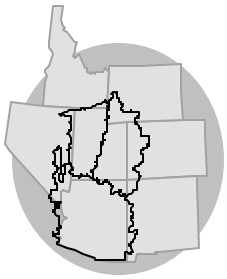
WATER SUPPLY OUTLOOK
for the
EASTERN GREAT BASIN

COLORADO BASIN
RIVER FORECAST CENTER

NATIONAL WEATHER SERVICE, SALT LAKE CITY, UT

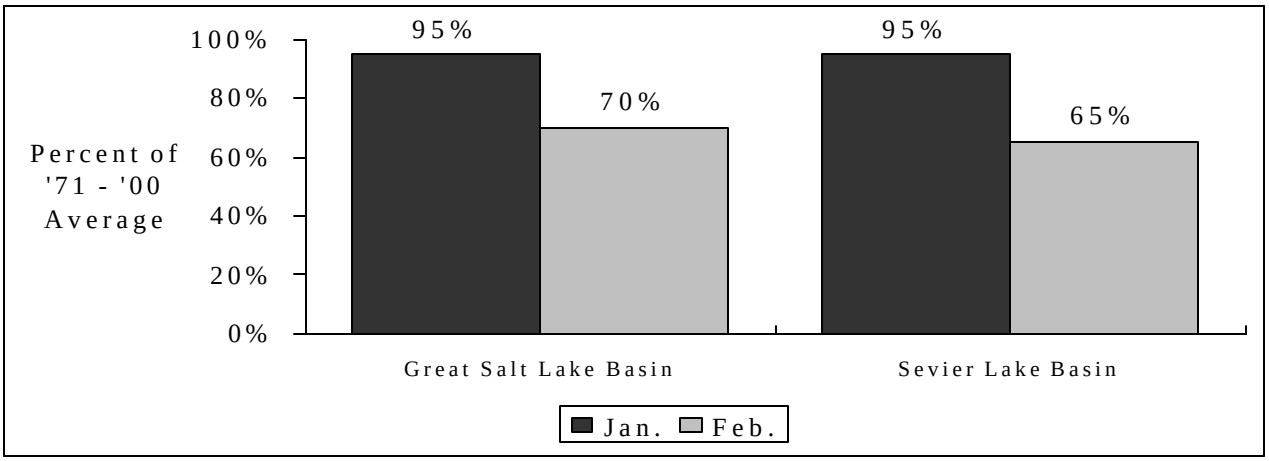


FEBRUARY 1, 2004

SUMMARY

As of February 1 below to much below average April-July runoff is forecast throughout the Eastern Great Basin. Forecasts are expected to range from 40 to 80 percent of the 1971-2000 average in the Great Salt Lake Basin and 30 to 75 percent in the Sevier Lake Basin. Much below average January precipitation in the Great Salt Lake Basin and below average precipitation in the Sevier Lake Basin decreased the snowpack approximately 30 percent overall and led to a comparable reduction in forecast volumes. February 1 snowpack ranges mostly from 70 to 155 percent of average in the Great Salt Lake Basin and 75 to 110 percent in the Sevier Lake Basin.

APRIL - JULY VOLUME FORECASTS



GREAT SALT LAKE BASIN

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

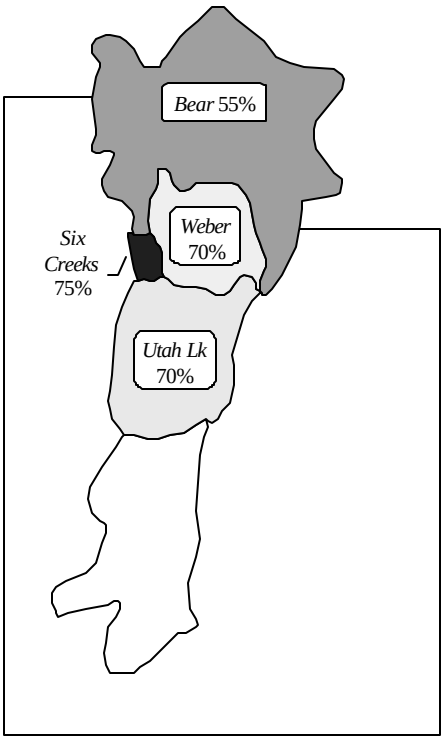
April-July streamflow forecasts for the Great Salt Lake Basin are as follows:

Bear River:
Much Below Average

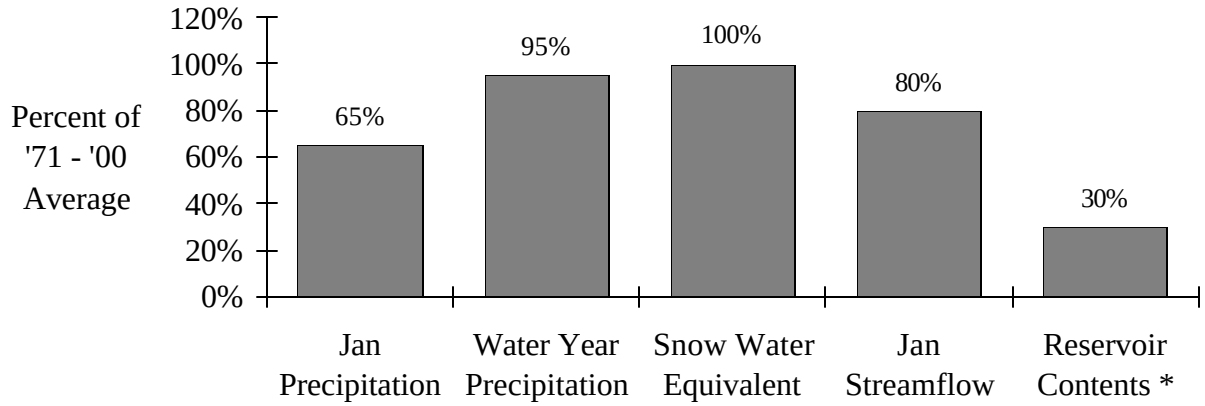
Weber River:
Below Average

Utah Lake:
Below Average

Six Creeks:
Below Average



BASIN CONDITIONS - FEBRUARY 1, 2004



* Percent usable capacity, not percent average contents.

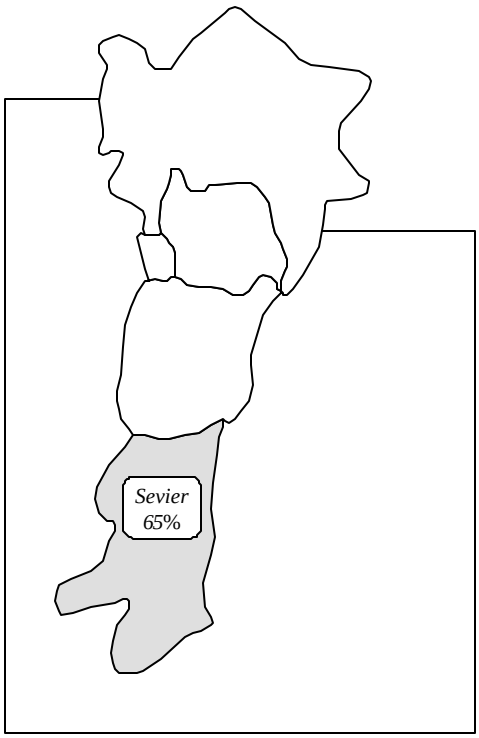
Specific site forecasts are listed beginning on page 4.

