

# STATE OF UTAH GENERAL OUTLOOK

Feb 1, 2004

## SUMMARY

Last month it was superlatives, gushing euphoria and general optimism that we had a real chance of having a banner snowpack year. This month it is back to reality. January snowpacks were 120% to 140% of normal with almost half of that snowpack accumulated over the Christmas-New Years time frame. High pressure moved in and essentially shut off the snow. In fact, January accumulated just 39% to 60% of average snow increases with most of that happening in the first few days of the month. The result is snowpacks that are near average across the state with the exception of the Virgin – Escalante area which is at 79% of average. Even though snowpacks have declined 20% to 30% relative to last month, they are still 150% to 200% greater than last year. Average looks pretty good compared to the 30% to 50% of normal last year. Precipitation for January was much below average state wide, ranging from 48% to 65% of average, bringing seasonal precipitation, (Oct-Jan) to 94%. Soil moisture remains a concern as there was very little precipitation accumulation prior to the onset of snowpacks. This condition will persist until the melt season saturates the soils and in some cases, could take an above normal amount of snow. Soil moisture deficits range from 6 to 9 inches in the upper 24 inches of soil, similar to last year. Low reservoir storage is also a concern with total reservoir storage down 8% (428,000 AF) from last year. 428,000 AF would be the entire reservoir capacity of the Sevier River Basin and then some. Areas of greatest concern are the Bear and Sevier River basins with current storage of 3% and 21% respectively. Streamflow forecasts are scattered across the spectrum, ranging from 13% to 122% of average. Surface Water Supply Indexes range from 2% on the Bear River to 59% over the western part of the Uintah Basin.

## SNOWPACK

January first snowpacks as measured by the NRCS SNOTEL system range from 78% in southern Utah to 106% on the Utah Lake watershed. The lowest snowpacks are on the Escalante at 65% of average. With just 2 months remaining in the normal snowpack accumulation season, most snowpacks are near normal conditions. Given the soil moisture and reservoir storage deficits, Utah really needs a much above average snowpack year. Given maximum historical snowpack accumulation for February and March, Utah's April 1 snowpack would range between 122% to 166% of normal with only a very small probability that this could occur. Given the minimum accumulation for February and March, our April 1 snowpacks would range between 0% and 80% of normal. The likelihood of this occurrence is also very small.

## PRECIPITATION

Mountain precipitation during January was much below average (62%) statewide. In northern Utah precipitation ranged from 55% on the Uintahs to 66% on the Provo. Southern Utah had precipitation values ranging from 48% in the southwest to 63% over the southeast watersheds. This brings the seasonal accumulation (Oct-Jan) to 94% of average statewide.

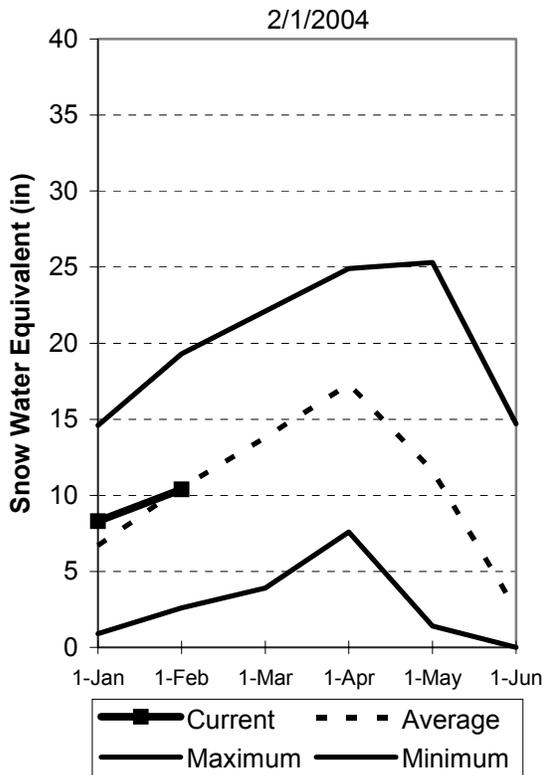
## RESERVOIRS

Storage in 41 of Utah's key irrigation reservoirs is at 39% of capacity, up 1% from last month. This is down substantially (8%) from last year indicating heavy use of reservoir storage to make up the streamflow deficit. Most reservoir operators are utilizing a conservative strategy, storing as much water as possible.

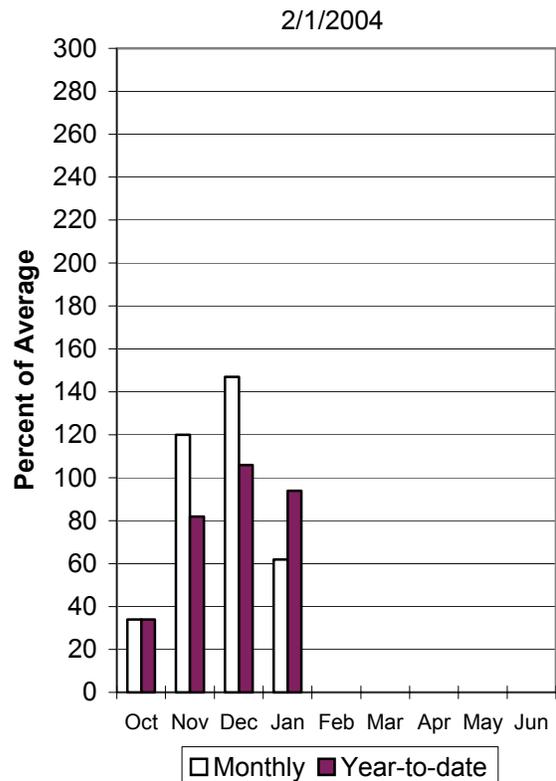
## STREAMFLOW

Snowmelt streamflows are expected to be much below to near average across the entire state of Utah this year. Forecast streamflows range from 13% on the Bear at Stewart dam to 122% on Wheeler Creek. Most flows are forecast to be in the 60% to 90% range. Overall water supply conditions are below to near normal.

### Mountain Snowpack



### Precipitation

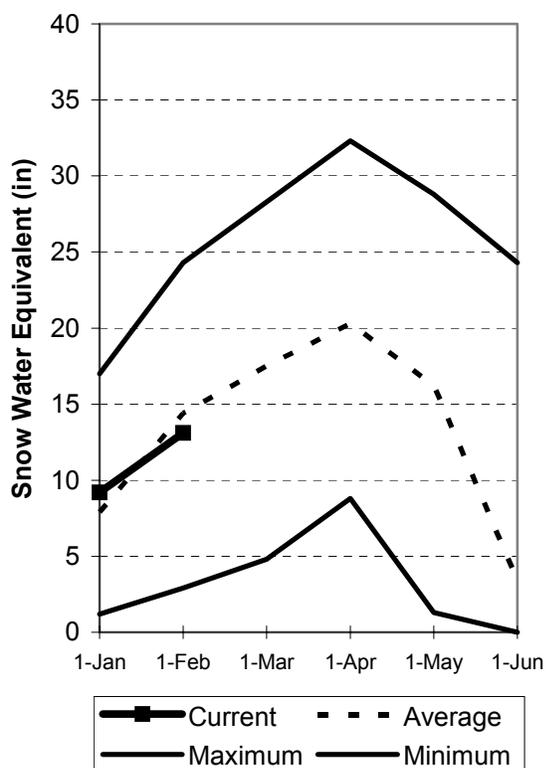


## Bear River Basin Jan 1, 2004

Snowpacks on the Bear River Basin are near average at 91% of normal, about 159% of last year and down 25% relative to last month. Specific sites range from 77% to 108% of normal. January precipitation was much below average at 66%, which brings the seasonal accumulation (Oct-Jan) to 91% of average. Soil moisture levels in runoff producing areas indicate about 7 inches of deficit in the upper 2 feet of soil. Forecast streamflows are for much below normal (13%) to below normal volumes (78%) this spring. Reservoir storage is extremely low at 3% of capacity. The Surface Water Supply Index is at 2% for the Bear River, or 98% of years have had more total water available. Water supply conditions are much below normal due to low reservoir storage and soil moisture.

