

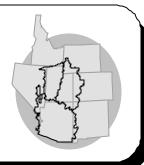
# WATER SUPPLY OUTLOOK

for the

# EASTERN GREAT BASIN

COLORADO BASIN RIVER FORECAST CENTER

NATIONAL WEATHER SERVICE, SALT LAKE CITY, UT

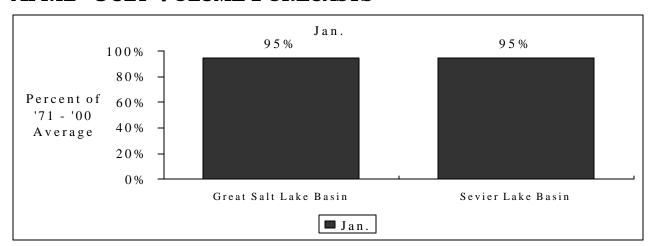


# JANUARY 1, 2004

### **SUMMARY**

Early season forecasts issued January 1 indicate below to above average April-July runoff volumes throughout the Eastern Great Basin. In the Great Salt Lake Basin runoff volumes are forecast to range from 60 to 115 percent of the 1971-2000 average and 75 to 115 percent of average in the Sevier Lake Basin. January 1 snowpack ranges from 95 to 210 percent of average in the Great Salt Lake Basin and 100 to 190 percent in the Sevier Lake Basin.

# **APRIL - JULY VOLUME FORECASTS**



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#### GREAT SALT LAKE BASIN

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

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

Bear River:

Below Average

Weber River:

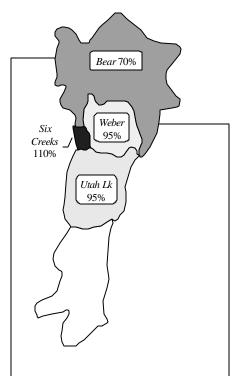
Near Average

Utah Lake:

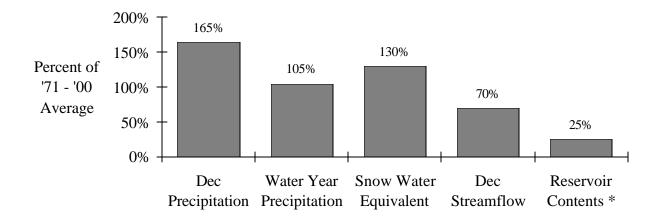
Near Average

Six Creeks:

Near Average



## BASIN CONDITIONS - JANUARY 1, 2004



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

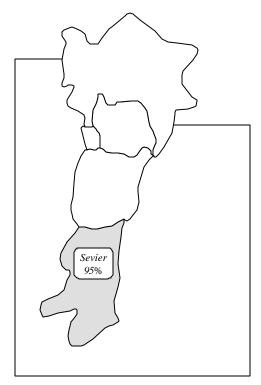
Specific site forecasts are listed beginning on page 4.

#### SEVIER LAKE BASIN

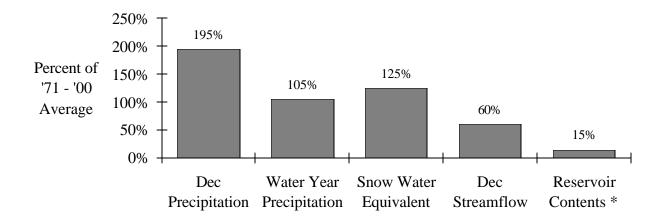
The January 1 water supply outlook is for below to above average April-July runoff volumes in the Sevier Lake Basin.

