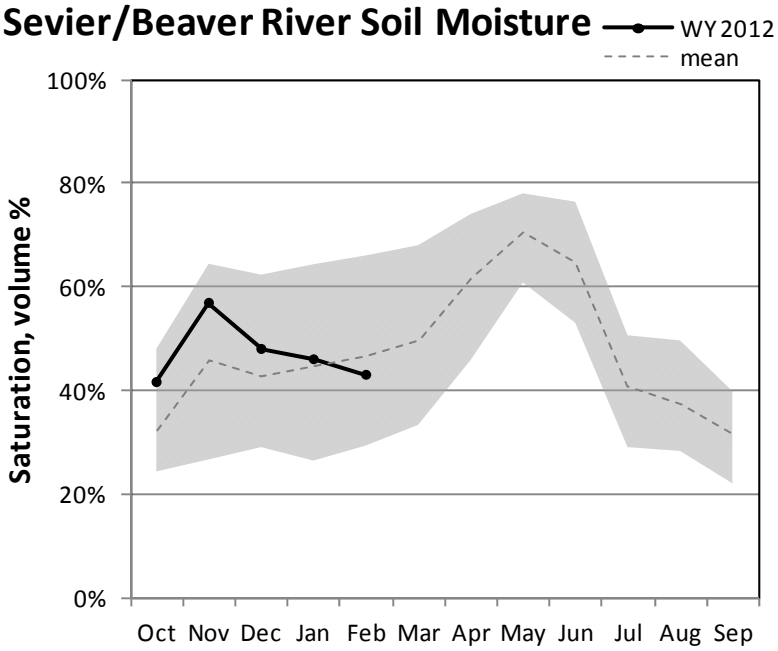
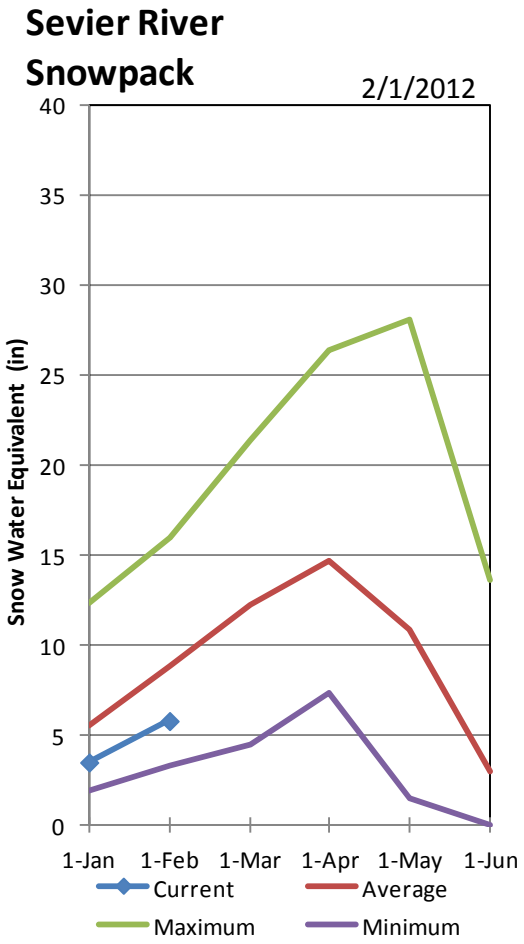
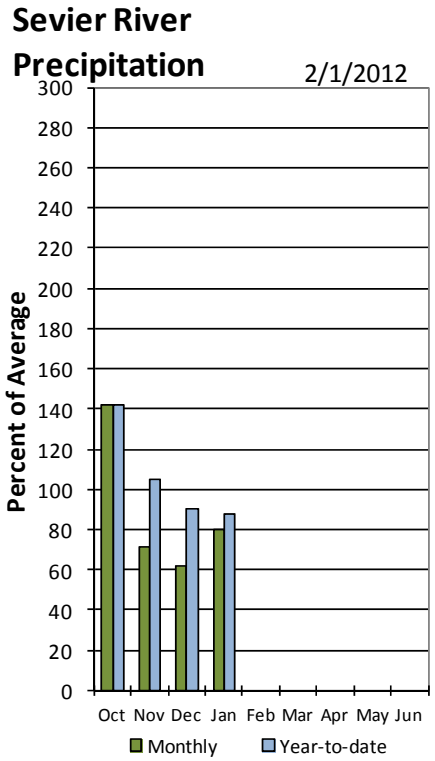
Sevier and Beaver River Basins
February 1, 2012