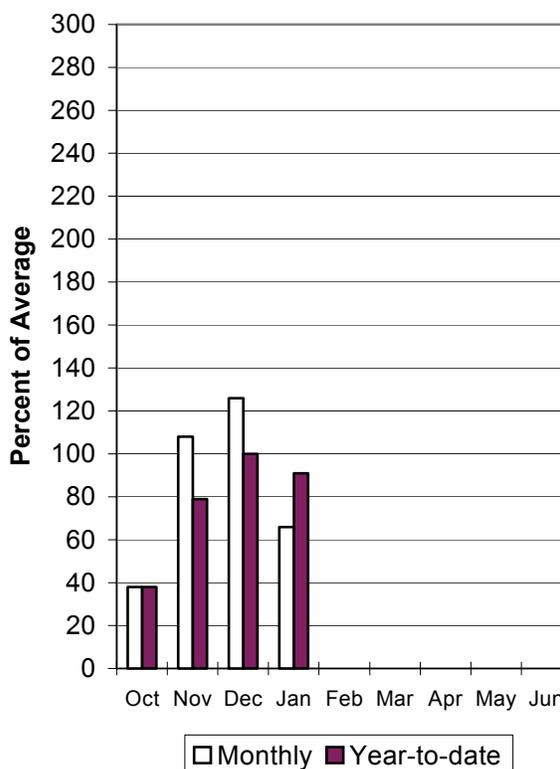
### Bear River Snowpack

2/1/2004



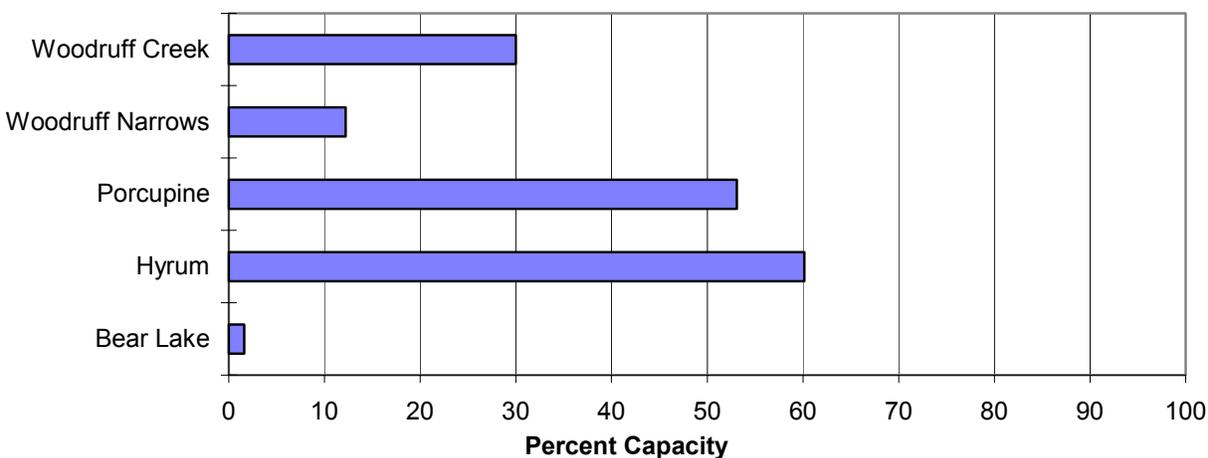
### Bear River Precipitation

2/1/2004



### Reservoir Storage

2/1/2004



BEAR RIVER BASIN  
Streamflow Forecasts - February 1, 2004

Forecast Point	Forecast Period	Future Conditions				Wetter		30-Yr Avg. (1000AF)
		90% (1000AF)	70% (1000AF)	Chance Of Exceeding * 50% (Most Probable) (1000AF) (% AVG.)		30% (1000AF)	10% (1000AF)	
Bear River nr UT-WY State Line	APR-JUL	51	71	85	75	99	119	113
Bear River ab Reservoir nr Woodruff	APR-JUL	10.0	42	64	47	86	118	136
Big Creek nr Randolph	APR-JUL	0.75	1.14	1.90	39	2.71	3.81	4.90
Smiths Fork nr Border	APR-JUL	50	68	80	78	92	110	103
Bear River at Stewart Dam	APR-JUL	9.0	16.0	29	13	45	76	227
Little Bear River at Paradise	APR-JUL	18.7	28	36	78	45	59	46
Logan River nr Logan combined flow	APR-JUL	58	78	93	74	109	136	126
Blacksmith Fork nr Hyrum	APR-JUL	18.8	28	36	75	45	59	48

BEAR RIVER BASIN  
Reservoir Storage (1000 AF) - End of January

BEAR RIVER BASIN  
Watershed Snowpack Analysis - February 1, 2004

Reservoir	Usable Capacity	Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
BEAR LAKE	1302.0	21.1	358.2	---	BEAR RIVER, UPPER (abv Ha	6	140	86
HYRUM	15.3	9.2	6.7	10.4	BEAR RIVER, LOWER (blw Ha	8	167	100
PORCUPINE	11.3	6.0	6.7	4.4	LOGAN RIVER	4	169	98
WOODRUFF NARROWS	57.3	7.0	7.0	25.2	RAFT RIVER	1	201	103
WOODRUFF CREEK	4.0	1.2	2.5	---	BEAR RIVER BASIN	14	157	95

\* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

The average is computed for the 1971-2000 base period.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.

(2) - The value is natural volume - actual volume may be affected by upstream water management.

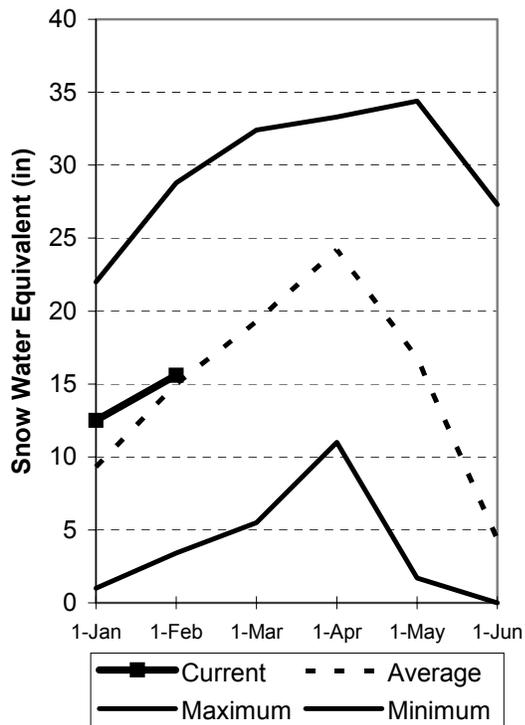
# Weber and Ogden River Basins

Feb 1, 2004

Snowpack on the Weber and Ogden Watersheds is near normal at 104% of average, about 182% of last year and down 30% relative to last month. Individual sites range from 67% to 155% of average. January precipitation was much below average at 65% bringing the seasonal accumulation (Oct-Jan) to 91% of average. Soil moisture levels in runoff producing areas indicate about 7 inches of deficit in the upper 2 feet of soil. Streamflow forecasts range from 56% to 122% of average. Reservoir storage is at 32% of capacity, about 12% less than last year. The Surface Water Supply Index is at 11% for the Weber River and at 25% for the Ogden River. Overall water supply conditions are below normal due to low reservoir storage and soil moisture conditions.