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

Sevier River: Near Average



## BASIN CONDITIONS - JANUARY 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	103	91	142	64
	WOODRUFF NARROWS RES	83	61	145	21
	MONTPELIER, NR, STEWART DAM, B	43	20	110	7
BIG CK	RANDOLPH, NR	2.9	59	5.4	0.42
SMITHS FORK	BORDER, NR	89	86	126	52
LOGAN	LOGAN, NR, STATE DAM, ABV	115	91	176	67
BLACKSMITH FORK	HYRUM, NR, UP&L DAM, ABV	44	92	72	23
SMITH AND MOREHOUSE CK	OAKLEY, NR	29	85	40	18
WEBER	OAKLEY, NR	106	86	147	65
	ROCKPORT RES, WANSHIP, NR	110	82	164	56
	COALVILLE, NR	112	82	169	55
	ECHO RES, ECHO, AT	145	81	210	77
	GATEWAY	325	92	465	187
CHALK CK	COALVILLE	36	80	59	13
LOST CK	LOST CK RES, CROYDON, NR	15	85	28	6.3
EAST CANYON CK	EAST CANYON RES, MORGAN, NR	34	110	52	19.7
SF OGDEN	HUNTSVILLE, NR	69	108	99	39
OGDEN	PINEVIEW RES, OGDEN, NR	137	103	193	81
WHEELER CK	HUNTSVILLE, NR	8.1	129	11.1	5.1
SPANISH FORK	CASTILLA, NR	84	109	132	36
PROVO	WOODLAND, NR	86	83	128	44
	HAILSTONE, NR	87	80	138	36
	DEER CK RES	107	85	184	30
AMERICAN FORK	AMERICAN FORK, NR, UP PWRPLNT,	37	116	54	20
JORDAN	UTAH LAKE, PROVO, NR	340	105	535	146
LITTLE COTTONWOOD CK	SALT LAKE CITY, NR	45	112	56	30
BIG COTTONWOOD CK	SALT LAKE CITY, NR	41	108	52	24
CITY CK	SALT LAKE CITY, NR	9.8	113	14.5	4.9
EMIGRATION CK	SALT LAKE CITY, NR	4.8	107	8.6	1.02
MILLCK	SALT LAKE CITY, NR	7.5	107	10.9	4.1
DELL FK	LITTLE DELL RES	7.3	107	11.9	2.8
PARLEYS CK	SALT LAKE CITY, NR	18	108	28	7.8
VERNON CK	VERNON, NR	1.35	91	2.7	0.68
S WILLOW CK	GRANTSVILLE, NR	4	125	5.8	2.2
SETTLEMENT CK	TOOELE, NR	2	102	3.1	1.19

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

Stream	Station	Most	Percent	Reas.	Reas.
		Probable	Avg.	Max	Min
SEVIER	HATCH	63	115	101	25
	KINGSTON, NR	99	111	148	51
	PIUTE RES, MARYSVALE, NR	126	100	195	57
	VERMILLION DAM	180	105	270	91
	SIGURD, NR	191	103	300	84
	GUNNISON, NR, SAN PITCH, BLO	280	100	495	65
EF SEVIER	KINGSTON, NR	34	89	60	7.9
CLEAR CK	SEVIER, NR, DIV, ABV	24	109	38	10
SALINA CK *	SALINA	NN	0	0	0
CHICKEN CK	LEVAN, NR	4.5	100	10	1.5
OAK CK	OAK CITY, NR, LITTLE CK, ABV	1.75	107	2.8	0.94
BEAVER	BEAVER, NR	20	77	31	11.8
	MINERSVILLE RES, MINERSVILLE,	6	36	16.4	0.7
COAL CK	CEDAR CITY, NR	16.4	85	30	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)

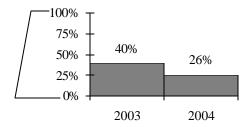
BN - below normal (70-89 percent of normal)

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



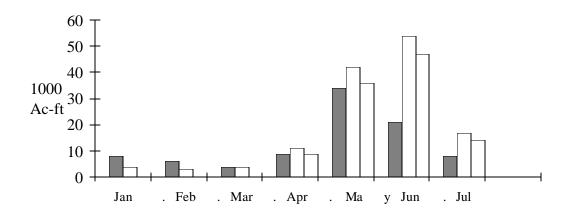
RESERVOIR	Usable	EOM Usable	Percent Usable	
(vol. in 1000 ac-ft)	Capacity	Contents	Capacity (%)	
Bear Lake	1302	15.7	1	
Causey	7.1	2.1	30	
Jordanelle	311	240.1	77	
Deer Creek	149.7	54	36	
East Canyon	49.5	23.9	48	
Echo	73.9	35.5	48	
Gunnison	20.3	0	0	
Hyrum	15.3	6.4	42	
Lost Creek	22.5	1.3	6	
Minersville	23.3	3.6	15	
Otter Creek	52.5	13.2	25	
Pine View	110.1	27.6	25 23	
Piute	71.8	16.4	23	
Rockport	60.9	30.4	50	
Sevier bridge	236	28	12	
* Utah Lake	870.9	405	47	
Willard	215	42.7	20	
Woodruff Narrows	55.8	6	11	
TOTAL	3627.3	951.9	26	
Flaming Gorge	3749	2606.1	70	
Lake Powell	24322	11486.8	47	
Moon Lake	36	13.7	38	
Red Fleet	25.7	12.9	50	
Scofield	65.8	12.8	19	
Starvation	165.3	123.1	74	
Steinaker	34.4	9.5	28	
Strawberry	1105.9	778.9	70	
Upper Stillwater	32.5	2.2	7	

