

WATER SUPPLY OUTLOOK for the

EASTERN GREAT BASIN

COLORADO BASIN RIVER FORECAST CENTER

NATIONAL WEATHER SERVICE, SALT LAKE CITY, UT

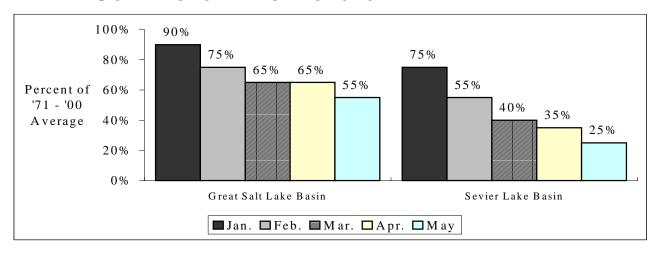


MAY 1, 2002

SUMMARY

Warm temperatures in early April initiated snowmelt throughout most of the eastern Great Basin with only minimal responses in streamflow. As of May 1st the Sevier Basin was nearly void of snow. The Great Salt Lake Basin was void of low elevation snow while from near 35 to 75 percent of average snowpack remained at most mid to high elevation sites. Forecasts were reduced, especially in the Sevier Basin. April-July runoff volumes are expected to range from near 45 to 75 percent of the 1971-2000 average over most of the Great Salt Lake Basin and 15 to 30 percent in the Sevier Basin.

APRIL - JULY VOLUME FORECASTS



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GREAT SALT LAKE BASIN

The May 1 water supply outlook is for below to 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:

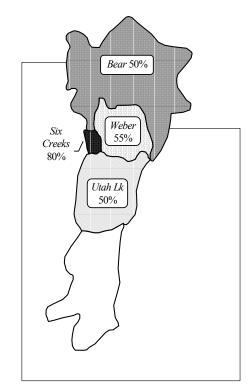
Much Below Average

Utah Lake:

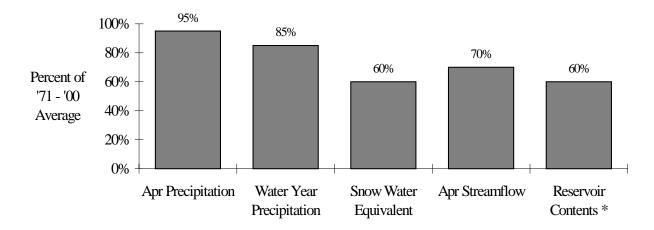
Much Below Average

Six Creeks:

Below Average



Basin Conditions - May 1, 2002



^{*} Percent usable capacity, not percent average contents.

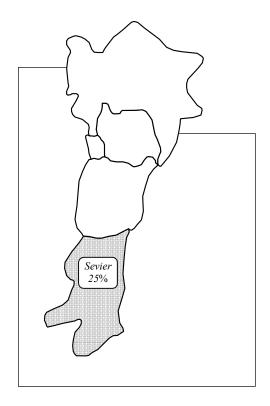
Specific site forecasts are listed beginning on page 4.

SEVIER LAKE BASIN

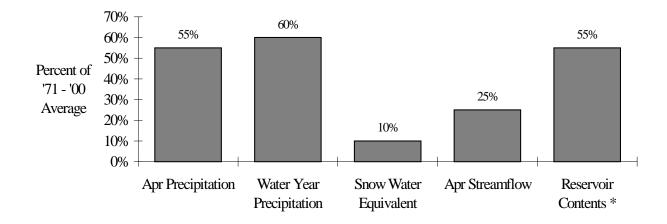
The May 1 water supply outlook is for much below average April-July runoff volumes in the Sevier Lake Basin.

