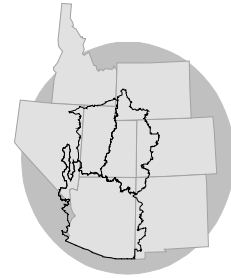


# WATER SUPPLY OUTLOOK for the EASTERN GREAT BASIN

***COLORADO BASIN  
RIVER FORECAST CENTER***

*NATIONAL WEATHER SERVICE, SALT LAKE CITY, UT*

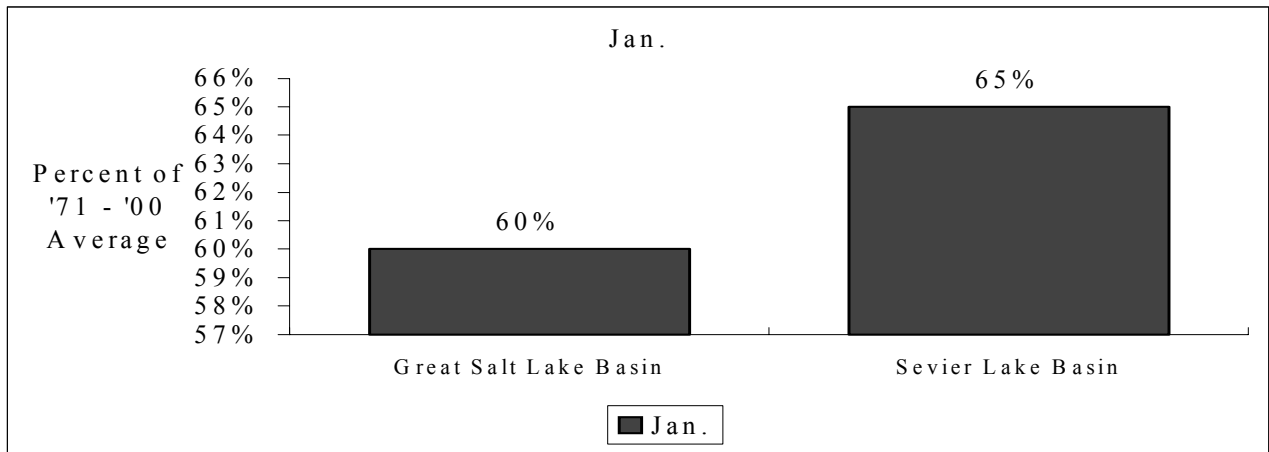


**JANUARY 1, 2003**

## SUMMARY

Early season forecasts issued January 1 indicate much below average April-July runoff volumes expected throughout the Eastern Great Basin. In the Great Salt Lake Basin runoff volumes are forecast to range from 40 to 75 percent of the 1971-2000 average and 45 to 75 percent of average in the Sevier Lake Basin. January 1 snowpack ranges from 50 to 100 percent of average in the Great Salt Lake Basin and 30 to 115 percent in the Sevier Lake Basin.

## APRIL - JULY VOLUME FORECASTS



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Monthly Streamflows	7
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# GREAT SALT LAKE BASIN

The January 1 water supply outlook is for much below average runoff in the Great Salt Lake Basin

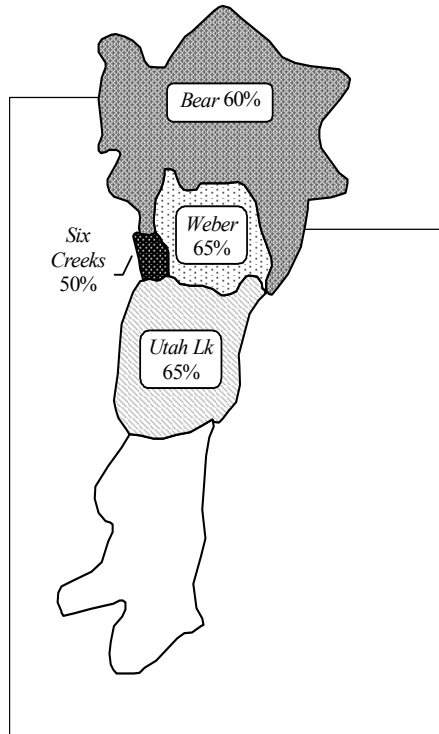
April-July streamflow forecasts for the Great Salt Lake Basin are as follows:

Bear River:  
Much Below Average

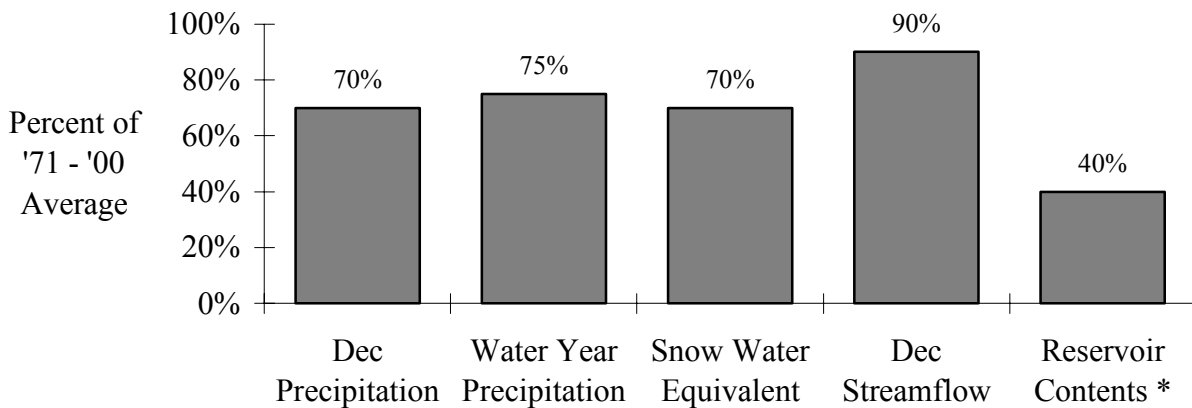
Weber River:  
Much Below Average

Utah Lake:  
Much Below Average

Six Creeks:  
Much Below Average



## BASIN CONDITIONS - JANUARY 1, 2003



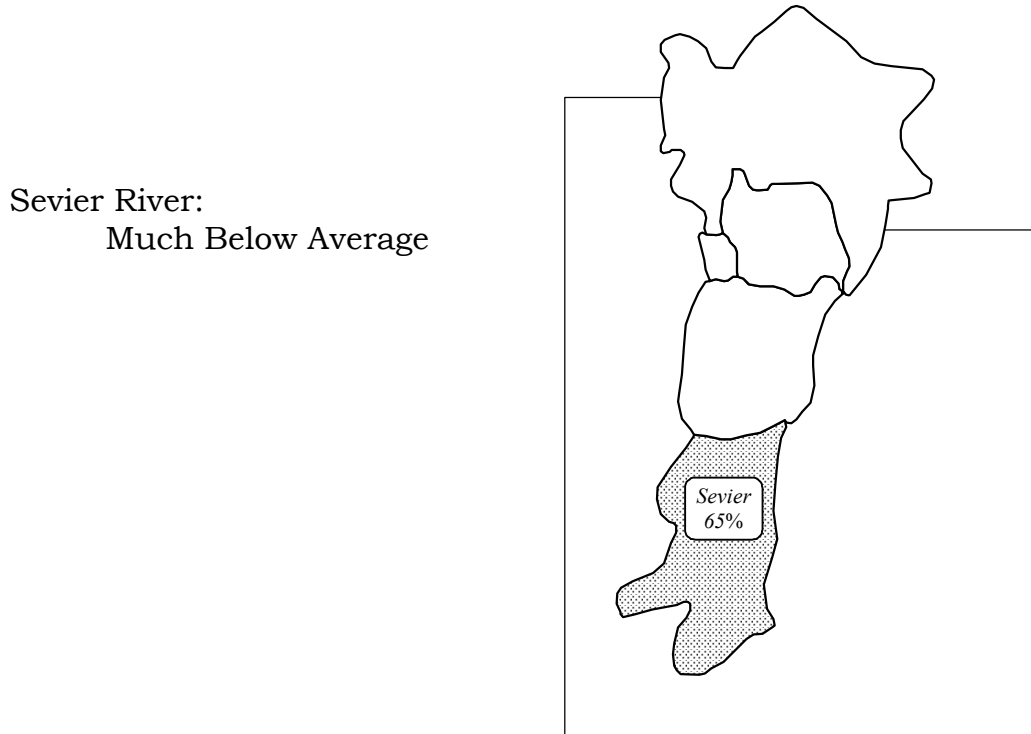
\* Percent usable capacity, not percent average contents.

