

# WATER SUPPLY OUTLOOK

for the

# **EASTERN GREAT BASIN**

COLORADO BASIN RIVER FORECAST CENTER

NATIONAL WEATHER SERVICE, SALT LAKE CITY, UT

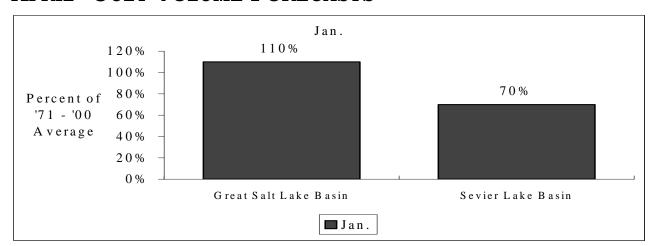


# JANUARY 1, 2006

## **SUMMARY**

Early season forecasts issued January 1 indicate near average April-July runoff volumes in the Great Salt Lake Basin and below average in the Sevier Lake Basin. Specifically, in the Great Salt Lake Basin runoff volumes are forecast to range from 100 to 125 percent of the 1971-2000 average and 60 to 80 percent of average in the Sevier Lake Basin. January 1 snowpack ranges from 90 to 190 percent of average in the Great Salt Lake Basin and 35 to 130 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 near average runoff in the Great Salt Lake Basin.

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

Bear River:

Near Average

Weber River:

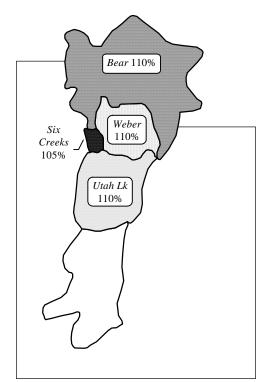
Near Average

Utah Lake:

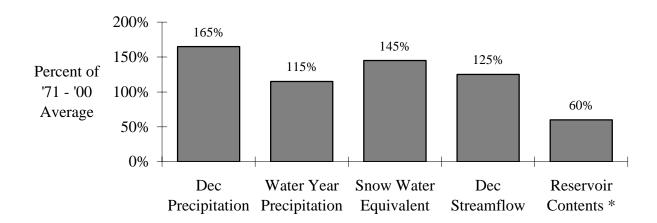
Near Average

Six Creeks:

Near Average



# BASIN CONDITIONS - JANUARY 1, 2006



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

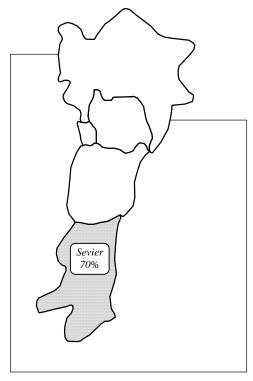
Specific site forecasts are listed beginning on page 4.

### SEVIER LAKE BASIN

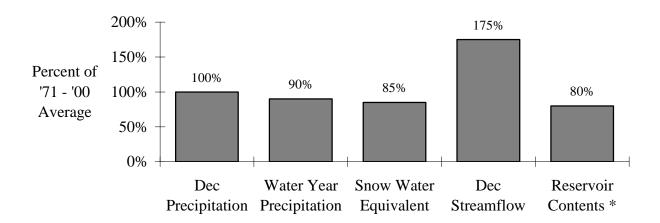
The January 1 water supply outlook is for below average April-July runoff volumes in the Sevier Lake Basin.