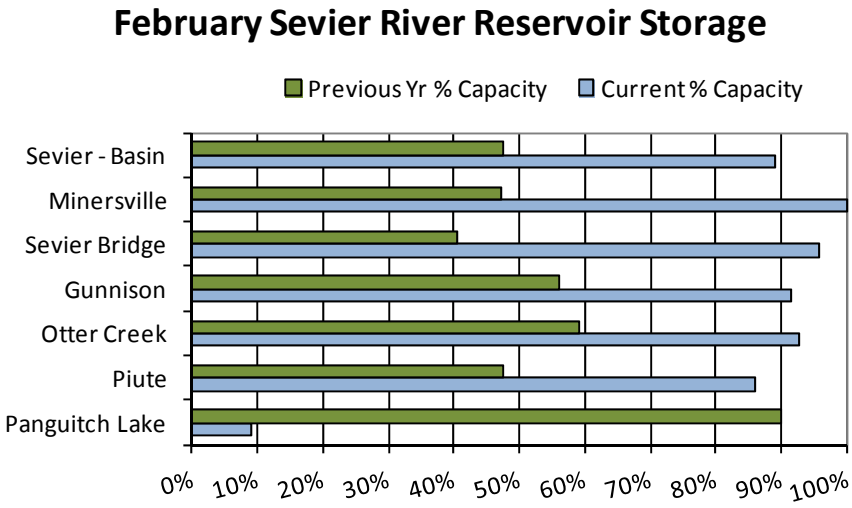
Snowpacks on the Sevier River Basin are much below normal at 65% of average, less than half of last year's figure. Individual sites range from 46% at Box Creek to 89% of average at Farnsworth Lake. Precipitation during January was below average at 80% of normal, bringing the seasonal accumulation (Oct-Jan) to 88% of average. Soil moisture estimates in runoff producing areas are at 43% of saturation in the upper 2 feet of soil compared to 63% last year. Streamflow forecasts range from 46% to 83% of average. Reservoir storage is at 89% of capacity, 46% more than last year. Surface Water Supply Indices are: Upper Sevier 56%, Lower Sevier 77% and Beaver 42%. Runoff conditions are below to much below normal mitigated by exceptional reservoir storage.



Percent saturation is calculated using the weighted average of volumetric soil moisture content at 2, 8, and 20-inch depths. Saturation is estimated as 40% volumetric water content. The gray area represents the range in saturation values since 2005.