Specific site forecasts are listed beginning on page 4.

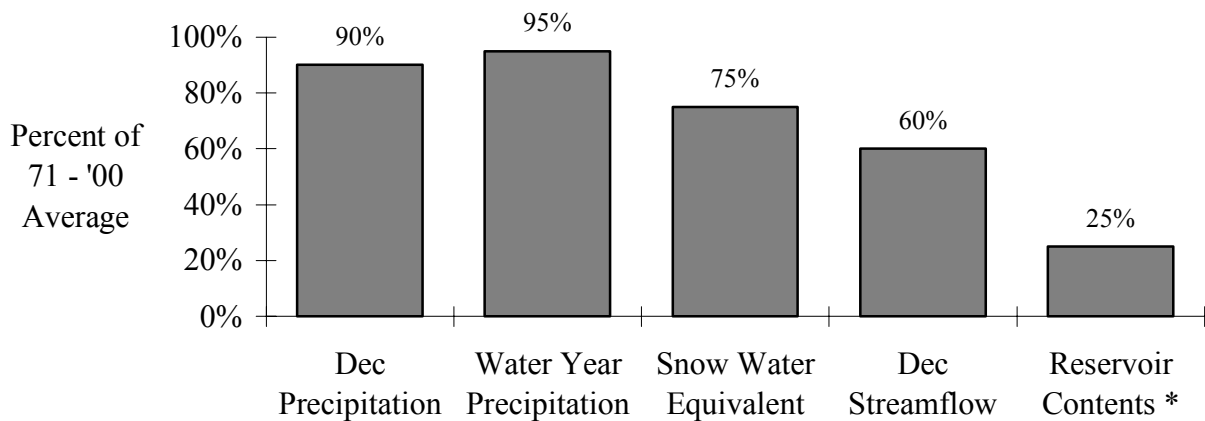
# SEVIER LAKE BASIN

The January 1 water supply outlook is for much below average April-July runoff volumes in the Sevier Lake Basin.

April-July streamflow forecasts for the Sevier Lake Basin are as follows:



## BASIN CONDITIONS - JANUARY 1, 2003



\* Percent usable capacity, not percent average contents.

Specific site forecasts are listed beginning on page 5.