SEVIER LAKE BASIN

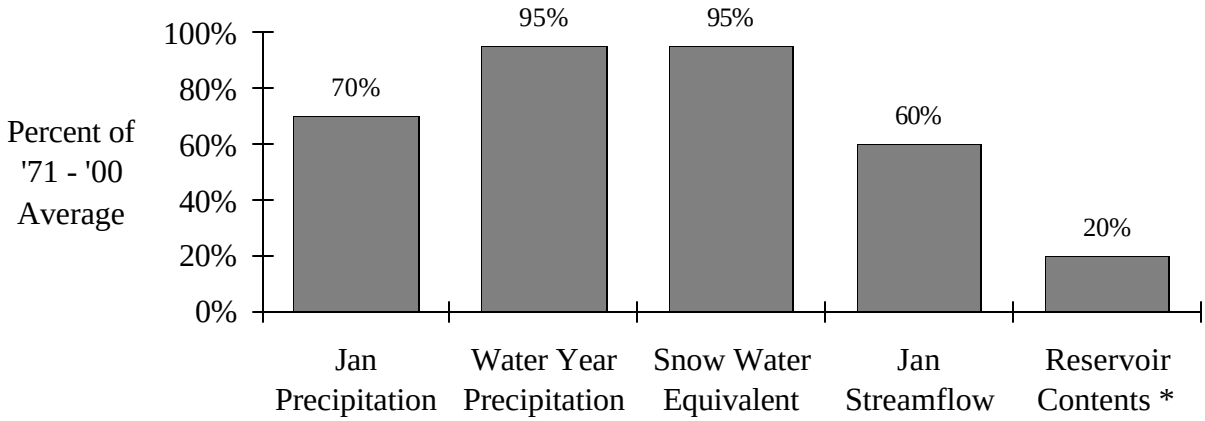
The February 1 water supply outlook is for much below to below average April-July runoff volumes in the Sevier Lake Basin.

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

Sevier River:
Much Below Average



BASIN CONDITIONS - FEBRUARY 1, 2004



* 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	85	75	119	51
	WOODRUFF NARROWS RES	64	47	118	10
	MONTPELIER, NR, STEWART DAM, B	29	13	76	9
BIG CK	RANDOLPH, NR	1.9	39	3.8	0.75
SMITHS FORK	BORDER, NR	80	78	110	50
LOGAN	LOGAN, NR, STATE DAM, ABV	93	74	136	58
BLACKSMITH FORK	HYRUM, NR, UP&L DAM, ABV	36	75	59	18.8
SMITH AND MOREHOUSE CK	OAKLEY, NR	22	65	31	13.1
WEBER	OAKLEY, NR	77	63	109	45
	ROCKPORT RES, WANSHIP, NR	83	62	125	41
	COALVILLE, NR	84	61	128	40
	ECHO RES, ECHO, AT	109	61	167	51
	GATEWAY	245	69	360	130
CHALK CK	COALVILLE	25	56	44	5.7
LOST CK	LOST CK RES, CROYDON, NR	11	62	19.9	4.7
EAST CANYON CK	EAST CANYON RES, MORGAN, NR	24	77	35	15.1
SF OGDEN	HUNTSVILLE, NR	50	78	75	25
OGDEN	PINEVIEW RES, OGDEN, NR	99	74	149	49
WHEELER CK	HUNTSVILLE, NR	7.7	122	10.4	5
SPANISH FORK	CASTILLA, NR	57	74	107	7.7
PROVO	WOODLAND, NR	67	65	100	34
	HAILSTONE, NR	68	62	110	26
	DEER CK RES	88	70	152	24
AMERICAN FORK	AMERICAN FORK, NR, UP PWRPLNT,	25	78	36	13.6
JORDAN	UTAH LAKE, PROVO, NR	240	74	410	69
LITTLE COTTONWOOD CK	SALT LAKE CITY, NR	30	75	41	19.5
BIG COTTONWOOD CK	SALT LAKE CITY, NR	27	71	39	15.3
CITY CK	SALT LAKE CITY, NR	6.3	72	8.9	1.4
EMIGRATION CK	SALT LAKE CITY, NR	3.2	71	5.8	0
MILL CK	SALT LAKE CITY, NR	5	71	7	1.4
DELL FK	LITTLE DELL RES	5	74	8	1
PARLEYS CK	SALT LAKE CITY, NR	13	78	20	1.97
VERNON CK	VERNON, NR	1.1	74	1.99	0.61
S WILLOW CK	GRANTSVILLE, NR	3.4	106	5	1.83
SETTLEMENT CK	TOOELE, NR	1.4	71	2.3	0.79