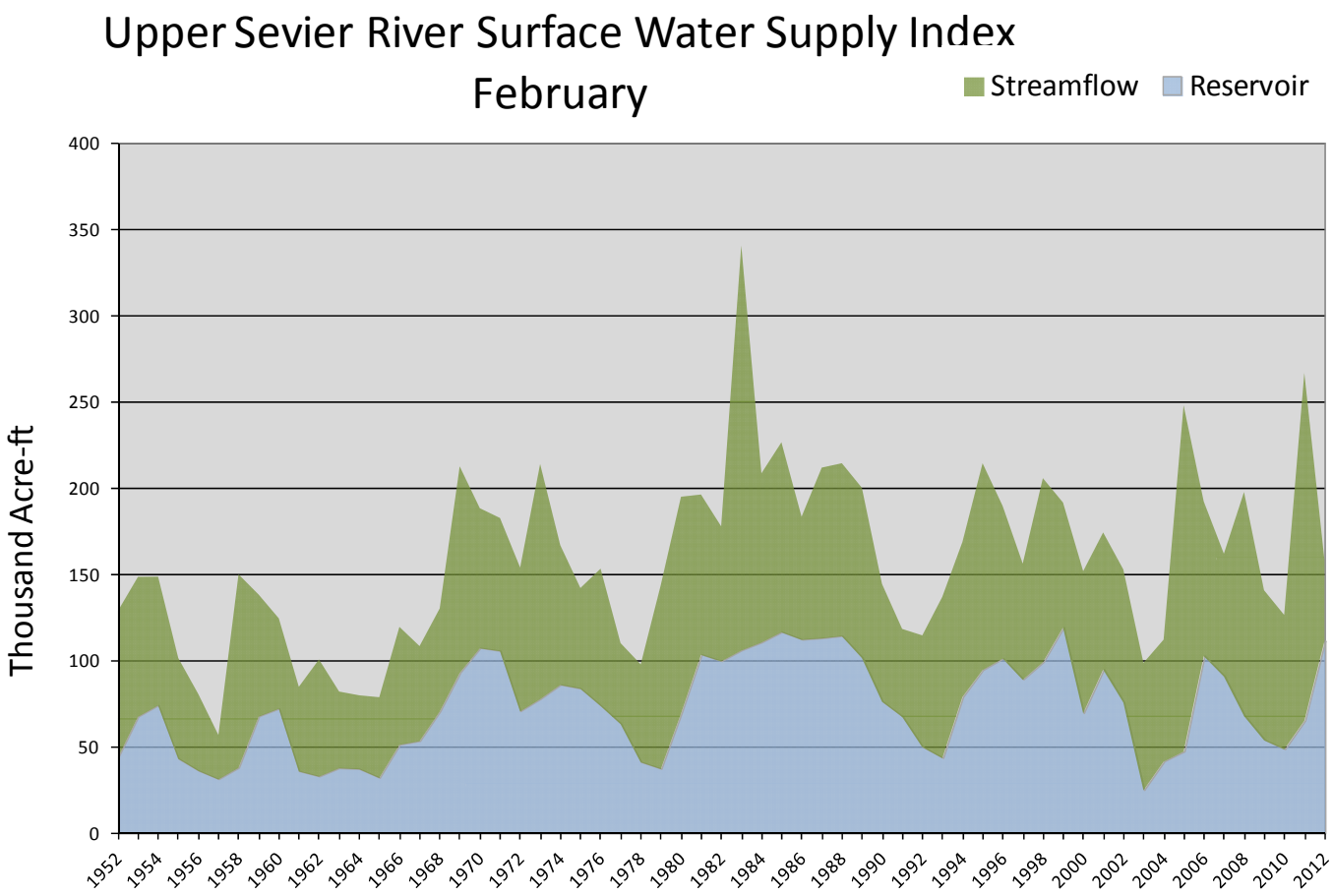


February 1, 2012

Surface Water Supply Index

Basin or Region	January EOM* Piute & Otter Creek Reservoir	April-July Forecast Inflow to Piute Reservoir	Reservoir + Streamflow	SWSI#	Percentile	Years with similar SWSI
	*KAF^*	*KAF*	*KAF*		*%*	
Upper Sevier	**111.4**	**47**	**158**	**0.54**	**56**	**72,97,07,74**