## SPECIFIC SITE FORECASTS

**Great Salt Lake Basin:** April through July volume (kaf) forecasts (except where noted).

Stream	Station	Most Probable	Percent Avg.	Reas. Max	Reas. Min
BEAR	UTAH-WYOMING STATE LINE, NR	78	67	112	54
	WOODRUFF NARROWS RES	62	46	108	29
	MONTPELIER, NR, STEWART DAM, B	122	42	235	73
BIG CK	RANDOLPH, NR	2.8	57	6.7	1.05
SMITHS FORK	BORDER, NR	69	67	119	40
LOGAN	LOGAN, NR, STATE DAM, ABV	79	65	133	47
BLACKSMITH FORK	HYRUM, NR, UP&L DAM, ABV	31	65	51	18.9
SMITH AND MOREHOUSE CK	OAKLEY, NR	24	71	35	16.6
WEBER	OAKLEY, NR	83	67	124	59
	ROCKPORT RES, WANSHIP, NR	80	60	134	51
	COALVILLE, NR	81	59	138	51
	ECHO RES, ECHO, AT	112	63	180	44
	GATEWAY	215	61	355	147
CHALK CK	COALVILLE	30	67	53	18.7
LOST CK	LOST CK RES, CROYDON, NR	11	62	22	3.8
EAST CANYON CK	EAST CANYON RES, MORGAN, NR	19	61	33	8.8
SF OGDEN	HUNTSVILLE, NR	44	69	74	26
OGDEN	PINEVIEW RES, OGDEN, NR	86	65	142	30
WHEELER CK	HUNTSVILLE, NR	4.8	76	7.6	2
SPANISH FORK	CASTILLA, NR	47	61	103	7.7
PROVO	WOODLAND, NR	73	71	122	38
	HAILSTONE, NR	71	65	131	29
	DEER CK RES	88	70	177	23
AMERICAN FORK	AMERICAN FORK, NR, UP PWRPLNT,	19	59	40	7.2
JORDAN	UTAH LAKE, PROVO, NR	210	65	435	46
LITTLE COTTONWOOD CK	SALT LAKE CITY, NR	25	62	43	17.2
BIG COTTONWOOD CK	SALT LAKE CITY, NR	21	55	43	14.9
CITY CK	SALT LAKE CITY, NR	4.4	51	11.1	1.49
EMIGRATION CK	SALT LAKE CITY, NR	2	44	6.6	0
MILL CK	SALT LAKE CITY, NR	3.3	47	8.4	1.61
DELL FK	LITTLE DELL RES	3.4	50	9	1
PARLEYS CK	SALT LAKE CITY, NR	8.8	53	22	1.32
VERNON CK	VERNON, NR	0.81	55	1.86	0.35
S WILLOW CK	GRANTSVILLE, NR	2.4	75	4.9	0.51
SETTLEMENT CK	TOOELE, NR	1.02	52	3.2	0.45

**Sevier Lake Basin:** April through July volume (kaf) forecasts (except where noted).

Stream	Station	Most Probable	Percent Avg.	Reas. Max	Reas. Min
SEVIER	HATCH	38	69	82	14.5
	KINGSTON, NR	60	67	118	29
	PIUTE RES, MARYSVALE, NR	81	64	163	25
	VERMILLION DAM	114	66	220	43
	SIGURD, NR	121	65	250	38
	GUNNISON, NR, SAN PITCH, BLO	176	63	420	65
EF SEVIER	KINGSTON, NR	26	68	55	4.8
CLEAR CK	SEVIER, NR, DIV, ABV	15	68	31	4.5
SALINA CK	* SALINA	MB	0	0	0
CHICKEN CK	LEVAN, NR	3.3	73	10.4	1.05
OAK CK	OAK CITY, NR, LITTLE CK, ABV	0.83	51	1.89	0.36
BEAVER	BEAVER, NR	17.5	67	25	12.2
	MINERSVILLE RES, MINERSVILLE,	7.7	46	17.9	3.3
COAL CK	CEDAR CITY, NR	11.5	60	23	4

\* Categorical Forecast - Current regulations allow for discontinuance of a streamflow volume forecast when observations at the point have not been taken or recorded for 5 years or longer. Recognizing the importance to the user, the NWS and NRCS have often continued to provide forecasts long after observations have ceased. Forecasters will now have the option to express these forecasts categorically (e.g. instead of issuing a forecast of 77 percent of average, the forecast would simply be “below average”). Specifically, the categories are:

MA - much above normal (greater than 130 percent of normal)

AN - above normal (111- 130 percent of normal)