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

Stream	Station	Most Probable	Percent Avg.	Reas. Max	Reas. Min
SEVIER	HATCH	36	65	65	7.4
	KINGSTON, NR	54	61	93	15.4
	PIUTE RES, MARYSVALE, NR	79	63	143	14.7
	VERMILLION DAM	120	70	189	51
	SIGURD, NR	126	68	225	29
	GUNNISON, NR, SAN PITCH, BLO	182	65	395	65
EF SEVIER	KINGSTON, NR	22	58	47	2.2
CLEAR CK	SEVIER, NR, DIV, ABV	17	77	30	3.8
SALINA CK ❄	SALINA	MB	0	0	0
CHICKEN CK	LEVAN, NR	3.3	73	7.2	1.14
OAK CK	OAK CITY, NR, LITTLE CK, ABV	1.06	65	1.89	0.47
BEAVER	BEAVER, NR	19	70	28	11.9
	MINERSVILLE RES, MINERSVILLE,	5	30	13.9	0.5
COAL CK	CEDAR CITY, NR	13	67	22	7

❄ 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)

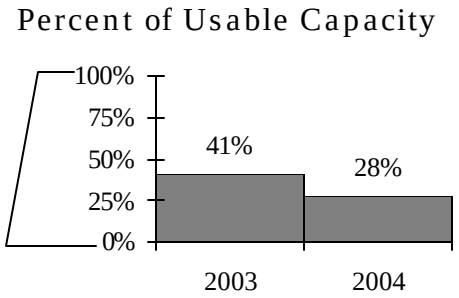
AN - above normal (111– 130 percent of normal)