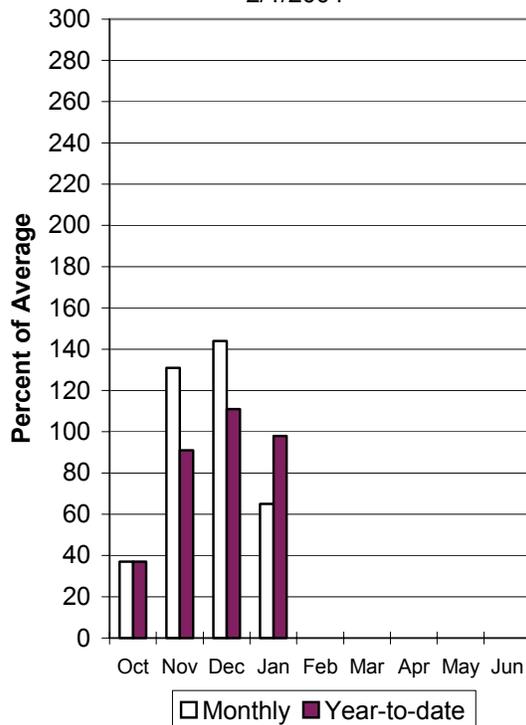
## Weber River Snowpack

2/1/2004



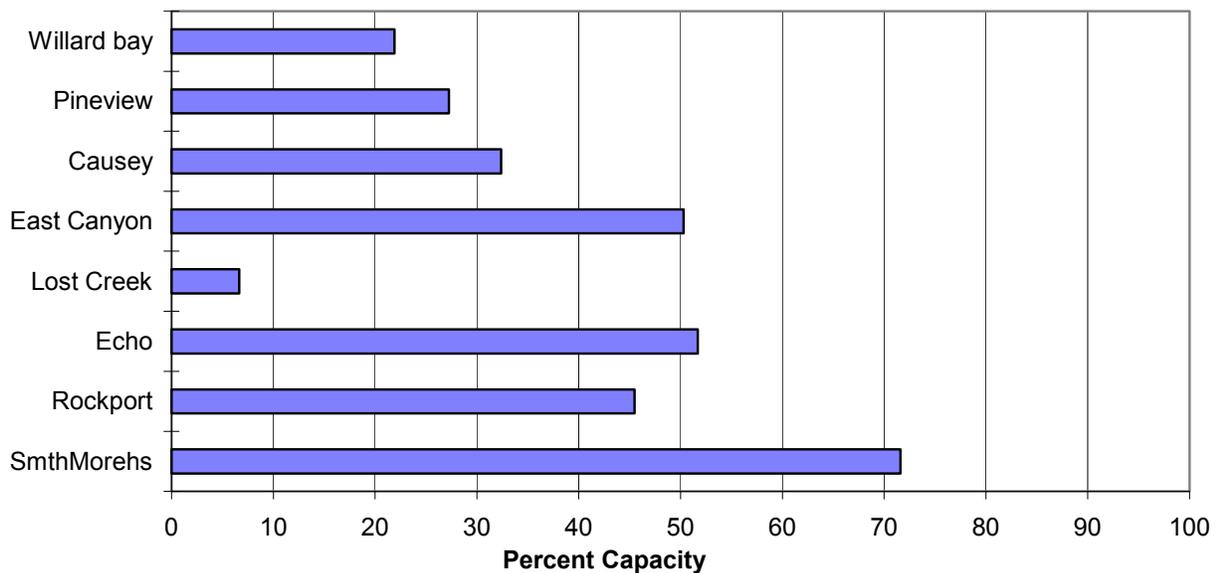
## Weber River Precipitation

2/1/2004



## Reservoir Storage

2/1/2004



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WEBER & OGDEN WATERSHEDS in Utah  
Streamflow Forecasts - February 1, 2004

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Forecast Point	Forecast Period	Future Conditions						30-Yr Avg. (1000AF)
		<<===== Drier =====>>		===== Wetter =====>>				
		90% (1000AF)	70% (1000AF)	50% (Most Probable) (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	
Smith & Morehouse Res inflow	APR-JUL	13.1	18.0	22	65	26	31	34
Weber River nr Oakley	APR-JUL	45	64	77	63	90	109	123
Rockport Reservoir inflow	APR-JUL	41	66	83	62	100	125	134
Weber River nr Coalville	APR-JUL	40	66	84	61	102	128	137
Chalk Creek at Coalville	APR-JUL	5.7	17.2	25	56	33	44	45
Echo Reservoir inflow	APR-JUL	51	86	109	61	132	167	179
Lost Creek Reservoir inflow	APR-JUL	4.7	8.1	11.0	63	14.3	19.9	17.6
East Canyon Reservoir inflow	APR-JUL	15.1	20	24	77	28	35	31
Weber River at Gateway	APR-JUL	130	199	245	69	291	361	355
SF Ogden River nr Huntsville	APR-JUL	25	40	50	78	60	75	64
Pineview Reservoir inflow	APR-JUL	49	79	99	74	119	149	133
Wheeler Creek nr Huntsville	APR-JUL	5.00	6.60	7.70	122	8.80	10.40	6.30

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WEBER & OGDEN WATERSHEDS in Utah  
Reservoir Storage (1000 AF) - End of January

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WEBER & OGDEN WATERSHEDS in Utah  
Watershed Snowpack Analysis - February 1, 2004

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Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
CAUSEY	7.1	2.3	2.0	2.8	OGDEN RIVER	4	194	104
EAST CANYON	49.5	24.9	28.5	35.4	WEBER RIVER	9	180	103
ECHO	73.9	38.2	30.6	50.2	WEBER & OGDEN WATERSHEDS	12	186	104
LOST CREEK	22.5	1.5	6.1	14.0				
PINEVIEW	110.1	30.0	42.0	51.7				
ROCKPORT	60.9	27.7	32.5	34.3				
WILLARD BAY	215.0	47.1	101.0	151.6				

\* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

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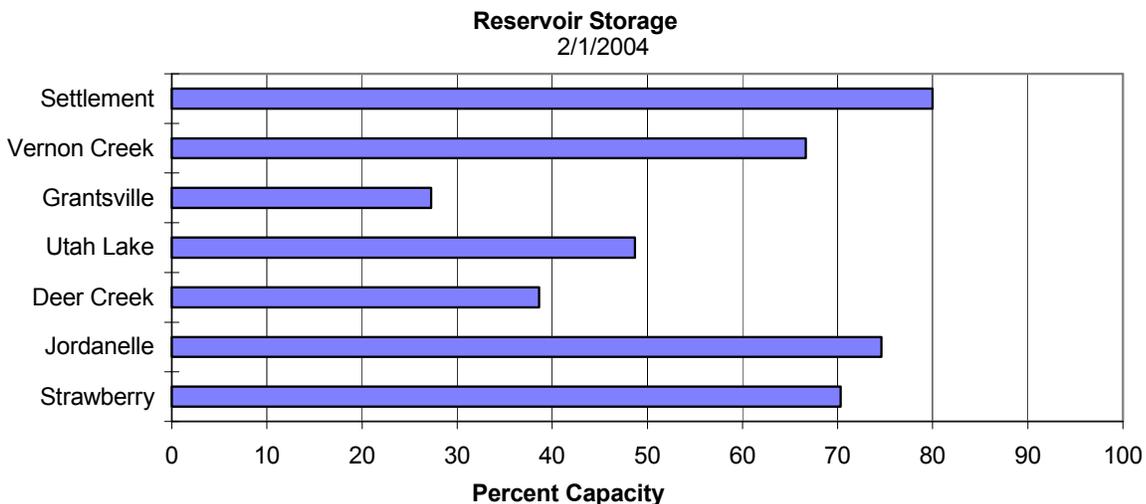
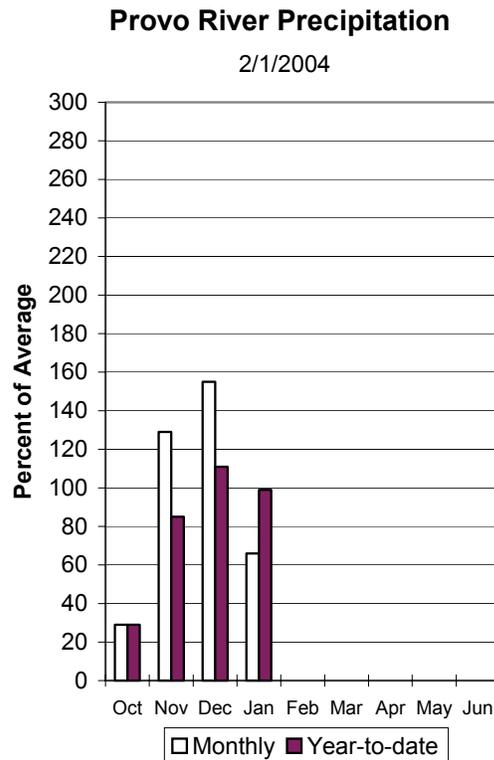
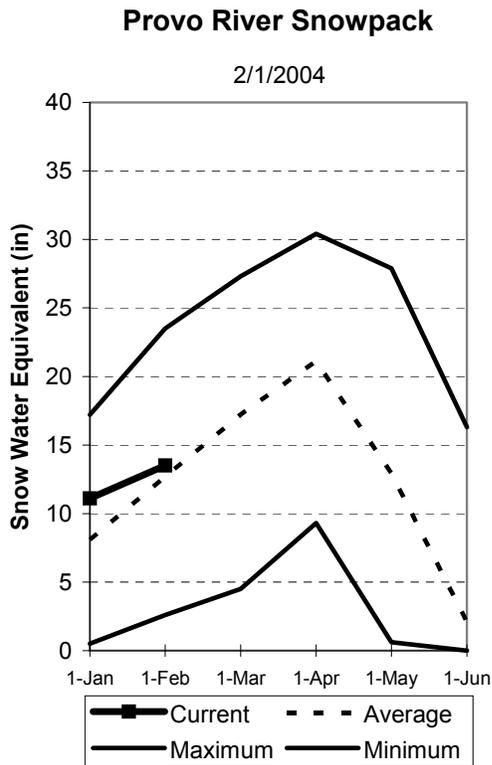
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(2) - The value is natural volume - actual volume may be affected by upstream water management.

## Utah Lake, Jordan River & Tooele Valley Basins

### Feb 1, 2004

Snowpacks over these watersheds are at 106% of average, 201% of last year and down 29% relative to last month. The upper Provo area is at 96% of average. Individual sites range from 81% to 138% of average. December precipitation was much below average at 66%, bringing the seasonal accumulation (Oct-Jan) to 99% of average. Soil moisture levels in runoff producing areas indicate about 6.5 inches of deficit in the upper 2 feet of soil. Forecast streamflows range from 54% to 105% of average. Reservoir storage is at 61% of capacity, 4% less than last year. The Surface Water Supply Index is at 9%, or 91% of years would have more total water available. General water supply conditions are below normal due to low reservoir storage and soil moisture.



UTAH LAKE, JORDAN RIVER & TOOELE VALLEY  
Streamflow Forecasts - February 1, 2004

Forecast Point	Forecast Period	Future Conditions						30-Yr Avg. (1000AF)
		<<===== Drier =====>>		===== Wetter =====>>				
		90% (1000AF)	70% (1000AF)	50% (Most Probable) (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	
Spanish Fork River nr Castilla	APR-JUL	7.7	33	57	74	81	107	77
Provo River nr Woodland	APR-JUL	34	54	67	65	80	100	103
Provo River nr Hailstone	APR-JUL	26	52	68	62	84	110	109
Provo R blw Deer Creek Dam	APR-JUL	24	62	88	70	114	152	126
American Fk R nr American Fk	APR-JUL	13.4	21	25	78	29	36	32
Utah Lake inflow	APR-JUL	68	169	240	74	311	410	325
Little Cottonwood Ck nr SLC	APR-JUL	19.6	26	30	75	34	41	40
Big Cottonwood Ck nr SLC	APR-JUL	15.2	23	27	71	31	39	38
Mill Creek nr SLC	APR-JUL	1.40	2.79	4.00	57	5.21	7.00	7.00
Parley's Creek nr SLC	APR-JUL	2.0	7.2	11.0	66	14.8	20	16.7
Dell Fork nr SLC	APR-JUL	1.02	2.28	3.90	57	5.52	8.00	6.80
Emigration Creek nr SLC	APR-JUL	0.00	1.09	2.50	56	3.91	5.80	4.50
City Creek nr SLC	APR-JUL	1.39	2.99	4.70	54	6.41	8.90	8.70
Vernon Creek nr Vernon	APR-JUL	0.61	0.86	1.10	74	1.40	1.99	1.48
Settlement Creek nr Tooele	APR-JUL	0.79	1.12	1.40	71	1.72	2.27	1.97
South Willow Creek nr Grantsville	APR-JUL	1.83	2.80	3.40	105	4.00	5.00	3.23

UTAH LAKE, JORDAN RIVER & TOOELE VALLEY  
Reservoir Storage (1000 AF) - End of January

UTAH LAKE, JORDAN RIVER & TOOELE VALLEY  
Watershed Snowpack Analysis - February 1, 2004

Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
DEER CREEK	149.7	57.8	75.8	104.8	PROVO RIVER & UTAH LAKE	7	189	96
GRANTSVILLE	3.3	0.9	1.4	1.8	PROVO RIVER	4	193	96
SETTLEMENT CREEK	1.0	0.8	0.6	0.6	JORDAN RIVER & GREAT SALT	6	220	114
STRAWBERRY-ENLARGED	1105.9	777.7	811.2	642.2	TOOELE VALLEY WATERSHEDS	3	202	112
UTAH LAKE	870.9	424.1	464.4	790.9	UTAH LAKE, JORDAN RIVER &	16	205	106
VERNON CREEK	0.6	0.4	0.5	---				

\* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

The average is computed for the 1971-2000 base period.