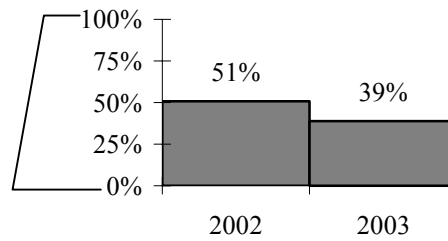
NN - near normal (90-110 percent of normal)

BN - below normal (70-89 percent of normal)

MB - much below normal (less than 70 percent of normal)

# END OF MONTH RESERVOIR CONTENTS

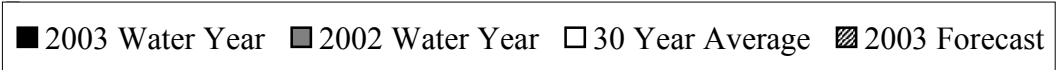
Percent of Usable Capacity



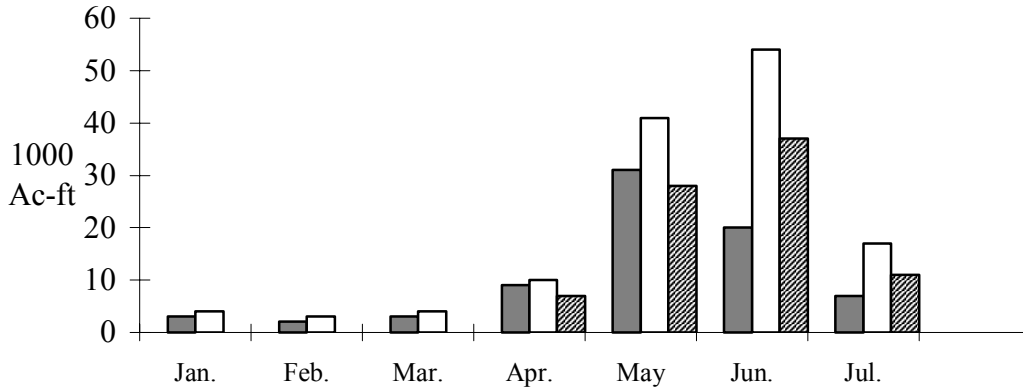
RESERVOIR (vol. in 1000 ac-ft)	Usable Capacity	EOM Usable Contents	Percent Usable Capacity (%)
Bear Lake	1421	352	25
Causey	7.1	2	28
Jordanelle	311	231	74
Deer Creek	149.7	72	48
East Canyon	49.5	28	57
Echo	73.9	30	41
Gunnison	20.3	missing	missing
Hyrum	15.3	6	39
Lost Creek	22.5	6	27
Minersville	23.3	3.5	15
Otter Creek	52.5	18.2	35
Pine View	110.1	23	21
Piute	71.8	2.5	3
Rockport	60.9	30	49
Sevier bridge	236	65.5	28
* Utah Lake	870.9	497.2	57
Willard	215	101.4	47
Woodruff Narrows	55.8	7	13
TOTAL	3746.3	1475.3	39
Flaming Gorge	3749	2631.8	70
Lake Powell	24322	13774	57
Moon Lake	36	1	3
Red Fleet	25.7	10	39
Scofield	65.8	13.6	21
Starvation	165.3	120	73
Steinaker	34.4	7	20
Strawberry	1105.9	814	74
Upper Stillwater	32.5	10	31

\* Usable capacity taken at compromise      Total does not include missing site usable capacities

