

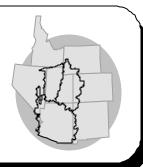
# WATER SUPPLY OUTLOOK

for the

# EASTERN GREAT BASIN

COLORADO BASIN RIVER FORECAST CENTER

NATIONAL WEATHER SERVICE, SALT LAKE CITY, UT

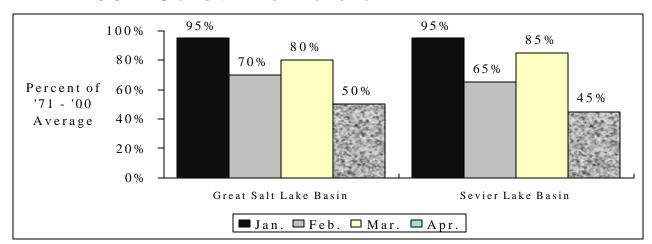


# APRIL 1, 2004

#### SUMMARY

As of April 1 much below average April-July runoff is forecast throughout the Eastern Great Basin, with the exception of a couple sites in the Six Creeks area, which are below average. Forecasts range mostly from 30 to 85 percent of the 1971-2000 average in the Great Salt Lake Basin and 40 to 65 percent in the Sevier Lake Basin. Snowpacks were depleted dramatically in the month of March due to warm temperatures and a lack of accumulation. The Great Salt Lake Basin snowpack decreased 30 to 45 percent and the Sevier Lake Basin decreased 55 percent from March 1, which resulted in major reductions in the volume forecasts from last month.

## **APRIL - JULY VOLUME FORECASTS**



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#### GREAT SALT LAKE BASIN

The April 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:

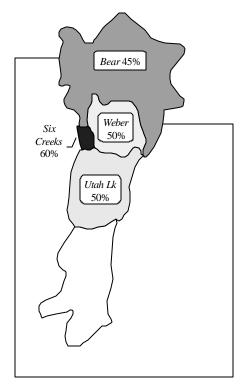
Much Below Average

Utah Lake:

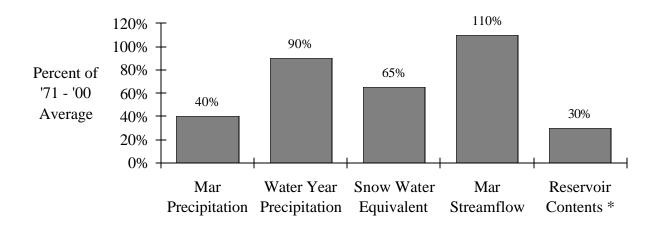
Much Below Average

Six Creeks:

Much Below Average



### BASIN CONDITIONS - APRIL 1, 2004



<sup>\*</sup> Percent usable capacity, not percent average contents.

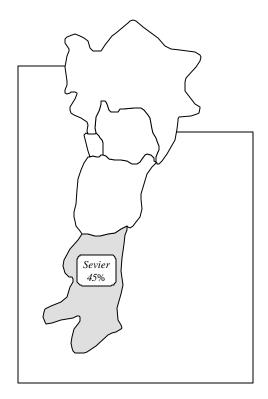
Specific site forecasts are listed beginning on page 4.

#### SEVIER LAKE BASIN

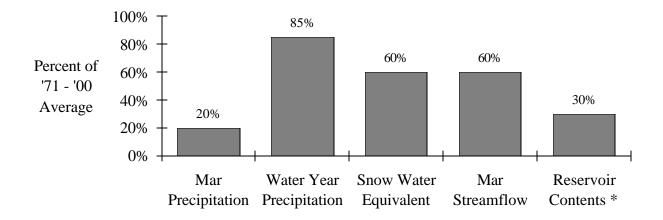
The April 1 water supply outlook is for much below average April-July runoff volumes in the Sevier Lake Basin.