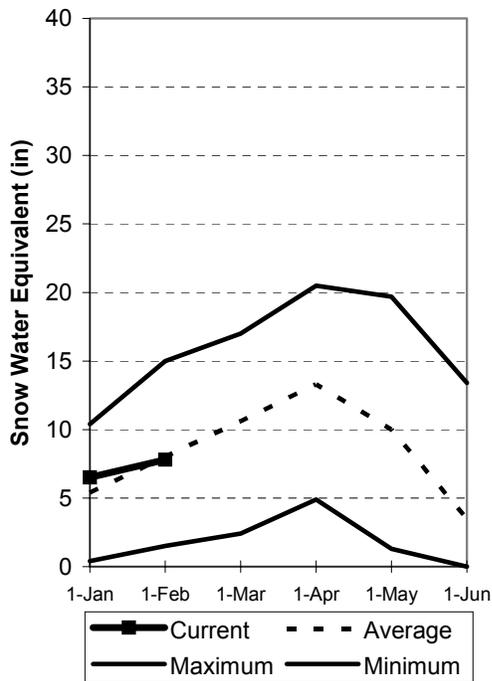
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## Uintah Basin and Dagget SCD's Feb 1, 2004

Snowpacks across the Uintah Basin and North Slope areas are near average at 98%, which is 164% of last year, down 23% relative to last month. The North Slope ranges from 68% to 119% and the Uintah Basin ranges from 86% to 124% of average. Precipitation during January was much below average at 55% bringing the seasonal accumulation (Oct-Jan) to 92% of average. Soil moisture levels in runoff producing areas indicate about 7 inches of deficit in the upper 2 feet of soil. Reservoir storage is at 70% of capacity, 2% less than last year. The Surface Water Supply Index for the western area is 59% and for the eastern area it is 46% indicating average or better conditions. Springtime runoff conditions are near normal with the exception of soil moisture.

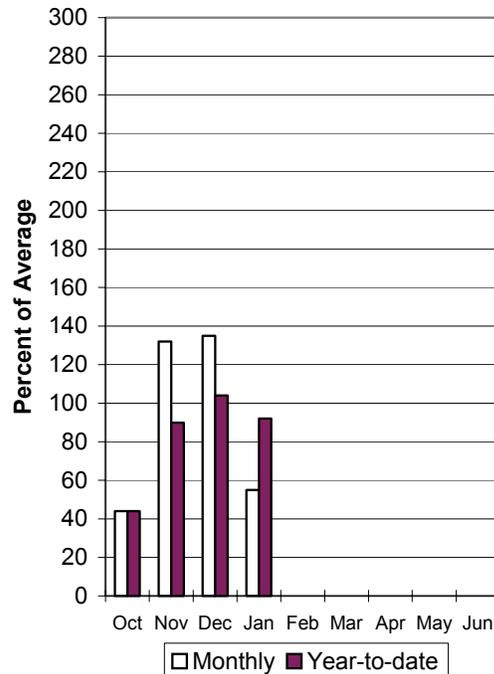
### Uintahs Snowpack

2/1/2004

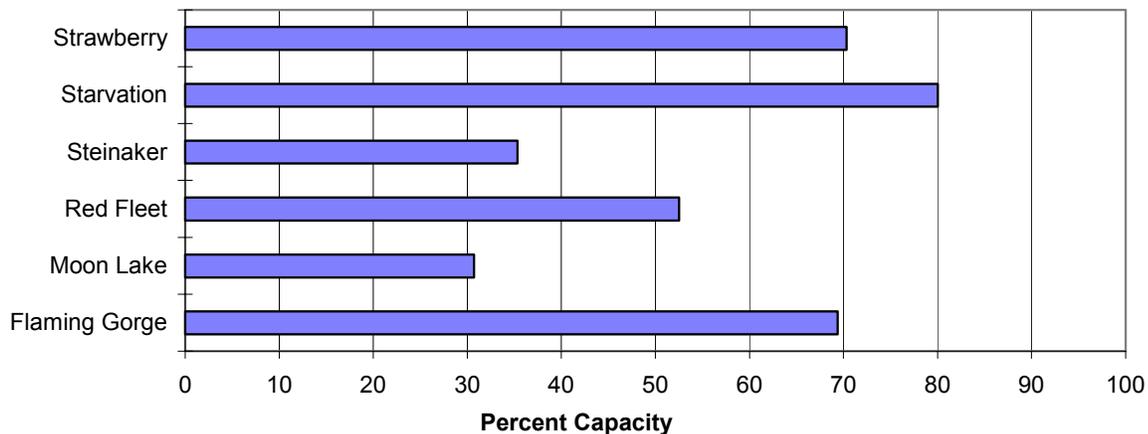


### Uintahs Precipitation

2/1/2004



### Reservoir Storage 2/1/2004



UINTAH BASIN & DAGGET SCD'S  
Streamflow Forecasts - February 1, 2004

Forecast Point	Forecast Period	Future Conditions						30-Yr Avg. (1000AF)
		<<===== Drier =====>>		===== Wetter =====>>				
		90% (1000AF)	70% (1000AF)	Chance Of Exceeding * 50% (Most Probable) (1000AF) (% AVG.)		30% (1000AF)	10% (1000AF)	
Blacks Fork nr Robertson	APR-JUL	47	65	77	81	89	107	95
EF of Smiths Fork nr Robertson	APR-JUL	17.2	20	23	74	26	31	31
Flaming Gorge Reservoir Inflow	APR-JUL	515	730	880	74	1030	1250	1190
BIG BRUSH CK abv Red Fleet Resv	APR-JUL	14.8	19.0	22	105	25	29	21
Ashley Creek nr Vernal	APR-JUL	27	44	55	106	66	83	52
WF DUCHESNE RIVER nr Hanna	APR-JUL	13.2	18.2	22	92	26	33	24
DUCHESNE R nr Tabiona	APR-JUL	65	81	92	88	103	119	105
UPPER STILLWATER RESV inflow	APR-JUL	44	59	70	85	81	96	82
ROCK CK nr Mountain Home	APR-JUL	51	65	74	83	83	97	89
DUCHESNE R abv Knight Diversion	APR-JUL	94	130	155	82	180	217	188
STRAWBERRY RES nr Soldier Springs	APR-JUL	31	44	55	93	67	86	59
CURRANT CREEK RESV Inflow	APR-JUL	14.8	19.1	22	88	25	30	25
STARVATION RESERVOIR inflow	APR-JUL	53	84	105	87	126	157	121
Lake Fork River abv Moon Lake	APR-JUL	40	52	61	90	70	82	68
Yellowstone River nr Altonah	APR-JUL	30	46	56	90	66	82	62
DUCHESNE R at Myton	APR-JUL	86	157	205	79	255	325	260
Whiterocks River nr Whiterocks	APR-JUL	17.0	37	50	89	63	83	56
DUCHESNE R nr Randlett	APR-JUL	33	139	240	74	340	490	325

UINTAH BASIN & DAGGET SCD'S  
Reservoir Storage (1000 AF) - End of January

UINTAH BASIN & DAGGET SCD'S  
Watershed Snowpack Analysis - February 1, 2004

Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
FLAMING GORGE	3749.0	2601.0	2626.0	2966.0	UPPER GREEN RIVER in UTAH	6	152	90
MOON LAKE	49.5	15.2	18.9	27.9	ASHLEY CREEK	2	213	113
RED FLEET	25.7	13.5	11.1	18.0	BLACK'S FORK RIVER	2	122	76
STEINAKER	33.4	11.8	6.0	21.6	SHEEP CREEK	1	150	68
STARVATION	165.3	132.3	127.0	132.3	DUCHESNE RIVER	11	169	101
STRAWBERRY-ENLARGED	1105.9	777.7	811.2	642.2	LAKE FORK-YELLOWSTONE CRE	4	155	95
					STRAWBERRY RIVER	4	190	105
					UINTAH-WHITEROCKS RIVERS	2	158	107
					UINTAH BASIN & DAGGET SCD	17	164	98

