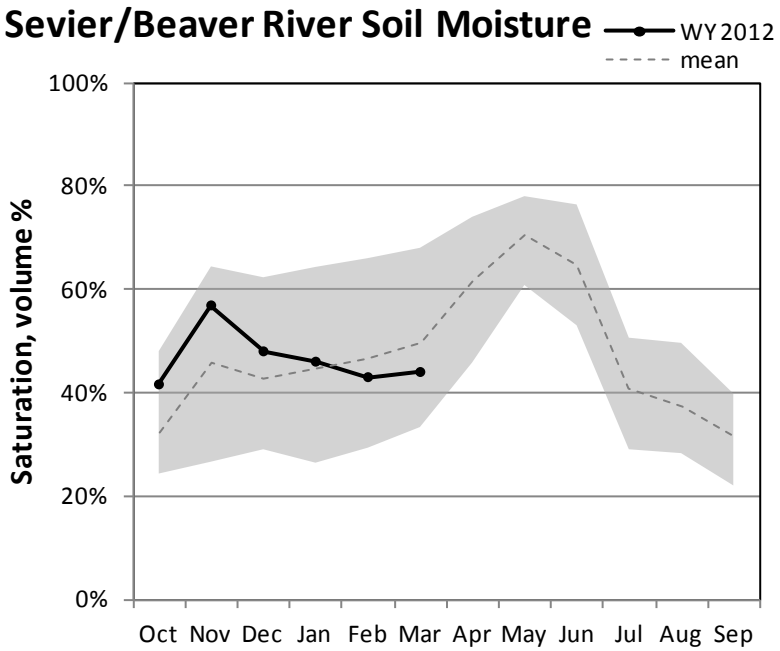
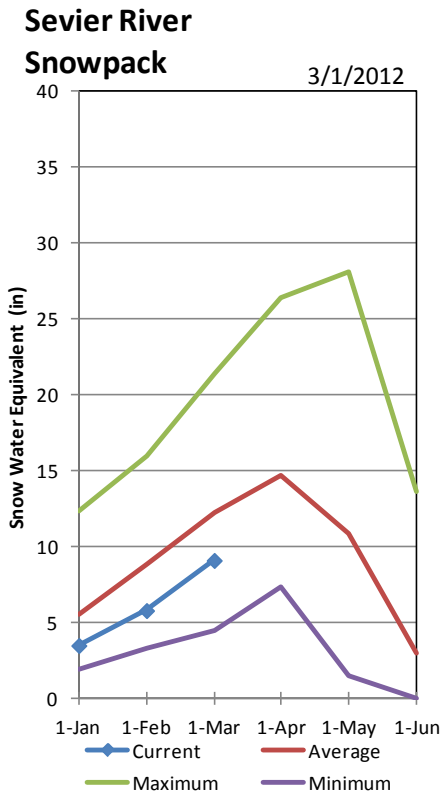
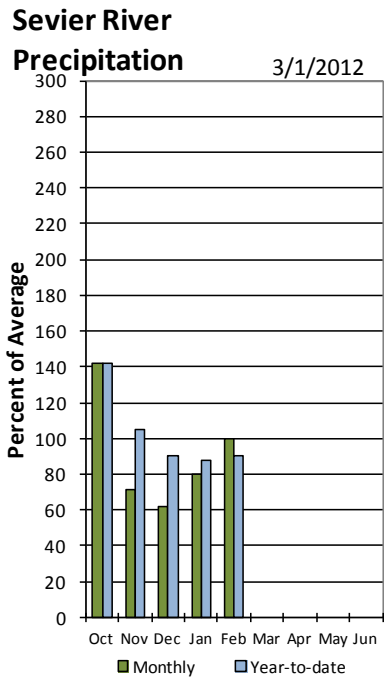
# Sevier and Beaver River Basins
## March 1, 2012