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

Sevier River: Much Below Average



Basin Conditions - May 1, 2002



^{*} 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	60	52	70	55
	WOODRUFF NARROWS RES	74	49	114	50
	RANDOLPH, NR	55	48	105	4.6
	MONTPELIER, NR, STEWART DAM,	81	28	161	2.9
BIG CK	RANDOLPH, NR	2	53	5.6	0.1
SMITHS FORK	BORDER, NR	53	51	68	42
THOMAS FORK *	WYOMING-IDAHO STATE LINE, NR	MB			
MONTPELIER CK *	MONTPELIER, NR, IRRIGATORS WII	MB			
CUB *	PRESTON, NR	MB			
LOGAN	LOGAN, NR, STATE DAM, ABV	62	51	70	55
BLACKSMITH FORK	HYRUM, NR, UP&L DAM, ABV	26	49	31	21
SMITH AND MOREHOUSE CK	OAKLEY, NR	15	50	21	8.9
WEBER	OAKLEY, NR	74	60	91	59
	ROCKPORT RES, WANSHIP, NR	82	59	104	66
	COALVILLE, NR	79	58	101	57
	ECHO RES, ECHO, AT	96	53	141	56
	GATEWAY	190	54	265	124
CHALK CK	COALVILLE	26	58	40	13.5
LOST CK	LOST CK RES, CROYDON, NR	10	60	16.5	2.8
EAST CANYON CK	EAST CANYON RES, MORGAN, NR	18	58	28	9.3
SF OGDEN	HUNTSVILLE, NR	35	55	47	24
OGDEN	PINEVIEW RES, OGDEN, NR	78	59	109	47
WHEELER CK	HUNTSVILLE, NR	3	48	4.6	1.39
SPANISH FORK	CASTILLA, NR	28	36	66	7.6
PROVO	WOODLAND, NR	57	55	77	37
	HAILSTONE, NR	59	54	89	29
	DEER CK RES	64	51	106	34
AMERICAN FORK	AMERICAN FORK, NR, UP PWRPLN	15	47	21	9.4
JORDAN	UTAH LAKE, PROVO, NR	140	43	260	20
LITTLE COTTONWOOD CK	SALT LAKE CITY, NR	36	90	42	30
BIG COTTONWOOD CK	SALT LAKE CITY, NR	31	82	38	24
CITY CK	SALT LAKE CITY, NR	6.5	75	9.4	3.6
EMIGRATION CK	SALT LAKE CITY, NR	3.6	80	6.1	1.15
MILL CK	SALT LAKE CITY, NR	5.6	80	7.6	3.6
DELL FK	LITTLE DELL RES	5	74	7.9	2.1
PARLEYS CK	SALT LAKE CITY, NR	12	72	17.5	6.6
VERNON CK	VERNON, NR	0.4	30	0.58	0.21
S WILLOW CK	GRANTSVILLE, NR	0.7	22	2.5	0.03
SETTLEMENT CK	TOOELE, NR	0.5	22	0.64	0.41

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

Stream	Station	Most	Percent	Reas.	Reas.
		Probable	Avg.	Max	Min
SEVIER	HATCH	16	29	34	8
	KINGSTON, NR	27	30	58	14
	PIUTE RES, MARYSVALE, NR	32	25	89	6.8
	VERMILLION DAM	44	26	110	22
	SIGURD, NR	49	26	144	24
	GUNNISON, NR, SAN PITCH, BLO	77	28	290	35
EF SEVIER	KINGSTON, NR	10	26	29	2.2
CLEAR CK	SEVIER, NR, DIV, ABV	6	27	14.6	3
SALINA CK *	SALINA	MB			
CHICKEN CK	LEVAN, NR	0.6	12	1	
OAK CK	OAK CITY, NR, LITTLE CK, ABV	0.5	28	0.62	0.33
BEAVER	BEAVER, NR	3.9	14	5.4	3
	MINERSVILLE RES, MINERSVILLE,	2.4	14	2.7	2.2
COAL CK	CEDAR CITY, NR	3.2	17	5.5	2.6

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

AA - above average (111–130 percent of average)

NA - near average (90-110 percent of average)

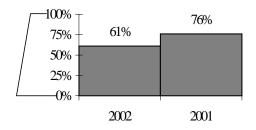
BA - below average (70-89 percent of average)

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

^{*} 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	1421	627	44
Causey	7.1	6.8	96
Jordanelle	311	242.4	78
Deer Creek	149.7	111	74
East Canyon	49.5	35.3	71
Echo	73.9	51	69
Gunnison	20.3	5.8	29 99
Hyrum	15.3	15.1	99
Lost Creek	22.5	9.8	44
Minersville	23.3	9.1	39
Otter Creek	52.5	40.1	76
Pine View	110.1	91.3	83
Piute	71.8	44.3	62
Rockport	60.9	32.9	54 57
Sevier bridge	236	134.9	
* Utah Lake	870.9	679.4	78
Willard	215	missing	missing
Woodruff Narrows	55.8	18.5	33
TOTAL	3551.6	2154.9	61
Flaming Gorge	3749	2820.3	75
Lake Powell	24322	16705	69
Moon Lake	36	18.1	50
Red Fleet	25.7	19.2	75
Scofield	65.8	33.5	51
Starvation	165.3	163.5	99
Steinaker	34.4	21.5	62
Strawberry	1105.9	906.8	82
Upper Stillwater	32.5	2.3	7