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

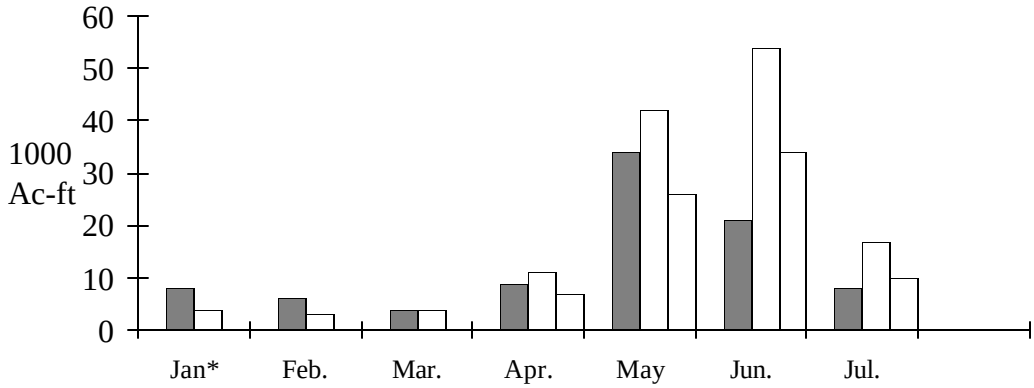


RESERVOIR (vol. in 1000 ac-ft)	Usable Capacity	EOM Usable Contents	Percent Usable Capacity (%)
Bear Lake	1302	21.1	2
Causey	7.1	2.3	32
Jordanelle	311	238.7	77
Deer Creek	149.7	57.8	39
East Canyon	49.5	24.9	50
Echo	73.9	38.2	52
Gunnison	20.3	1.2	6
Hyrum	15.3	9.2	60
Lost Creek	22.5	1.5	7
Minersville	23.3	4.6	20
Otter Creek	52.5	16.5	31
Pine View	110.1	30	27
Piute	71.8	25	35
Rockport	60.9	27.7	45
Sevier bridge	236	37.2	16
* Utah Lake	870.9	431.3	50
Willard	215	47.1	22
Woodruff Narrows	55.8	7	13
TOTAL	3647.6	1021.3	28
Flaming Gorge	3749	2600.3	69
Lake Powell	24322	10984.2	45
Moon Lake	36	15.2	42
Red Fleet	25.7	13.5	53
Scofield	65.8	13	20
Starvation	165.3	132.3	80
Steinaker	34.4	11.8	34
Strawberry	1105.9	777.7	70
Upper Stillwater	32.5	2.2	7

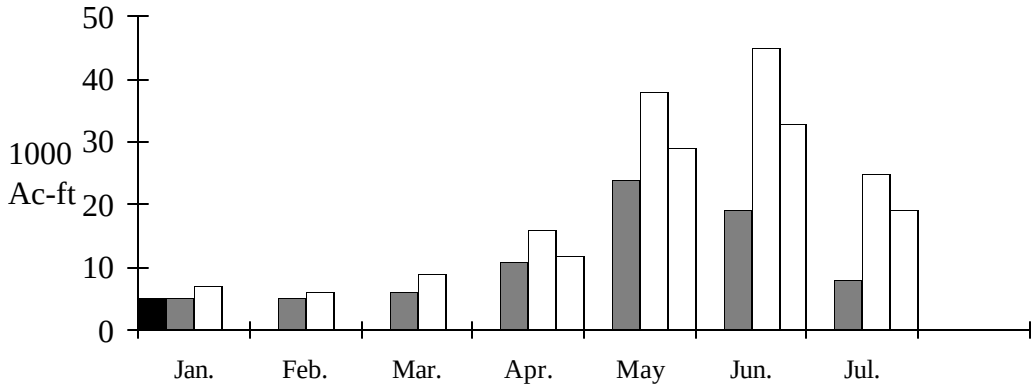
*** Usable capacity taken at compromise Total does not include missing site usable capacities**

MONTHLY STREAMFLOWS

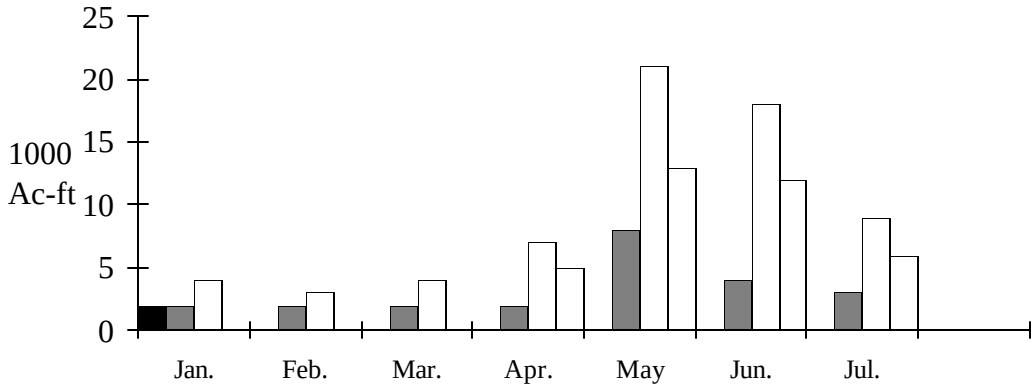
Weber Oakley, nr:



Logan - Logan, nr, State Dam, abv:



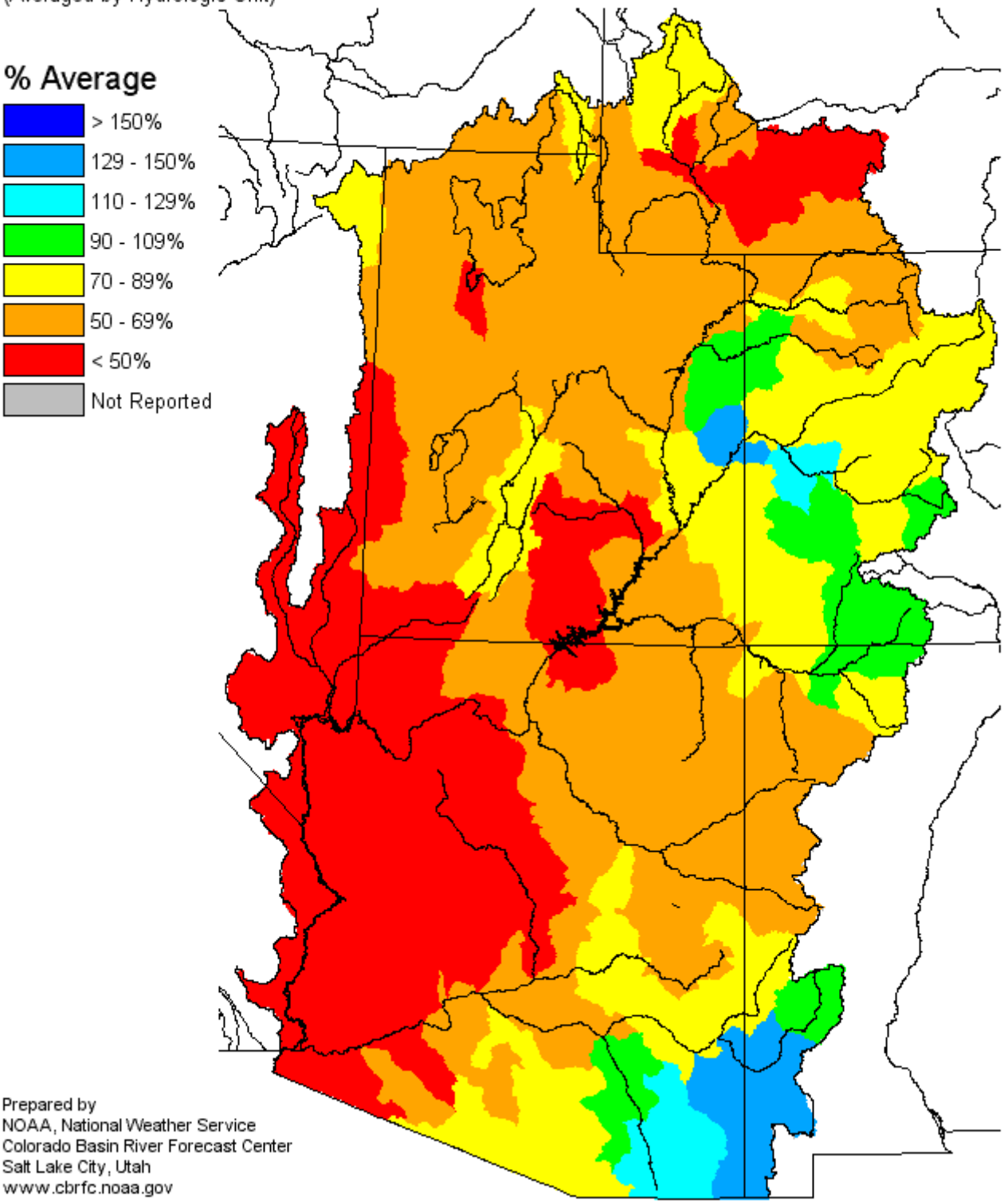
Sevier - Hatch:



* observed data unavailable

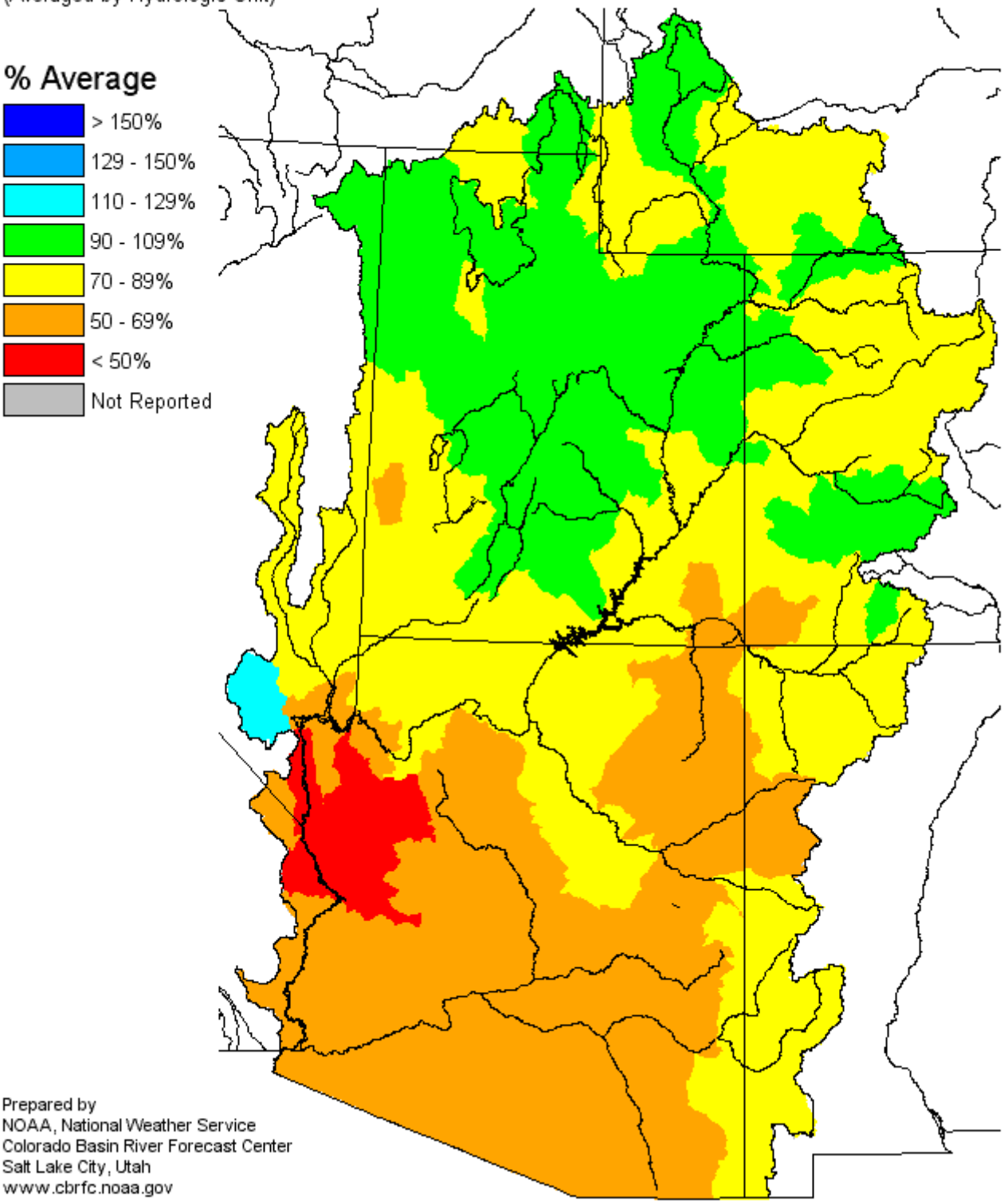
Monthly Precipitation for January 2004

(Averaged by Hydrologic Unit)



Seasonal Precipitation, October 2003 - January 2004

(Averaged by Hydrologic Unit)



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 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