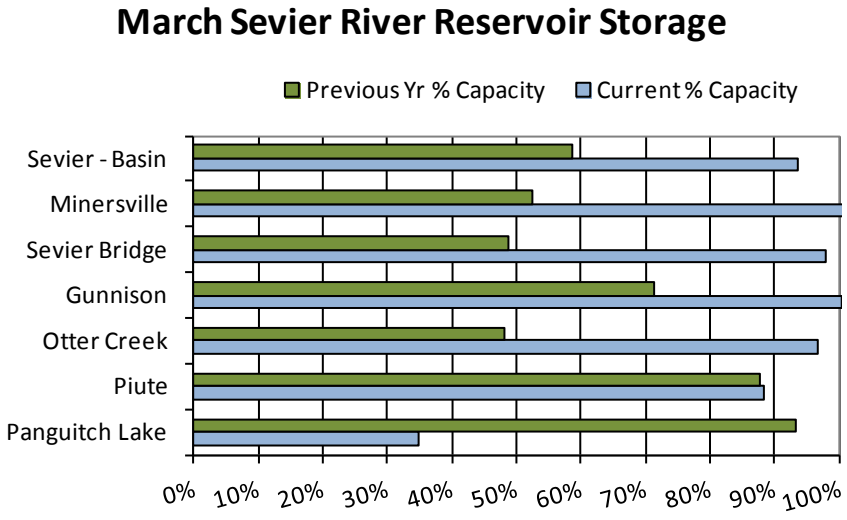
Snowpack on the Sevier River Basin is below normal at 71% of average, about 55% of last year. Individual sites range from 47% at Squaw Springs to 100% of average at Farnsworth Lake. Precipitation during February was near average at 100% of normal, bringing the seasonal accumulation (Oct-Feb) to 90% of average. Soil moisture estimates in runoff producing areas are at 44% of saturation in the upper 2 feet of soil compared to 62% last year. Streamflow forecasts range from 49% to 77% of average. Reservoir storage is at 93% of capacity, compared to 59% last year. Surface Water Supply Indices are: Upper Sevier 44%, Lower Sevier 75% and Beaver 52%. Runoff conditions are poor, reservoir storage is excellent.