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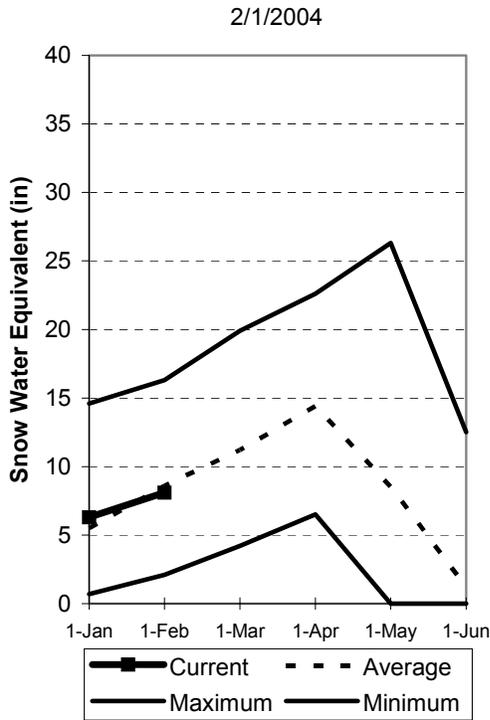
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# Carbon, Emery, Wayne, Grand and San Juan Co.

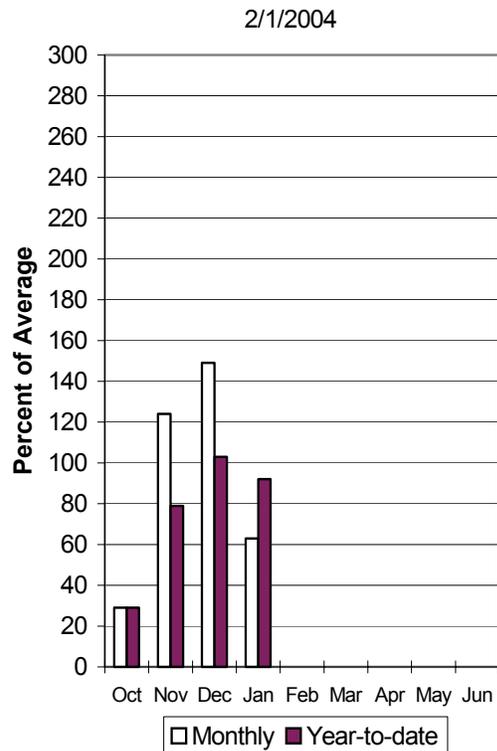
## Feb 1, 2004

Snowpacks in this region are near normal at 93% of average, about 152% of last year, down 21% relative to last month. Individual sites range from 53% to 116% of average. Precipitation during January was much below average at 63%, bringing the seasonal accumulation (Oct-Jan) to 92% of normal. Soil moisture levels in runoff producing areas indicate about 7 inches of deficit in the upper 2 feet of soil. Forecast streamflows range from 74% to 114% of average. Reservoir storage is at 37% of capacity, up 5% from last year. Surface Water Supply Indices for the area are: Price 28%, (below normal) San Rafael area 52% (average) and Moab 56% (average). General runoff and water supply conditions are below to near normal due to low reservoir storage and soil moisture.

### Southeast Utah Snowpack

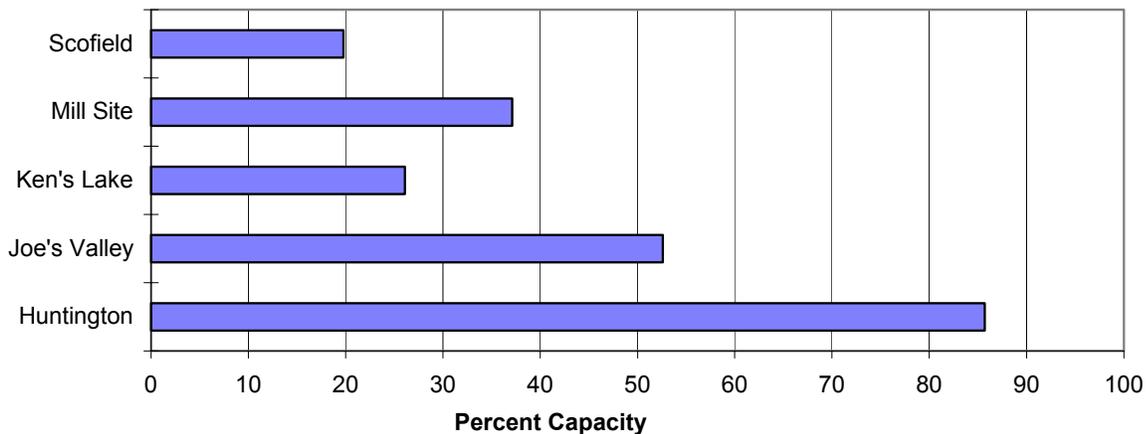


### Southeast Utah Precipitation



### Reservoir Storage

2/1/2004



CARBON, EMERY, WAYNE, GRAND, & SAN JUAN Co.  
Streamflow Forecasts - February 1, 2004

Forecast Point	Forecast Period	Future Conditions				Wetter		30-Yr Avg. (1000AF)
		90% (1000AF)	70% (1000AF)	50% (Most Probable) (1000AF)	Chance Of Exceeding * (% AVG.)	30% (1000AF)	10% (1000AF)	
Gooseberry Creek nr Scofield	APR-JUL	5.2	8.3	10.3	87	12.3	15.4	11.9
Scofield Reservoir inflow	APR-JUL	28	36	42	91	48	56	46
White River blw Tabbyune Creek	APR-JUL	5.9	10.0	13.4	77	17.3	24	17.4
Green River at Green River, UT	APR-JUL	1420	2110	2580	81	3050	3740	3170
Electric Lake inflow	APR-JUL	5.7	8.9	11.6	74	14.8	21	15.7
HUNTINGTON CK nr Huntington	APR-JUL	19.8	30	37	74	44	54	50
JOE'S VALLEY RESV Inflow	APR-JUL	25	40	50	86	60	75	58
Ferron Creek nr Ferron	APR-JUL	21	29	34	87	40	50	39
Colorado River nr Cisco	APR-JUL	2140	3130	3800	82	4470	5460	4650
Mill Creek at Sheley Tunnel nr Moab	APR-JUL	2.50	4.40	5.70	114	7.00	8.90	5.00
Seven Mile Creek nr Fish Lake	APR-JUL	2.70	5.40	7.20	103	9.00	11.70	7.00
Muddy Creek nr Emery	APR-JUL	7.0	13.7	18.3	92	23	30	19.9
North Ck ab R.S. nr Monticello	MAR-JUL	0.01	0.31	1.03	106	2.16	4.57	0.97
South Ck ab Lloyd's Res nr Monticell	MAR-JUL	0.56	1.06	1.50	110	2.01	2.90	1.37
Recapture Ck bl Johnson Ck nr Blandi	MAR-JUL	1.40	3.90	5.50	109	7.10	9.60	5.05
San Juan River nr Bluff	APR-JUL	820	1100	1290	105	1480	1760	1230

CARBON, EMERY, WAYNE, GRAND, & SAN JUAN Co.  
Reservoir Storage (1000 AF) - End of January

CARBON, EMERY, WAYNE, GRAND, & SAN JUAN Co.  
Watershed Snowpack Analysis - February 1, 2004

Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
HUNTINGTON NORTH	4.2	3.6	3.7	2.8	PRICE RIVER	3	147	90
JOE'S VALLEY	61.6	32.4	21.8	41.2	SAN RAFAEL RIVER	3	141	92
KEN'S LAKE	2.3	0.6	0.7	1.1	MUDDY CREEK	1	143	102
MILL SITE	16.7	6.2	8.7	78.8	FREMONT RIVER	3	114	79
SCOFIELD	65.8	13.0	13.6	33.8	LASAL MOUNTAINS	1	195	103
					BLUE MOUNTAINS	1	289	116
					WILLOW CREEK	1	230	108
					CARBON, EMERY, WAYNE, GRA	13	152	93

\* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

The average is computed for the 1971-2000 base period.