**EOM, end of month; # SWSI, Surface Water Supply Index; ^KAF, thousand acre-feet.*

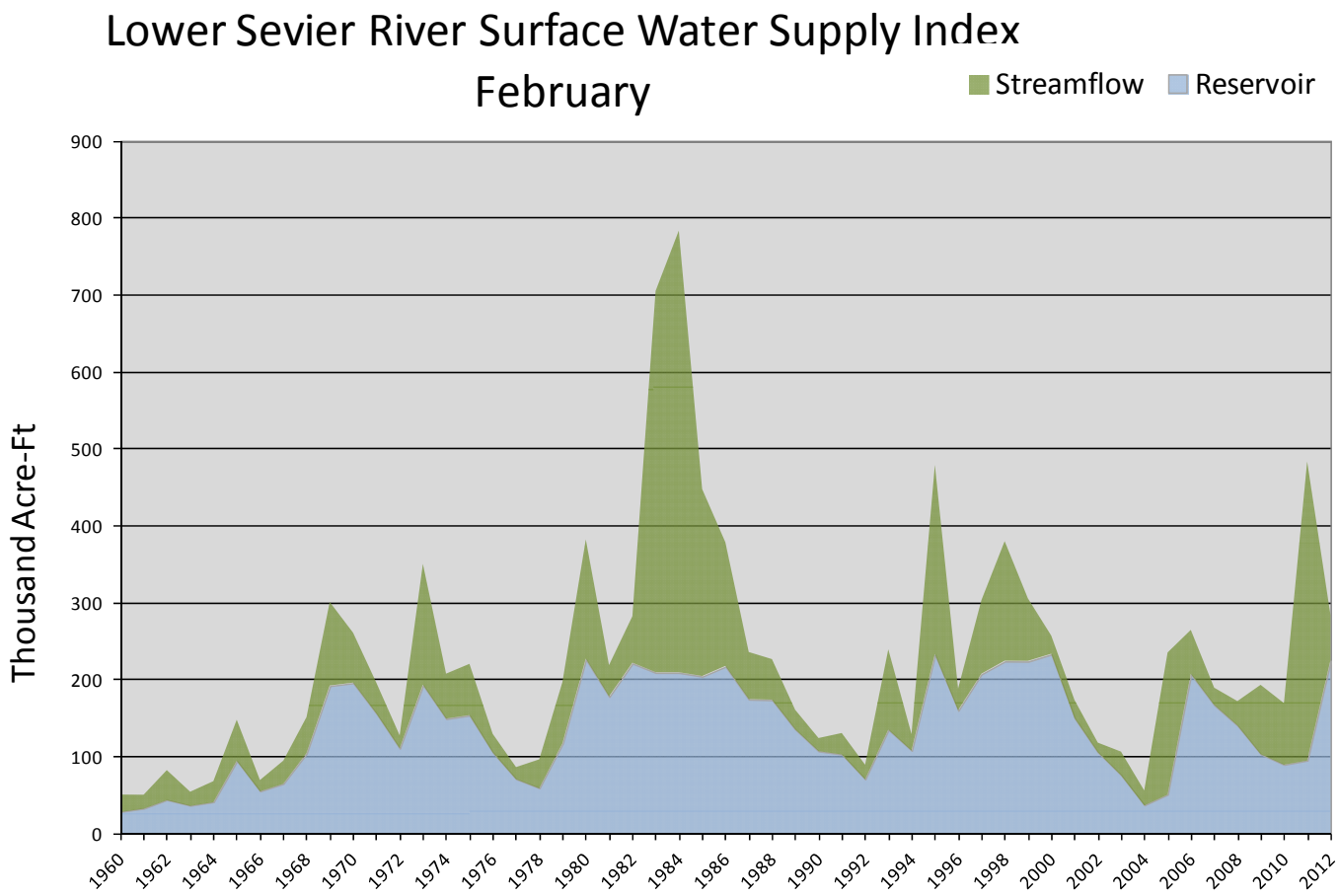


February 1, 2012

Surface Water Supply Index

Basin or Region	January EOM* Sevier Bridge Reservoir	April-July Forecast Inflow to Sevier Bridge Reservoir	Reservoir + Streamflow	SWSI#	Percentile	Years with similar SWSI
	*KAF^*	*KAF*	*KAF*		*%*	
Lower Sevier	**225.9**	**58**	**284**	**2.28**	**77**	**06,82,69,97**

