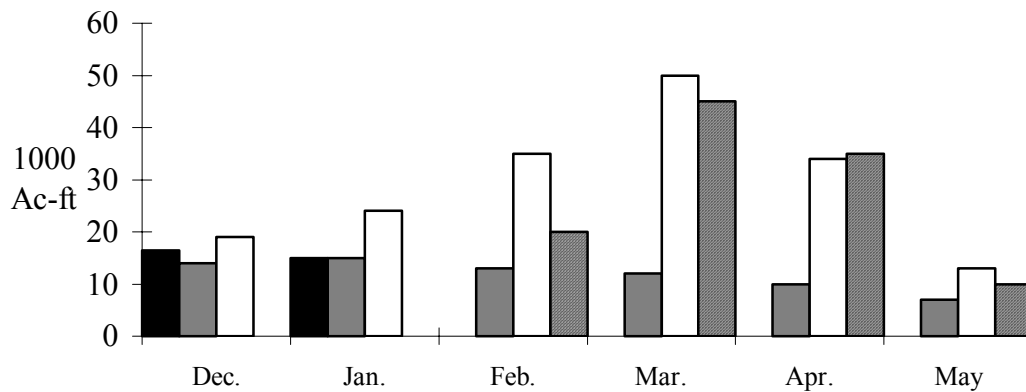
MONTHLY STREAMFLOWS



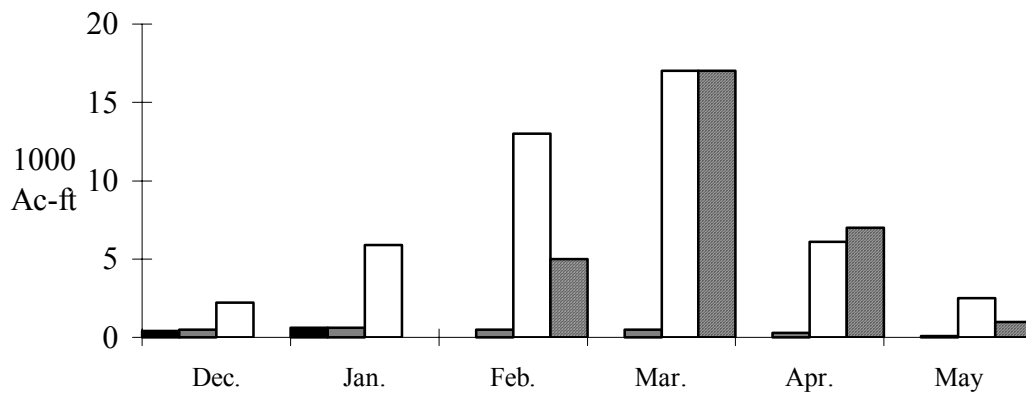
Salt - Roosevelt:



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

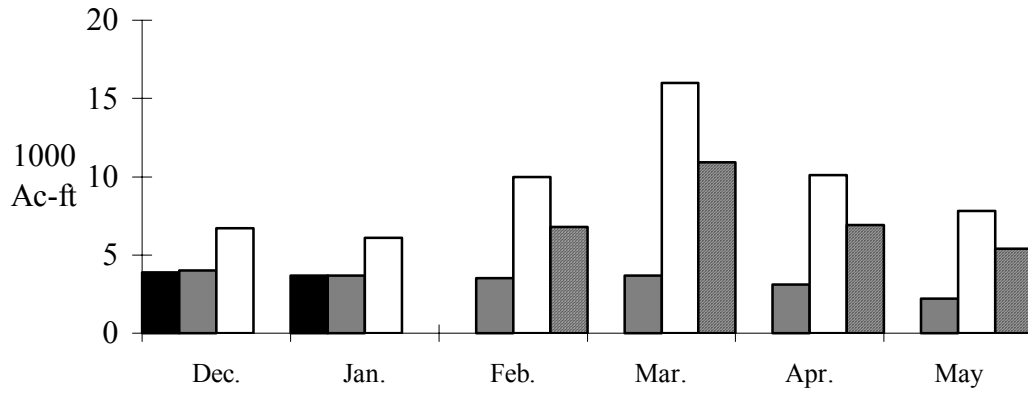


Tonto Ck - Roosevelt, nr, Gun Ck, abv:

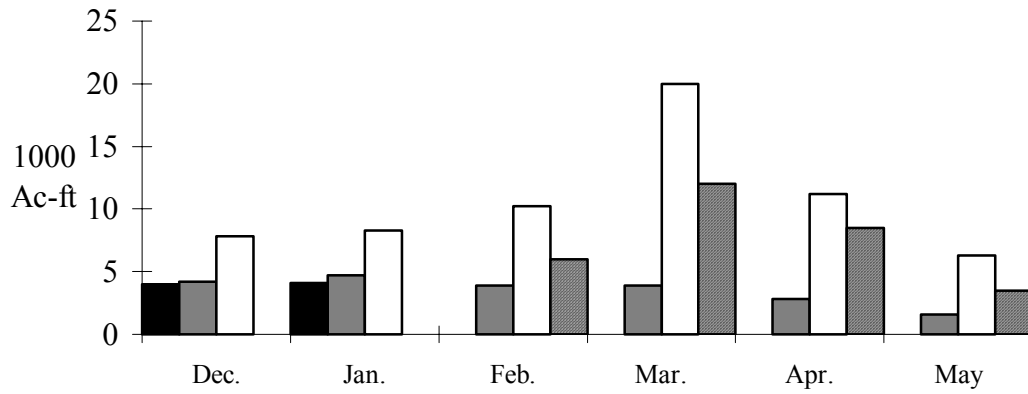




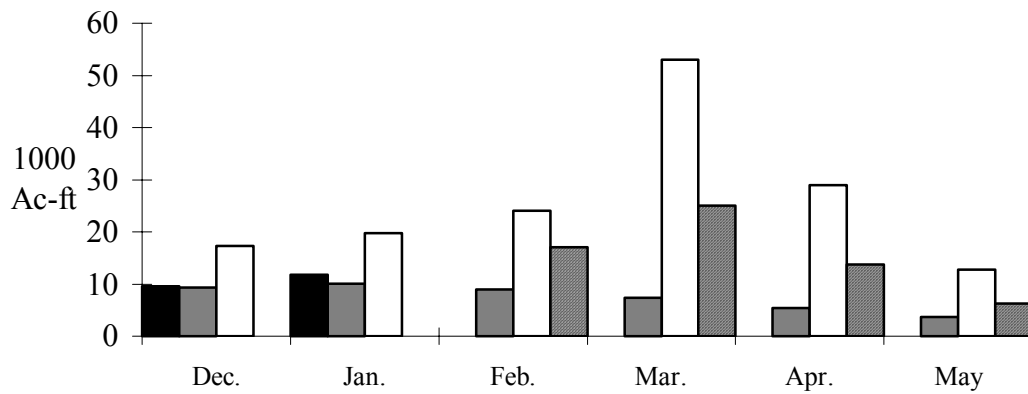
Gila - Gila, nr:



San Francisco - Clifton:



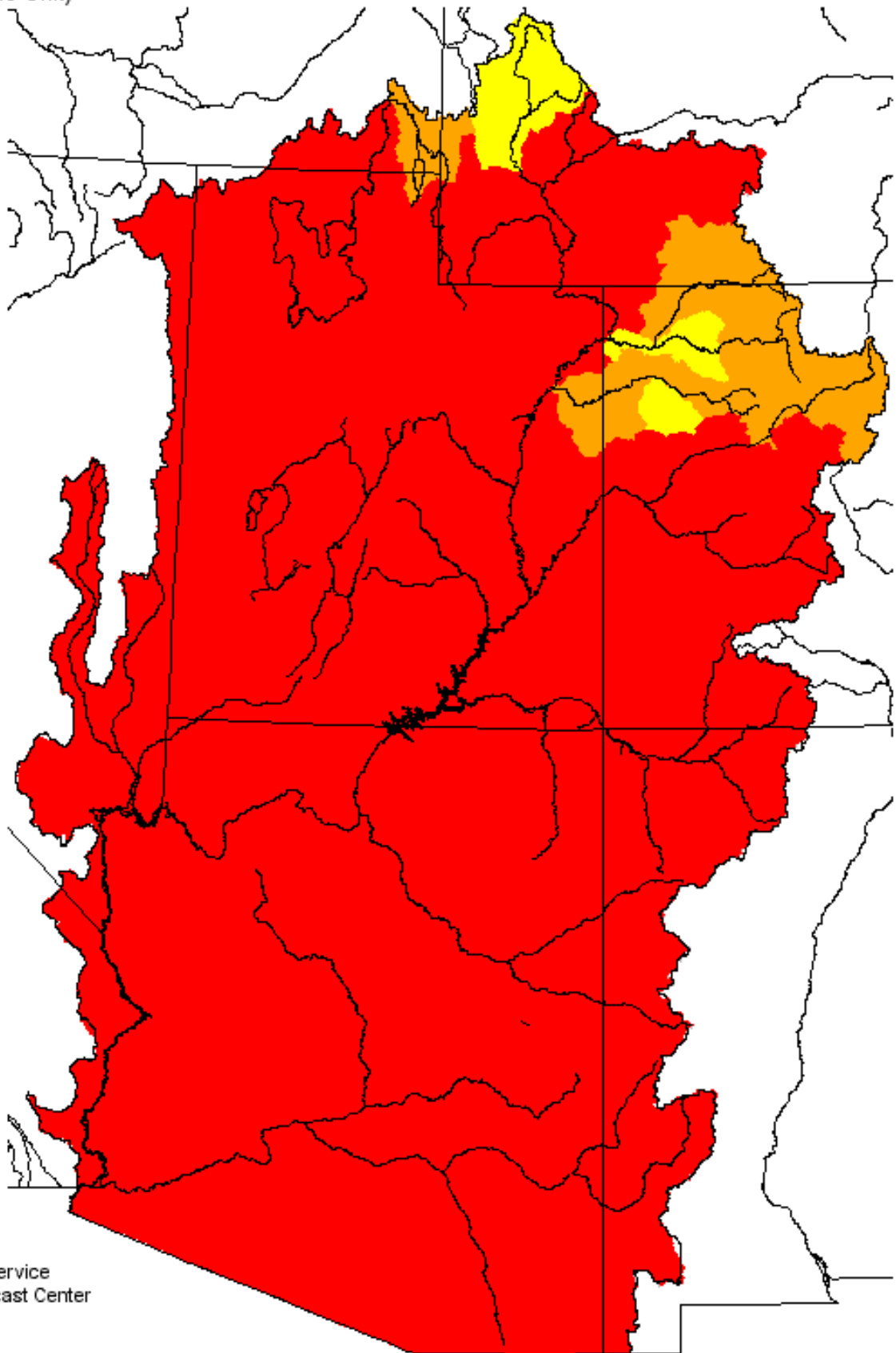
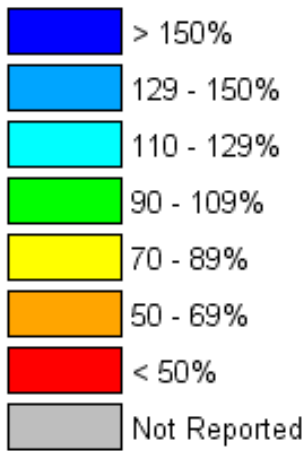
Gila - Solomon:



Monthly Precipitation for January 2003

(Averaged by Hydrologic Unit)