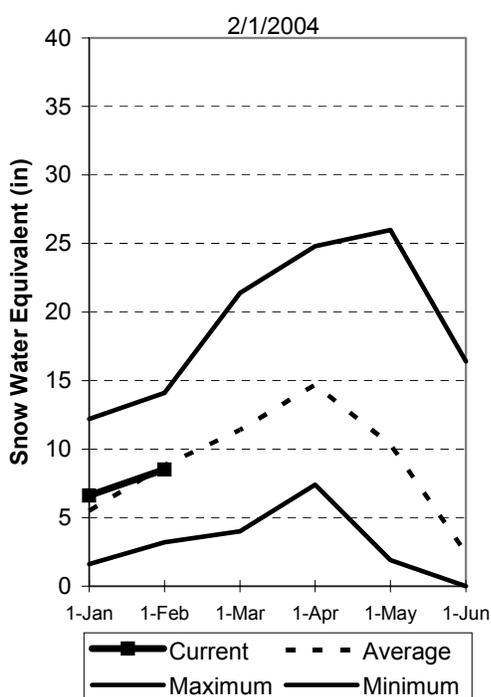
- (1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
- (2) - The value is natural volume - actual volume may be affected by upstream water management.

## Sevier and Beaver River Basins

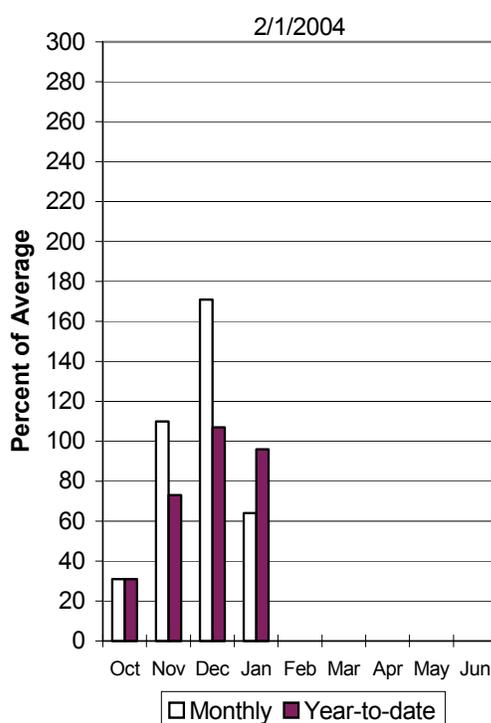
### Feb 1, 2004

Snowpacks on the Sevier River Basin are near normal at 96% of average, about 177% of last year, down 24% relative to last month. Individual sites range from 73% to 110% of average. Precipitation during January was much below average at 64% of normal, bringing the seasonal accumulation (Oct-Jan) to 96% of average. Soil moisture levels in runoff producing areas indicate about 7 inches (Sevier) and 9 inches (Beaver) of deficit in the upper 2 feet of soil. Streamflow forecasts range from 30% to 77% of average. Reservoir storage is at 21% of capacity, 5% less than last year. Surface Water Supply Indices are: Upper Sevier 24%, Lower Sevier 22% and Beaver 32%. Water supply conditions remain below normal due to low reservoir storage and soil moisture.

### Sevier River Snowpack

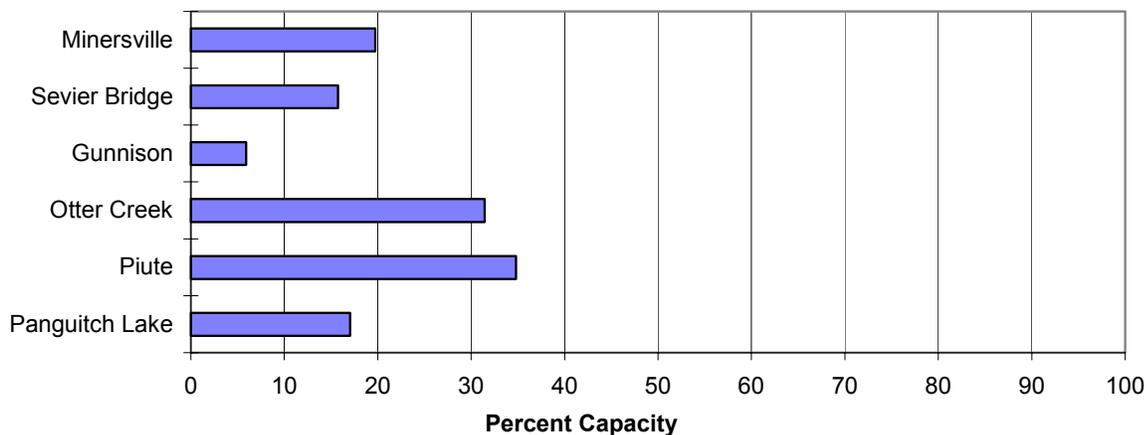


### Sevier River Precipitation



### Reservoir Storage

2/1/2004



SEVIER & BEAVER RIVER BASINS  
Streamflow Forecasts - February 1, 2004

Forecast Point	Forecast Period	Future Conditions						30-Yr Avg. (1000AF)
		<<===== Drier =====>>		===== Wetter =====>>				
		90% (1000AF)	70% (1000AF)	50% (Most Probable) (1000AF)	30% (1000AF)	10% (1000AF)	Chance Of Exceeding * (% AVG.)	
Sevier River at Hatch	APR-JUL	7.1	26	36	66	46	65	55
Sevier River nr Kingston	APR-JUL	15.1	40	54	61	68	93	89
EF Sevier R nr Kingston	APR-JUL	2.3	12.1	22	58	32	47	38
Sevier R blw Piute Dam	APR-JUL	15.0	53	79	63	105	143	126
Clear Creek nr Sevier	APR-JUL	3.7	12.2	17.0	77	22	30	22
Sevier R nr Gunnison	APR-JUL	64	108	182	65	256	395	280
Chicken Creek nr Levan	APR-JUL	1.14	2.25	3.30	73	4.64	7.21	4.50
Oak Creek nr Oak City	APR-JUL	0.47	0.79	1.06	64	1.37	1.89	1.66
Beaver River nr Beaver	APR-JUL	11.9	15.9	19.0	70	23	28	27
Minersville Reservoir inflow	APR-JUL	0.5	2.7	5.0	30	8.1	13.9	16.6

SEVIER & BEAVER RIVER BASINS  
Reservoir Storage (1000 AF) - End of January

SEVIER & BEAVER RIVER BASINS  
Watershed Snowpack Analysis - February 1, 2004

Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
GUNNISON	20.3	1.2	1.1	13.1	UPPER SEVIER RIVER (south	8	192	98
MINERSVILLE (RkyFd)	23.3	4.6	4.6	14.4	EAST FORK SEVIER RIVER	3	154	94
OTTER CREEK	52.5	16.5	22.4	36.5	SOUTH FORK SEVIER RIVER	5	228	100
PIUTE	71.8	25.0	2.5	49.5	LOWER SEVIER RIVER (inclu	6	160	94
SEVIER BRIDGE	236.0	37.2	76.3	159.6	BEAVER RIVER	2	170	99
PANGUITCH LAKE	22.3	3.8	3.9	131.4	SEVIER & BEAVER RIVER BAS	16	175	96

\* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

The average is computed for the 1971-2000 base period.