**EOM, end of month; # SWSI, Surface Water Supply Index; ^KAF, thousand acre-feet.*

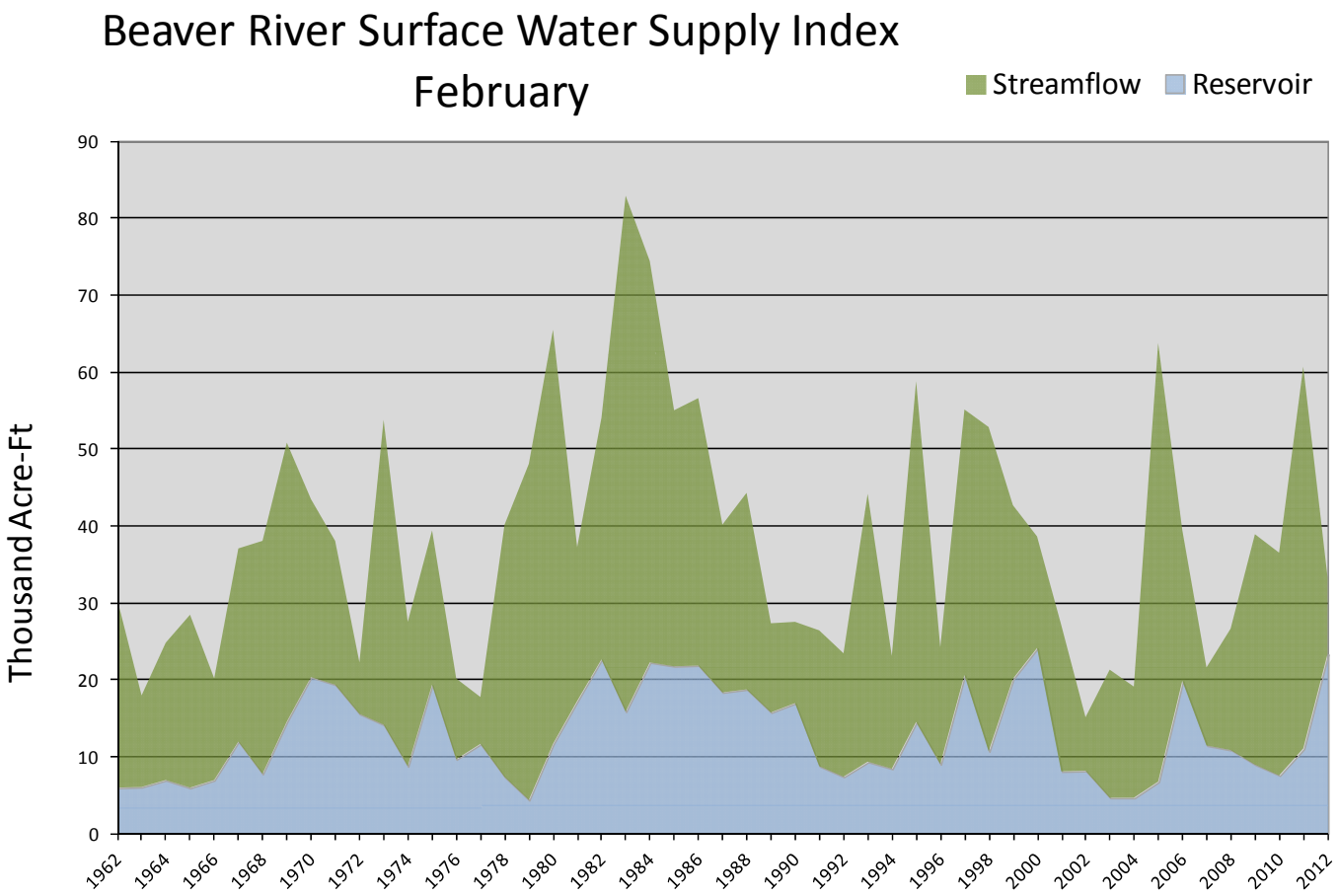


February 1, 2012

Surface Water Supply Index

Basin or Region	January EOM* Minersville Reservoir	April-July forecast Beaver River at Beaver	Reservoir + Streamflow	SWSI#	Percentile	Years with similar SWSI
	*KAF^*	*KAF*	*KAF*		*%*	
Beaver	**23.3**	**10.0**	**33.3**	**-0.64**	**42**	**65,62,67,81**