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

Sevier River: Below Average



# BASIN CONDITIONS - JANUARY 1, 2006



<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	124	110	163	85
	WOODRUFF NARROWS RES	150	110	210	88
BIG CK	RANDOLPH, NR	4.8	98	10.1	1.52
SMITHS FORK	BORDER, NR	120	117	157	83
BEAR	MONTPELIER, NR, STEWART DAM, B	265	113	405	152
LOGAN	LOGAN, NR, STATE DAM, ABV	136	108	200	83
BLACKSMITH FORK	HYRUM, NR, UP&L DAM, ABV	55	115	85	31
SMITH AND MOREHOUSE CK	OAKLEY, NR	37	109	48	26
WEBER	OAKLEY, NR	137	111	177	97
	ROCKPORT RES, WANSHIP, NR	151	113	205	96
CHALK CK	COALVILLE	47	104	72	22
WEBER	COALVILLE, NR	158	115	210	103
	ECHO RES, ECHO, AT	199	111	270	129
LOST CK	LOST CK RES, CROYDON, NR	18.4	105	32	8.5
EAST CANYON CK	EAST CANYON RES, MORGAN, NR	38	123	57	23
WEBER	GATEWAY	425	120	565	285
SF OGDEN	HUNTSVILLE, NR	69	108	99	39
OGDEN	PINEVIEW RES, OGDEN, NR	142	107	198	86
WHEELER CK	HUNTSVILLE, NR	7.3	116	10.3	4.3
SPANISH FORK	CASTILLA, NR	84	109	132	36
PROVO	WOODLAND, NR	116	113	152	68
	HAILSTONE, NR	125	115	170	68
	DEER CK RES	148	117	215	62
AMERICAN FORK	AMERICAN FORK, NR, UP PWRPLNT,	36	112	53	19.1
JORDAN	UTAH LAKE, PROVO, NR	355	109	535	146
LITTLE COTTONWOOD CK	SALT LAKE CITY, NR	42	105	55	29
BIG COTTONWOOD CK	SALT LAKE CITY, NR	40	105	54	26
CITY CK	SALT LAKE CITY, NR	8.9	102	13.7	4.1
EMIGRATION CK	SALT LAKE CITY, NR	4.9	109	8.7	1.12
MILLCK	SALT LAKE CITY, NR	7.1	101	10.5	3.7
DELL FK	LITTLE DELL RES	6.8	100	11.4	2.3
PARLEYS CK	SALT LAKE CITY, NR	17	102	27	6.8
VERNON CK	VERNON, NR	1.06	72	2.1	0.53
S WILLOW CK	GRANTSVILLE, NR	2.8	87	4.5	1.02
SETTLEMENT CK	TOOELE, NR	1.66	84	3.2	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	40	73	78	1.57
	KINGSTON, NR	62	70	118	21
EF SEVIER	KINGSTON, NR	26	68	52	0
CLEAR CK	SEVIER, NR, DIV, ABV	16	73	30	2
SEVIER	PIUTE RES, MARYSVALE, NR	87	69	170	32
	VERMILLION DAM	114	66	205	25
	SIGURD, NR	119	64	225	11.8
	GUNNISON, NR, SAN PITCH, BLO	170	61	385	28
SALINA CK *	SALINA	MB	0	0	0
CHICKEN CK	LEVAN, NR	2.5	56	6.4	0.63
OAK CK	OAK CITY, NR, LITTLE CK, ABV	1.16	71	2	0.51
BEAVER	BEAVER, NR	22	81	34	13.2
	MINERSVILLE RES, MINERSVILLE,	6.9	42	17.8	1
COAL CK	CEDAR CITY, NR	12.5	65	24	5

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)

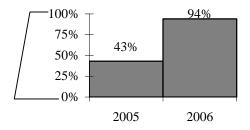
BN - below normal (70-89 percent of normal)

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	251.8	19
Causey	7.1	3.3	46
Jordanelle	311	279	90
Deer Creek	149.7	110.7	74
East Canyon	49.5	35.1	71
Echo	73.9	50	68
Gunnison	20.3	missing	-99
Hyrum	15.3	10.4	68
Lost Creek	22.5	15.3	68
Minersville	23.3	18.2	78
Otter Creek	52.5	41.5	79
Pine View	110.1	52.3	48
Piute	71.8	50.7	71
Rockport	60.9	38.1	63
Sevier bridge	236	189.3	80
* Utah Lake	870.9	841.1	97
Willard	215	181.3	84
Woodruff Narrows	55.8	30	54
TOTAL	2345.6	2198.1	94
Flaming Gorge	3749	3079.4	82
Lake Powell	24322	11576.3	48
Moon Lake	36	29.2	81
Red Fleet	25.7	21.2	82
Scofield	65.8	43.6	66
Starvation	165.3	137.4	83
Steinaker	34.4	27.6	80
Strawberry	1105.9	836	76
Upper Stillwater	32.5	missing	-99

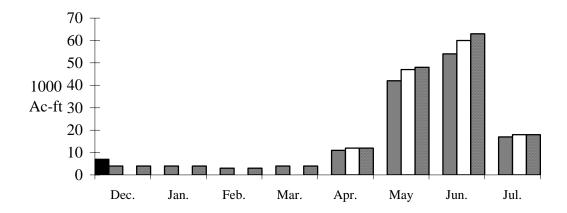
<sup>\*</sup> Usable capacity taken at compromise