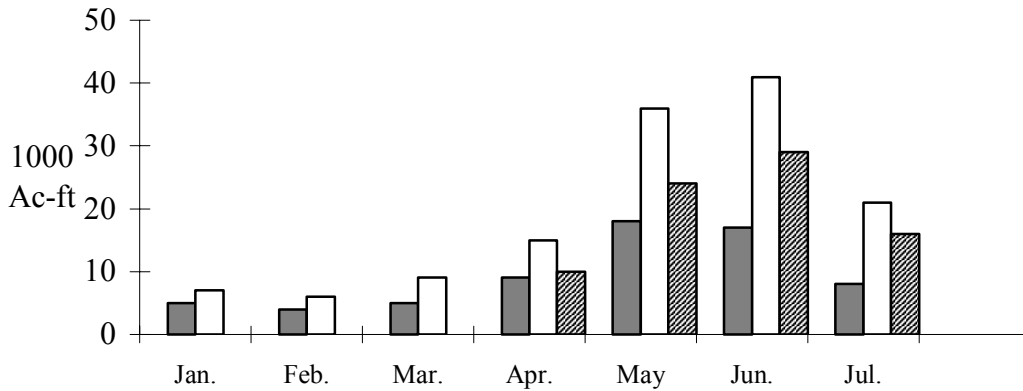
# MONTHLY STREAMFLOWS



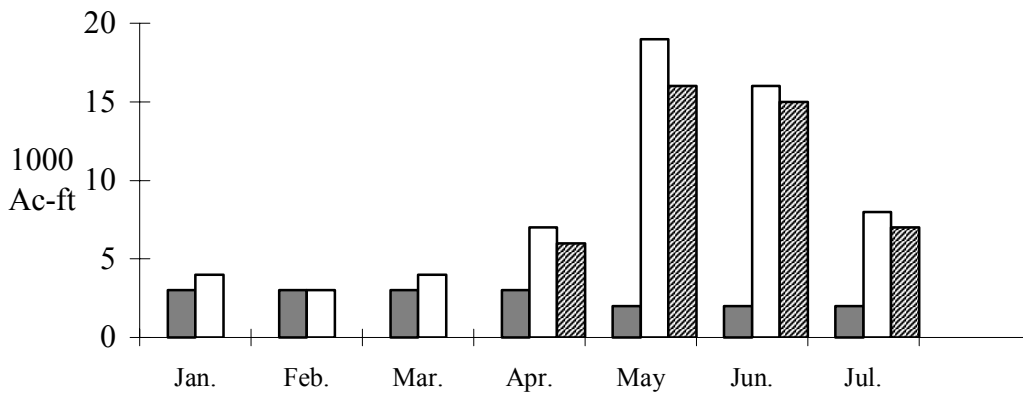
## Weber Oakley, nr:



## Logan - Logan, nr, State Dam, abv:



## Sevier - Hatch:

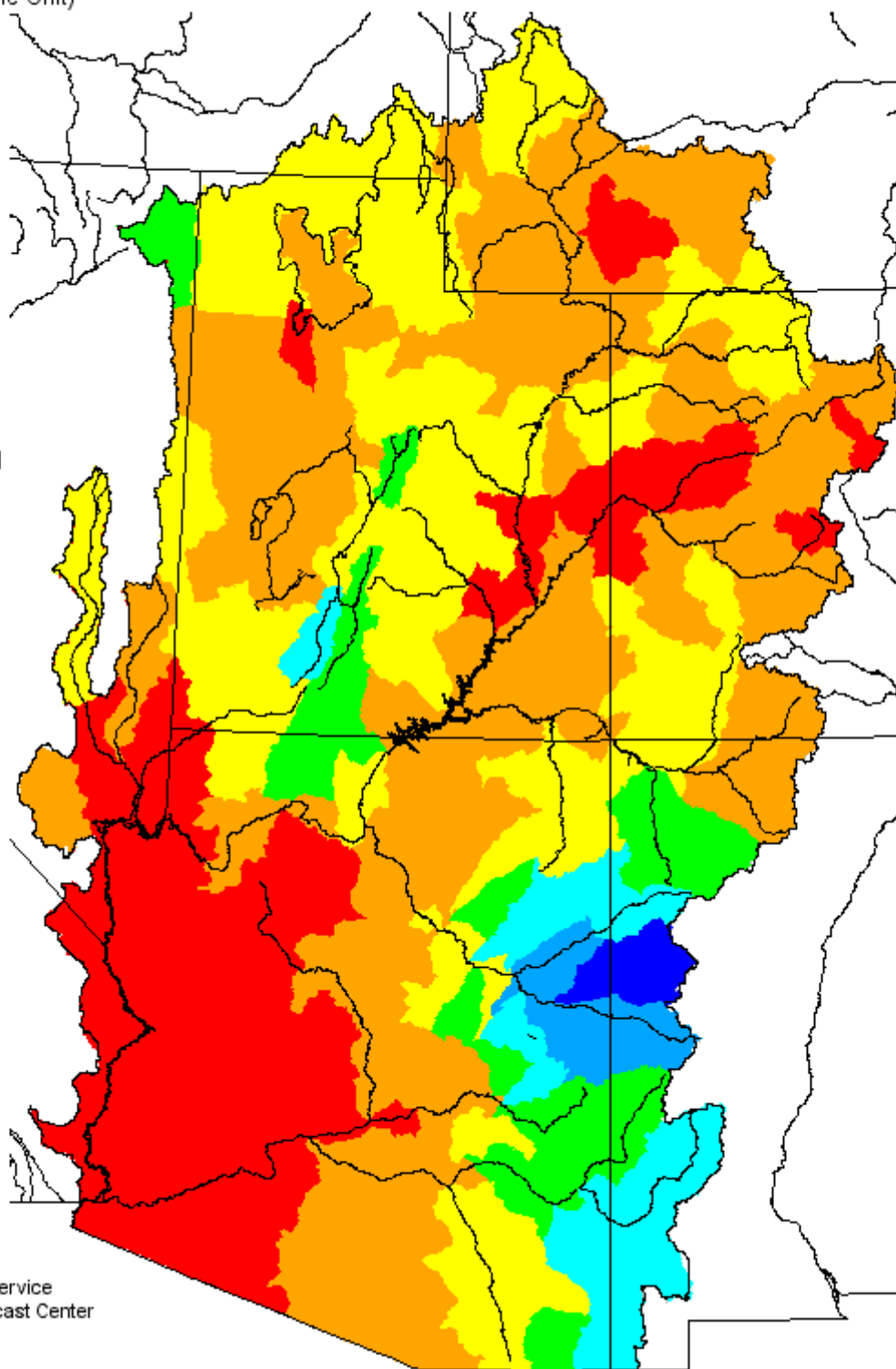
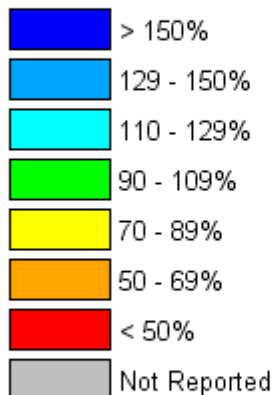


\* observed data unavailable

# Monthly Precipitation for December 2002

(Averaged by Hydrologic Unit)