**EOM, end of month; # SWSI, Surface Water Supply Index; ^KAF, thousand acre-feet.*



Sevier & Beaver Basins

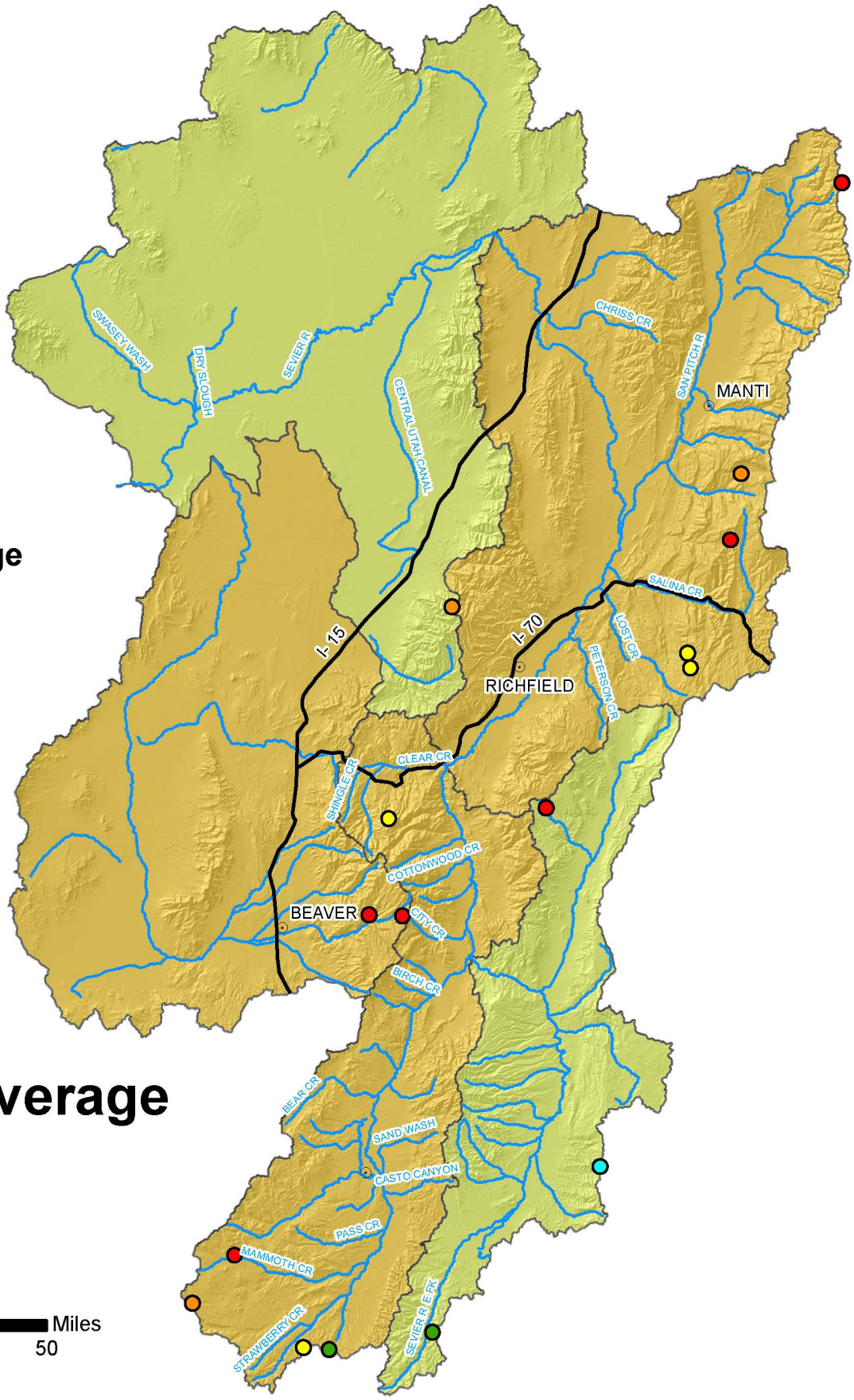
N

Snotel % of Average

- < 50%
- 50 - 69%
- 70 - 89%
- 90 - 109%
- 110 - 129%
- 130 - 149%
- > 150%

Watershed % of Average

- 0
- <50%
- 50 - 69%
- 70 - 89%
- 90 - 109%
- 110 - 129%
- 130 - 149%
- >150%



Basinwide Average
63 %

0 5 10 20 30 40 50 Miles

Provisional Data
Subject to Revision

SEVIER & BEAVER RIVER BASINS as of February 1, 2012

SEVIER & BEAVER RIVER BASINS
Streamflow Forecasts - February 1, 2012

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (1000AF)	50% (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
Mammoth Ck nr Hatch	APR-JUL	0.5	4.1	17.0	66	26	52	26
Sevier R at Hatch	APR-JUL	5.5	20	30	55	40	54	55
Sevier R nr Kingston	APR-JUL	0.7	4.7	19.0	58	33	54	33
EF Sevier R nr Kingston	APR-JUL	6.6	20	29	83	38	51	35
Sevier R bl Piute Dam	APR-JUL	2.6	25	47	71	69	101	66
Clear Ck ab Diversions nr Sevier	APR-JUL	0.9	8.1	13.0	59	17.9	25	22
Salina Ck nr Emery	APR-JUL	0.27	2.50	5.00	56	7.50	11.30	9.00
Salina Ck at Salina	APR-JUL	0.3	4.0	9.0	46	16.0	30	19.7