Total does not include missing site usable capacities

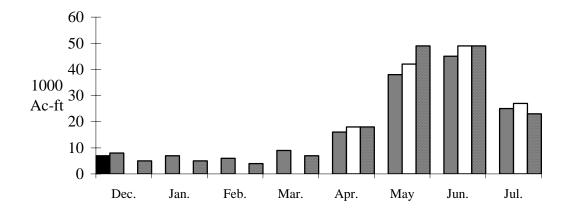
## MONTHLY STREAMFLOWS

 $\blacksquare$  2006 Water Year  $\; \blacksquare$  2005 Water Year  $\; \square$  30 Year Average  $\; \blacksquare$  2006 Forecast

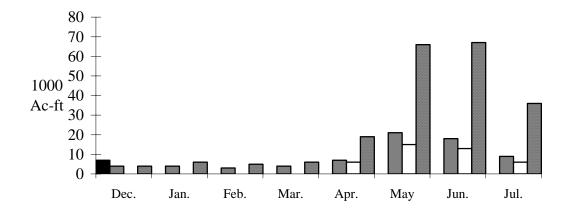
#### Weber Oakley, nr:



Logan - Logan, nr, State Dam, abv:

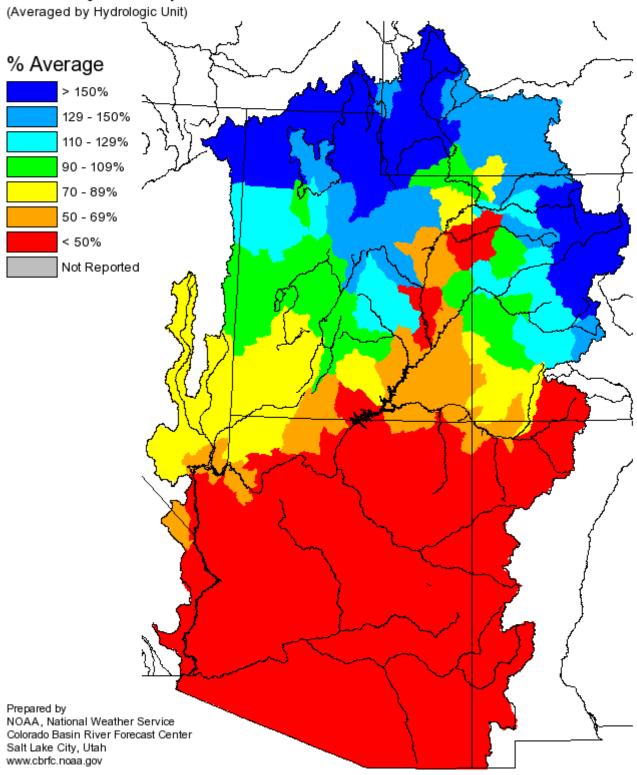


#### Sevier - Hatch:

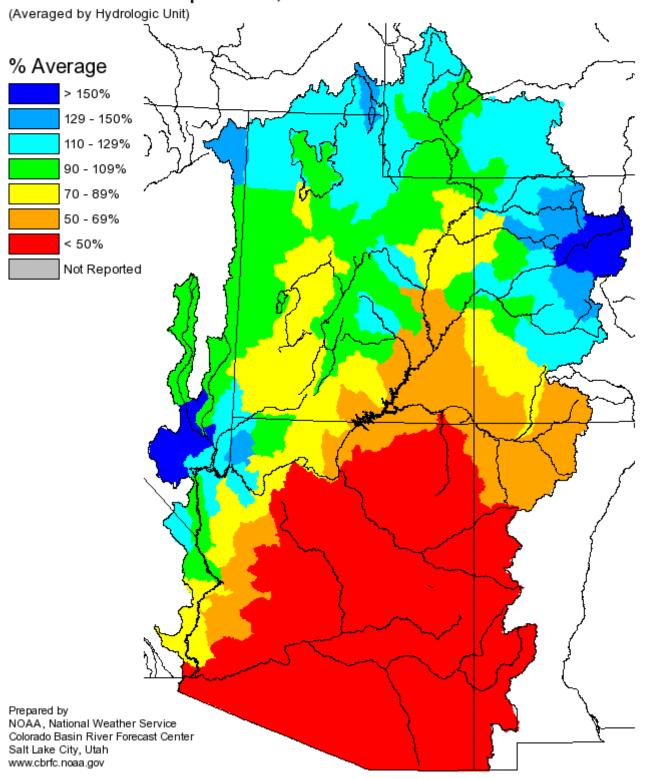


<sup>\*</sup> observed data unavailable

# Monthly Precipitation for December 2005



# Seasonal Precipitation, October 2005 - December 2005



#### 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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