## % Average



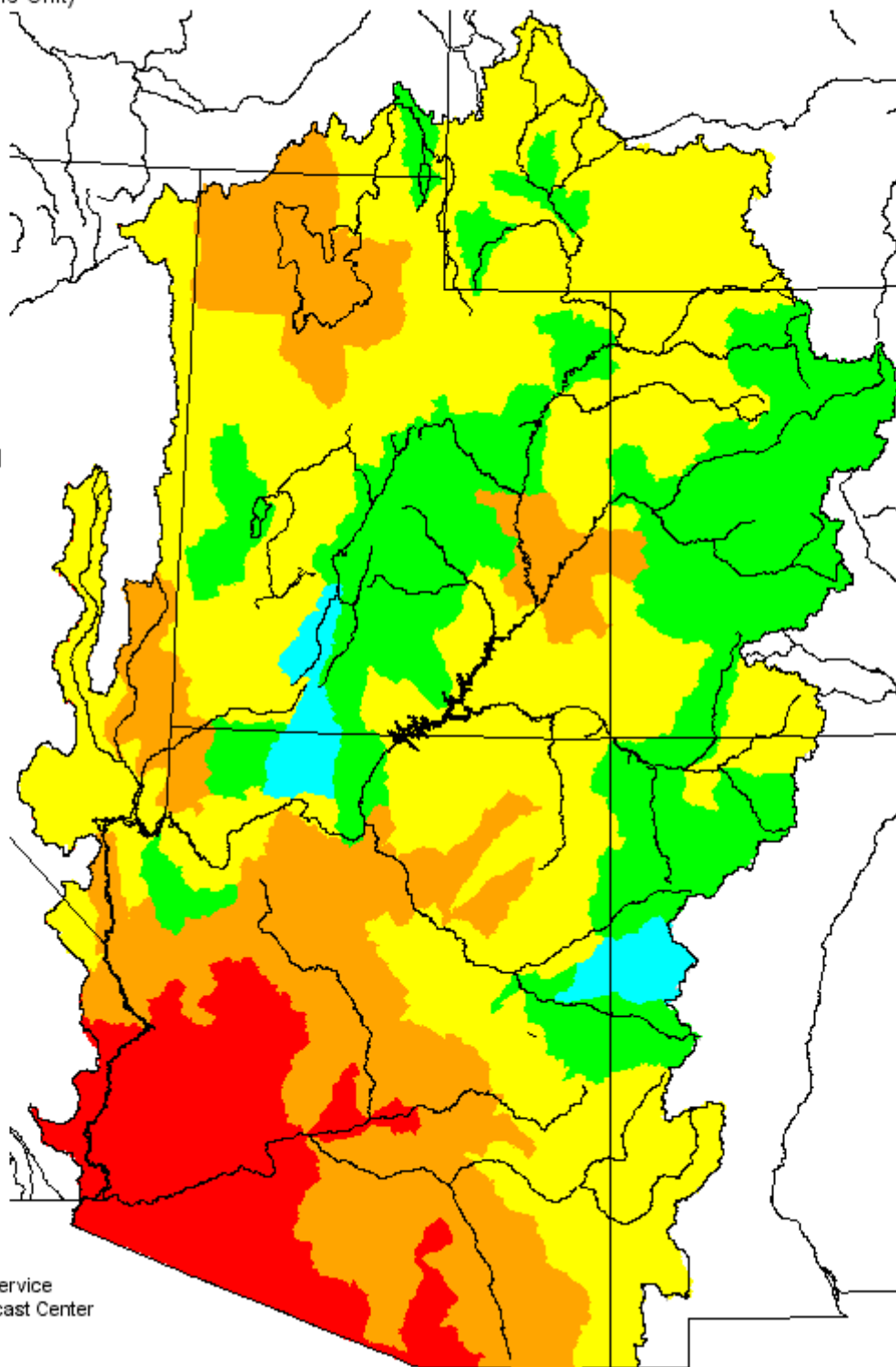
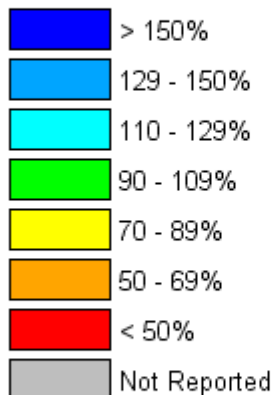
Prepared by  
NOAA, National Weather Service  
Colorado Basin River Forecast Center  
Salt Lake City, Utah  
[www.cbrfc.noaa.gov](http://www.cbrfc.noaa.gov)



# Seasonal Precipitation, October 2002 - December 2002

(Averaged by Hydrologic Unit)

## % Average



Prepared by  
NOAA, National Weather Service  
Colorado Basin River Forecast Center  
Salt Lake City, Utah  
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## 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	Above Average	Near Average	Below Average	Much Below Average
Greater than 130%	111-130%	90-110%	70-89%	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

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