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

Sevier River: Much Below Average



# BASIN CONDITIONS - APRIL 1, 2004



<sup>\*</sup> 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	Percent	Reas.	Reas.
		Probable	Avg.	Max	Min
BEAR	UTAH-WYOMING STATE LINE, NR	53	47	76	30
	WOODRUFF NARROWS RES	33	24	75	23
	MONTPELIER, NR, STEWART DAM, B	17	8	40	4
BIG CK	RANDOLPH, NR	0.55	11	2.1	0.38
SMITHS FORK	BORDER, NR	60	58	79	41
LOGAN	LOGAN, NR, STATE DAM, ABV	72	57	94	53
BLACKSMITH FORK	HYRUM, NR, UP&L DAM, ABV	24	50	39	12.7
SMITH AND MOREHOUSE CK	OAKLEY, NR	17.5	51	25	10.3
WEBER	OAKLEY, NR	58	47	84	32
	ROCKPORT RES, WANSHIP, NR	52	39	85	19
	COALVILLE, NR	50	36	85	15
	ECHO RES, ECHO, AT	70	39	119	21
	GATEWAY	165	46	260	68
CHALK CK	COALVILLE	14	31	32	9.3
LOST CK	LOST CK RES, CROYDON, NR	10	57	16.7	5
EAST CANYON CK	EAST CANYON RES, MORGAN, NR	17	55	25	10.5
SF OGDEN	HUNTSVILLE, NR	40	62	57	23
OGDEN	PINEVIEW RES, OGDEN, NR	78	59	111	45
WHEELER CK	HUNTSVILLE, NR	4.5	71	6.5	2.5
SPANISH FORK	CASTILLA, NR	34	44	74	7.6
PROVO	WOODLAND, NR	52	50	79	25
	HAILSTONE, NR	51	47	87	15.1
	DEER CK RES	64	51	122	19.9
AMERICAN FORK	AMERICAN FORK, NR, UP PWRPLNT,	19	59	26	12.1
JORDAN	UTAH LAKE, PROVO, NR	175	54	310	38
LITTLE COTTONWOOD CK	SALT LAKE CITY, NR	34	85	40	28
BIG COTTONWOOD CK	SALT LAKE CITY, NR	23	61	31	14.9
CITY CK	SALT LAKE CITY, NR	3	34	6.4	1
EMIGRATION CK	SALT LAKE CITY, NR	1.6	36	4.5	0
MILL CK	SALT LAKE CITY, NR	6	86	8.6	3.4
DELL FK	LITTLE DELL RES	4.4	65	8.2	0.62
PARLEYS CK	SALT LAKE CITY, NR	10.5	63	17.6	3.4
VERNON CK	VERNON, NR	0.72	49	1.1	0.47
S WILLOW CK	GRANTSVILLE, NR	2.1	66	3.2	0.95
SETTLEMENT CK	TOOELE, NR	0.91	46	1.53	0.49

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

Stream	Station	Most	Percent	Reas.	Reas.
		Probable	Avg.	Max	Min
SEVIER	HATCH	23	42	41	5
	KINGSTON, NR	38	43	66	10.1
	PIUTE RES, MARYSVALE, NR	67	53	120	13.5
	VERMILLION DAM	80	47	139	21
	SIGURD, NR	84	45	168	30
	GUNNISON, NR, SAN PITCH, BLO	120	43	325	50
EF SEVIER	KINGSTON, NR	24	63	44	3.7
CLEAR CK	SEVIER, NR, DIV, ABV	9	41	19.1	4.1
SALINA CK *	SALINA	MB	0	0	0
CHICKEN CK	LEVAN, NR	1.49	33	2.9	0.65
OAK CK	OAK CITY, NR, LITTLE CK, ABV	0.8	49	1.31	0.42
BEAVER	BEAVER, NR	14	52	19.4	9.7
	MINERSVILLE RES, MINERSVILLE,	2.6	16	8.9	0.2
COAL CK	CEDAR CITY, NR	10	52	13	7

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)

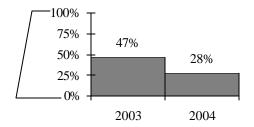
BN - below normal (70-89 percent of normal)

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

<sup>\*</sup> 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:

# END OF MONTH RESERVOIR CONTENTS

# Percent of Usable Capacity



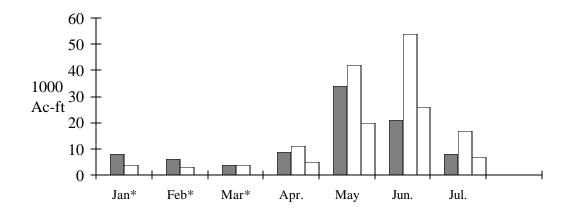
RESERVOIR	Usable	EOM Usable	Percent Usable	
(vol. in 1000 ac-ft)	Capacity	Contents	Capacity (%)	
Bear Lake	1302	61.7	5	
Causey	7.1	3.9	55	
Jordanelle	311	234	75	
Deer Creek	149.7	62.6	42	
East Canyon	49.5	30.5	62	
Echo	73.9	48	65	
Gunnison	20.3	3.8	19	
Hyrum	15.3	15.3	100	
Lost Creek	22.5	5.4	24	
Minersville	23.3	7.9	34	
Otter Creek	52.5	26.1	50	
Pine View	110.1	60.6	55	
Piute	71.8	14.9	21	
Rockport	60.9	37.1	61	
Sevier bridge	236	74.9	32	
* Utah Lake	870.9	missing	missing	
Willard	215	79	37	
Woodruff Narrows	55.8	19	34	
TOTAL	2776.7	784.7	28	
Flaming Gorge	3749	2631.8	70	
Lake Powell	24322	10179.6	42	
Moon Lake	36	17.8	49	
Red Fleet	25.7	14.7	57	
Scofield	65.8	17.3	26	
Starvation	165.3	152.7	92	
Steinaker	34.4	14.3	42	
Strawberry	1105.9	777.4	70	
Upper Stillwater	32.5	2.2	7	