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

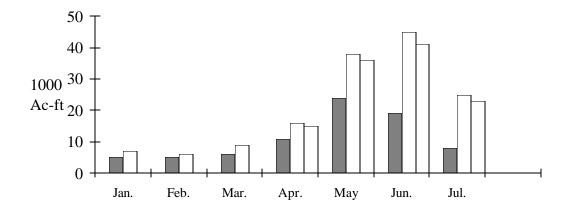
Total does not include missing site usable capacities

### MONTHLY STREAMFLOWS

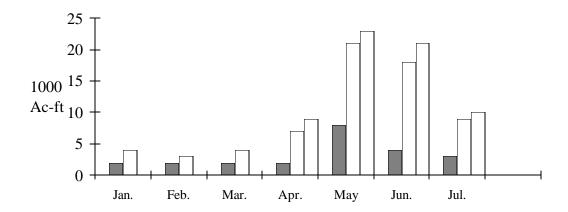
#### Weber Oakley, nr:



Logan - Logan, nr, State Dam, abv:

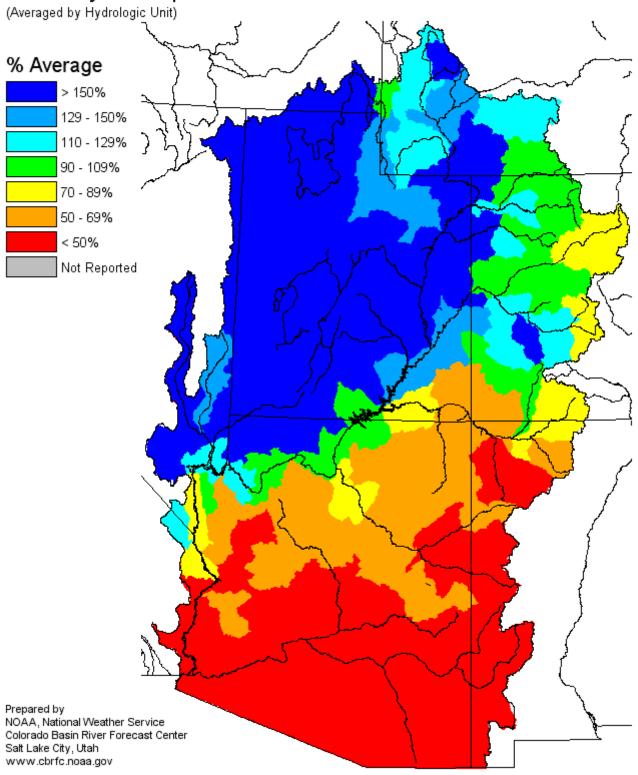


#### **Sevier - Hatch:**

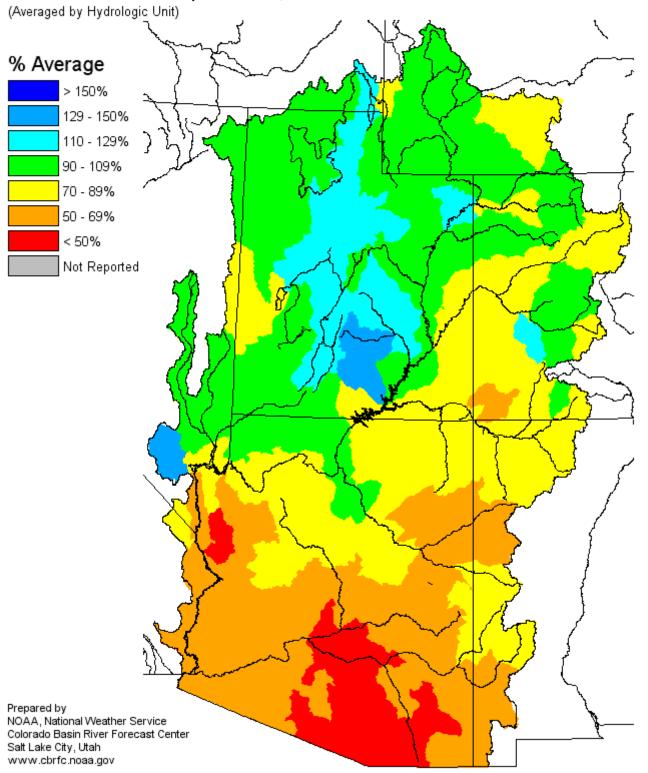


<sup>\*</sup> observed data unavailable

# Monthly Precipitation for December 2003



# Seasonal Precipitation, October 2003 - December 2003



#### 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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