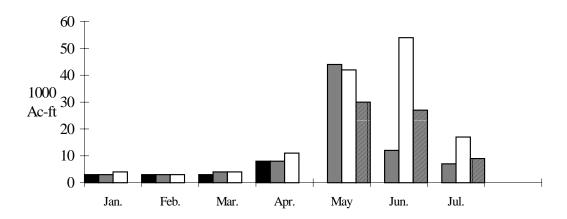
^{*} Usable capacity taken at compromise

Total does not include missing site usable capacities

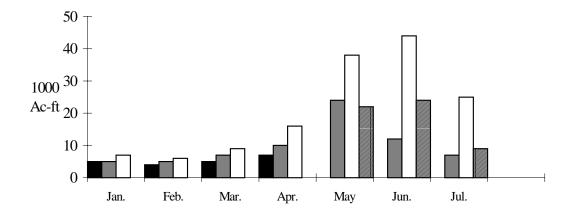
MONTHLY STREAMFLOWS

☐ 2002 Water Year ☐ 2001 Water Year ☐ 30 Year Average ☐ 2002 Forecast

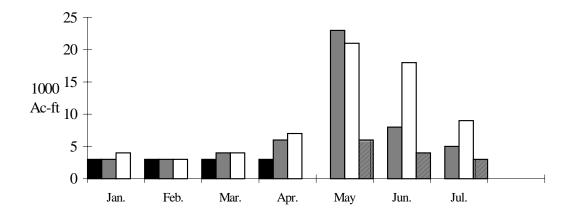
Weber Oakley, nr:



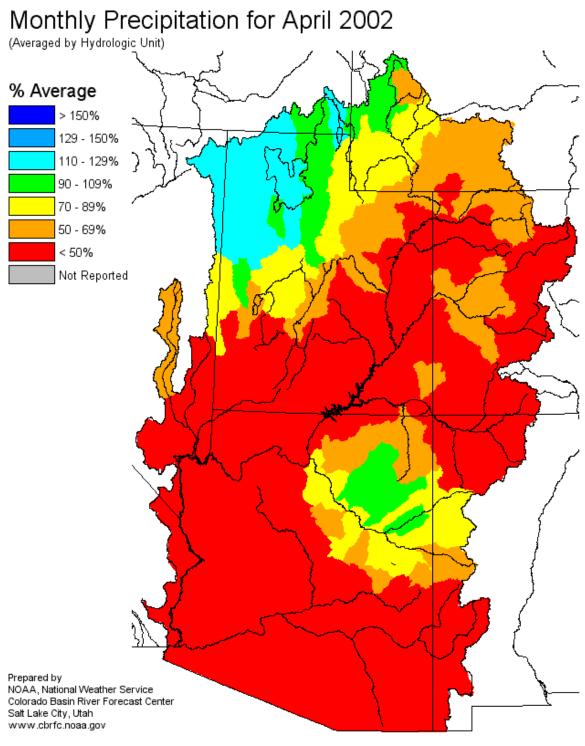
Logan - Logan, nr, State Dam, abv:



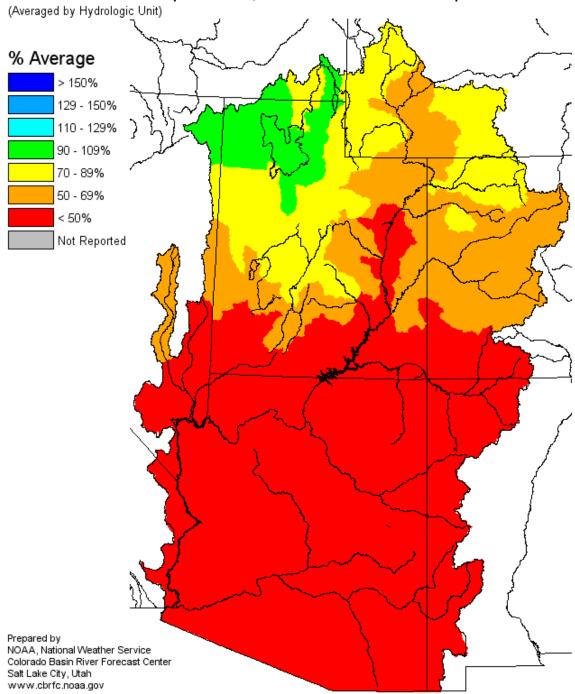
Sevier - Hatch:



^{*} observed data unavailable



Seasonal Precipitation, October 2001 - April 2002



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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