Manti Ck Blw Dugway Ck Nr Manti	APR-JUL	5.6	8.6	11.0	60	13.7	18.1	18.3
Sevier R nr Gunnison	APR-JUL	5.0	37	58	55	79	111	106
Chicken Ck nr Levan	APR-JUL	0.55	1.26	2.00	44	3.00	4.90	4.50
Oak Creek nr Oak City	APR-JUL	0.43	0.74	1.00	60	1.30	1.81	1.66
Beaver R nr Beaver	APR-JUL	1.1	10.0	16.0	59	22	31	27
Minersville Res Inflow	APR-JUL	1.8	5.6	10.0	60	16.4	30	16.6

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

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
GUNNISON	20.3	18.6	11.4	13.1
MINERSVILLE (RkyFd)	23.3	23.3	11.0	14.4
OTTER CREEK	52.5	48.7	31.0	36.5
PIUTE	71.8	61.7	34.2	49.5
SEVIER BRIDGE	236.0	225.9	95.5	159.6
PANGUITCH LAKE	22.3	2.0	20.1	131.4

SEVIER & BEAVER RIVER BASINS
Watershed Snowpack Analysis - February 1, 2012

Watershed	Number of Data Sites	This Year as % of Last Yr	Average
UPPER SEVIER RIVER	8	45	66
EAST FORK SEVIER RIVER	3	57	66
SOUTH FORK SEVIER RIVER	5	37	66
LOWER SEVIER RIVER	6	57	73
BEAVER RIVER	2	30	51
SEVIER & BEAVER RIVER BAS	16	47	67

* 90%, 70%, 50%, 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.
(3) - Median value used in place of average.