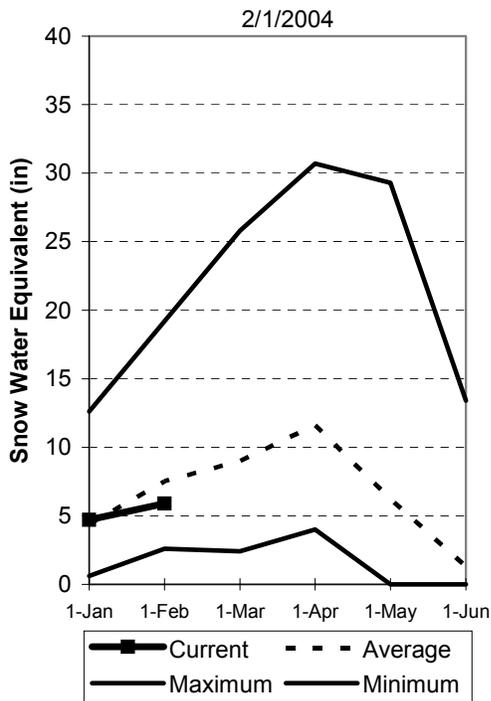
- (1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
- (2) - The value is natural volume - actual volume may be affected by upstream water management.

# E. Garfield, Kane, Washington, & Iron co.

Feb 1, 2004

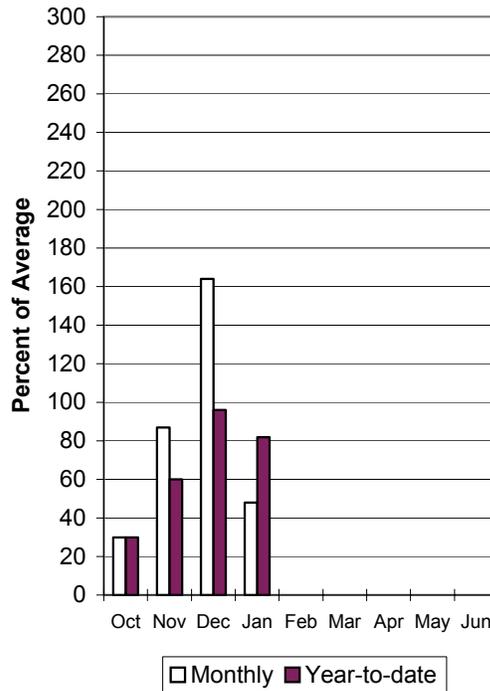
Snowpacks in this region are below normal at 78% of average, about 200% of last year, down 29% relative to last month. Individual sites range from 16% to 105% of average. Precipitation was much below normal during January at 48% of average, bringing the seasonal accumulation (Oct-Jan) to 82% of normal. Soil moisture levels in runoff producing areas indicate about 7 inches of deficit in the upper 2 feet of soil. Forecast streamflows range from 57% to 67% of average. Reservoir storage is at 41% of capacity, 16% more than last year. The Surface Water Supply Index is at 33%, indicating below normal water availability. Concerns remain over low reservoir storage, soil moisture and snowpacks in the lower elevations.

## Southwest Utah Snowpack



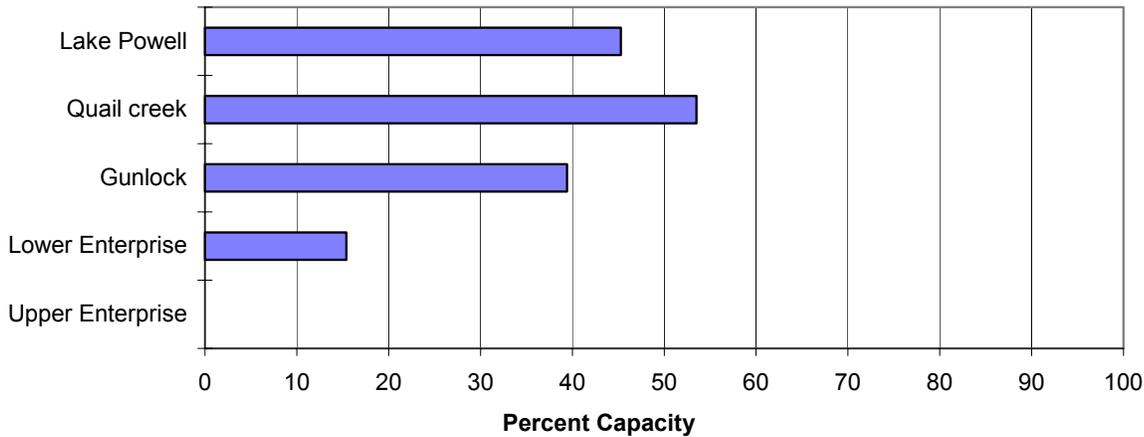
## Southwest Utah Precipitation

2/1/2004



## Reservoir Storage

2/1/2004



E. GARFIELD, KANE, WASHINGTON, & IRON Co.  
Streamflow Forecasts - February 1, 2004

Forecast Point	Forecast Period	Future Conditions						30-Yr Avg. (1000AF)
		<<===== Drier =====>>		===== Wetter =====>>				
		90% (1000AF)	70% (1000AF)	50% (Most Probable) (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	
Lake Powell inflow	APR-JUL	3420	5260	6500	82	7740	9580	7930
Virgin River nr Virgin	APR-JUL	20	31	40	63	50	66	64
Virgin River nr Hurricane	APR-JUL	16.2	30	39	57	48	62	69
Santa Clara River nr Pine Valley	APR-JUL	0.84	2.15	3.40	62	4.93	7.69	5.50
Coal Creek nr Cedar City	APR-JUL	6.5	10.1	13.0	67	16.3	22	19.3

E. GARFIELD, KANE, WASHINGTON, & IRON Co.  
Reservoir Storage (1000 AF) - End of January

E. GARFIELD, KANE, WASHINGTON, & IRON Co.  
Watershed Snowpack Analysis - February 1, 2004

Reservoir	Usable Capacity	*** Usable Storage ***			Watershed	Number of Data Sites	This Year as % of	
		This Year	Last Year	Avg			Last Yr	Average
GUNLOCK	10.4	4.1	4.4	5.7	VIRGIN RIVER	5	223	90
LAKE POWELL	24322.0	11010.0	13300.0	---	PAROWAN	2	197	99
QUAIL CREEK	40.0	21.4	11.0	26.5	ENTERPRISE TO NEW HARMONY	2	0	46
UPPER ENTERPRISE	10.0	0.0	0.2	---	COAL CREEK	2	203	87
LOWER ENTERPRISE	2.6	0.4	0.4	38.0	ESCALANTE RIVER	2	111	65
					E. GARFIELD, KANE, WASHIN	9	193	78

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- (1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
- (2) - The value is natural volume - actual volume may be affected by upstream water management.