<sup>\*</sup> Usable capacity taken at compromise

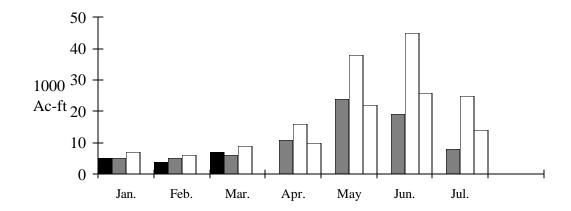
Total does not include missing site usable capacities

## MONTHLY STREAMFLOWS

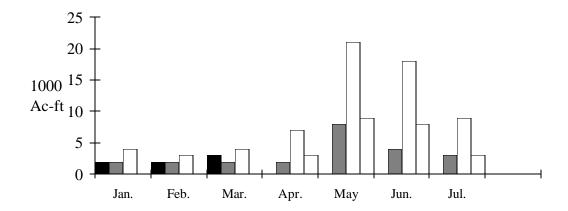
### Weber Oakley, nr:



Logan - Logan, nr, State Dam, abv:

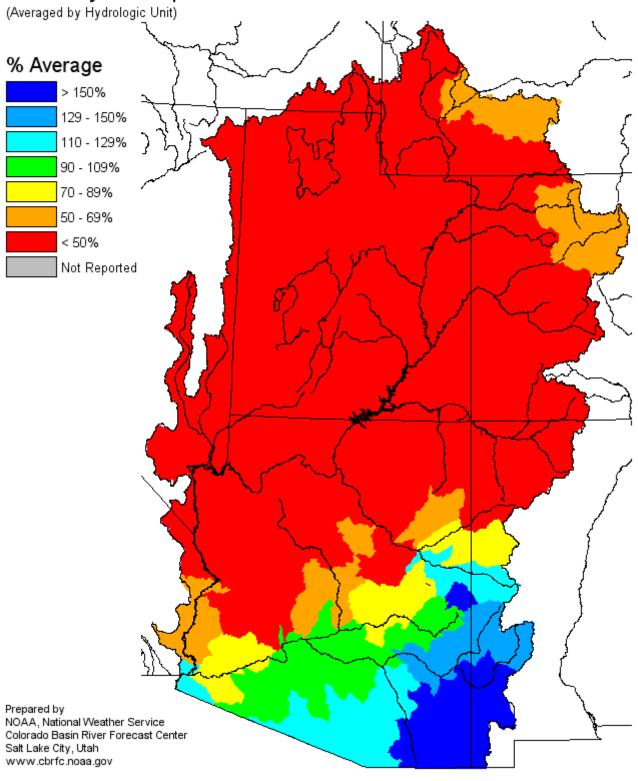


### **Sevier - Hatch:**

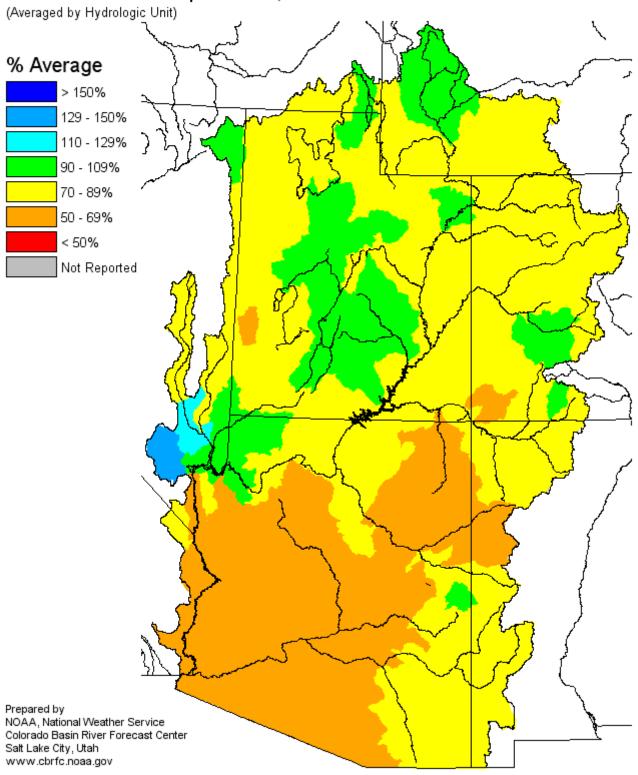


<sup>\*</sup> observed data unavailable

# Monthly Precipitation for March 2004



# Seasonal Precipitation, October 2003 - March 2004



#### 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

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