% Average

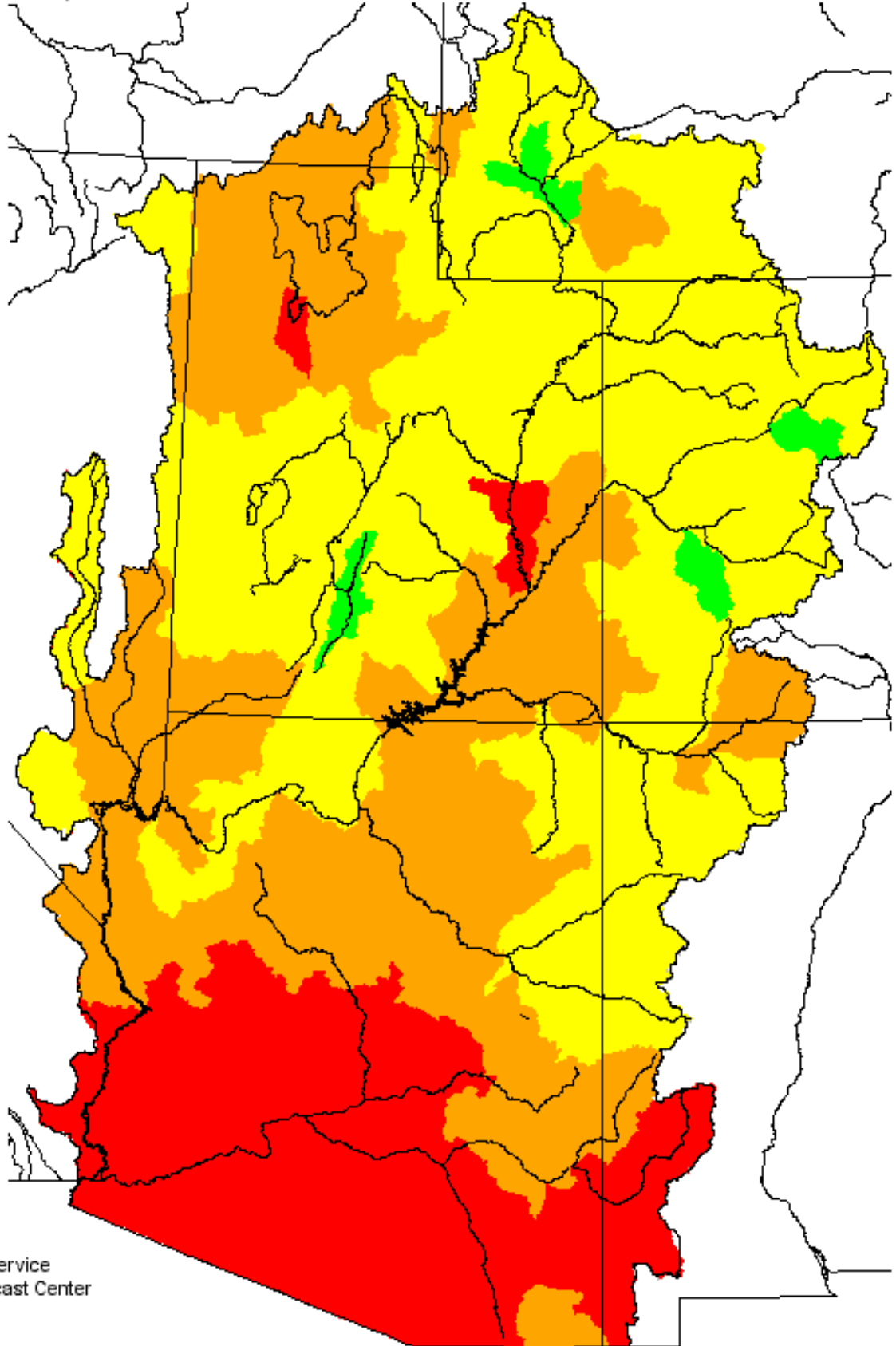
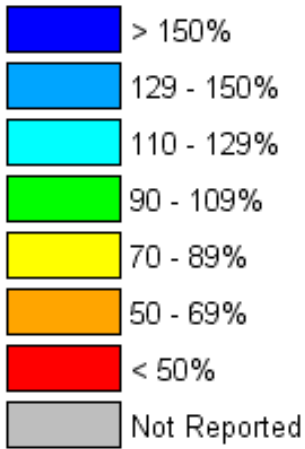


Prepared by
NOAA, National Weather Service
Colorado Basin River Forecast Center
Salt Lake City, Utah
www.cbrfc.noaa.gov

Seasonal Precipitation, October 2002 - January 2003

(Averaged by Hydrologic Unit)

% Average



Prepared by
NOAA, National Weather Service
Colorado Basin River Forecast Center
Salt Lake City, Utah
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 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

2242 W. North Temple · Salt Lake City, UT 84116 · (801) 524-5130 · <http://www.cbrfc.gov>