*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.*

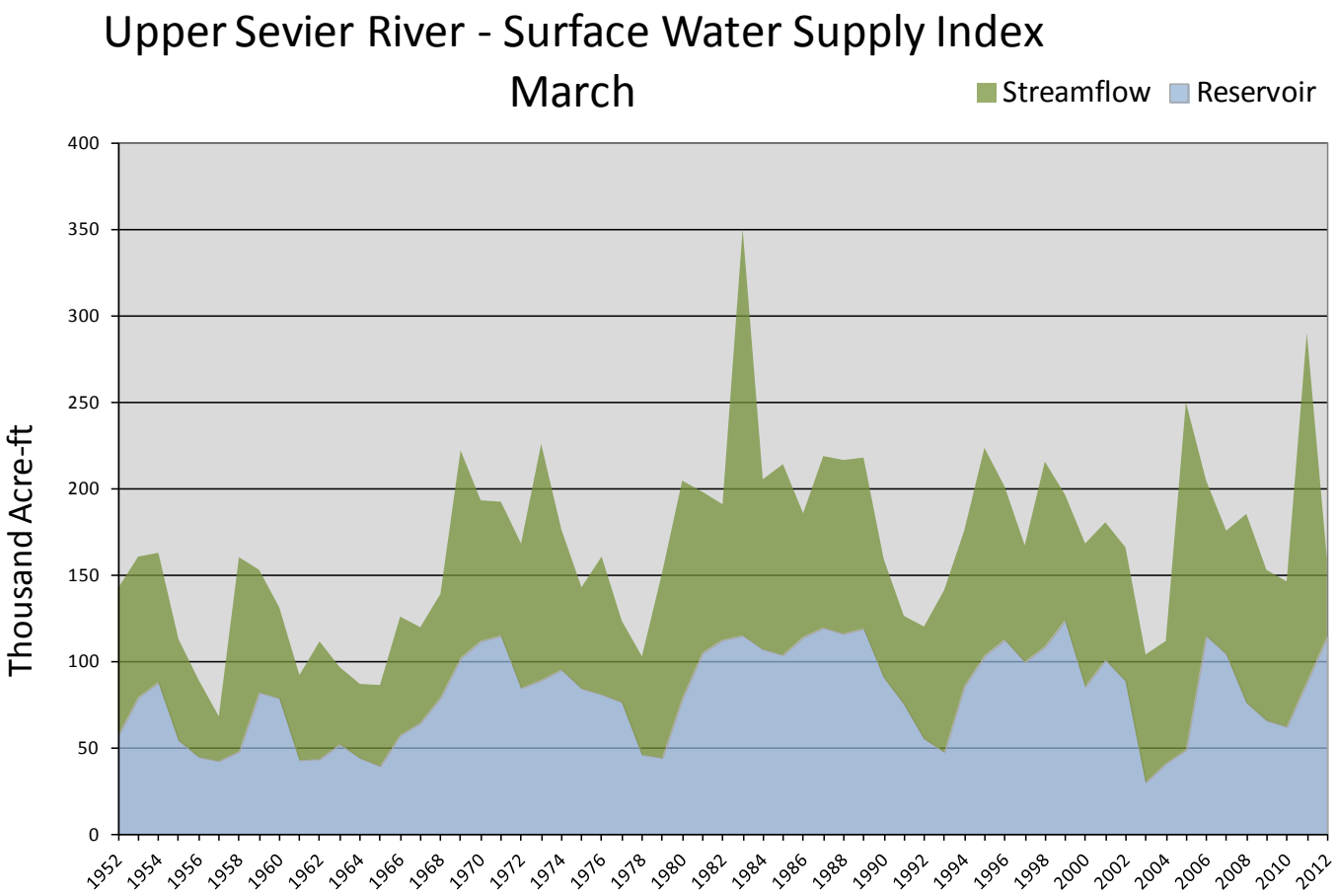


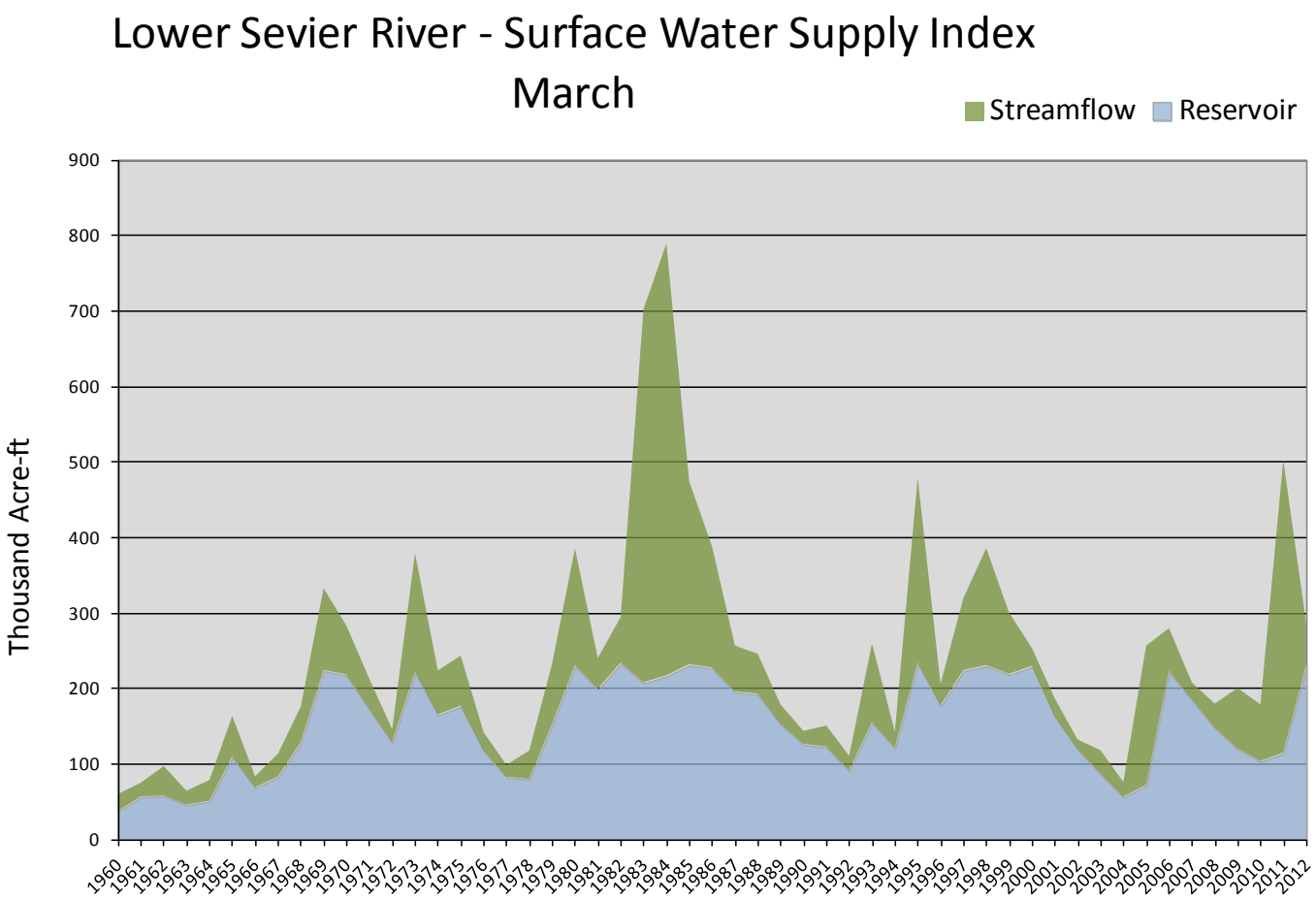
| *March 1, 2012* | **Surface Water Supply Index** | | | | | |
|---|---|---|---|---|---|---|
| Basin or Region | February EOM* Piute & Otter Creek Reservoir | April-July Forecast Inflow to Piute Reservoir | Reservoir + Streamflow | SWSI# | Percentile | Years with similar SWSI |
| | *KAF^* | *KAF* | *KAF* | | *%* | |
| **Upper Sevier** | **114.2** | **45** | **159** | **-0.54** | **44** | **59,90,58,53** |

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



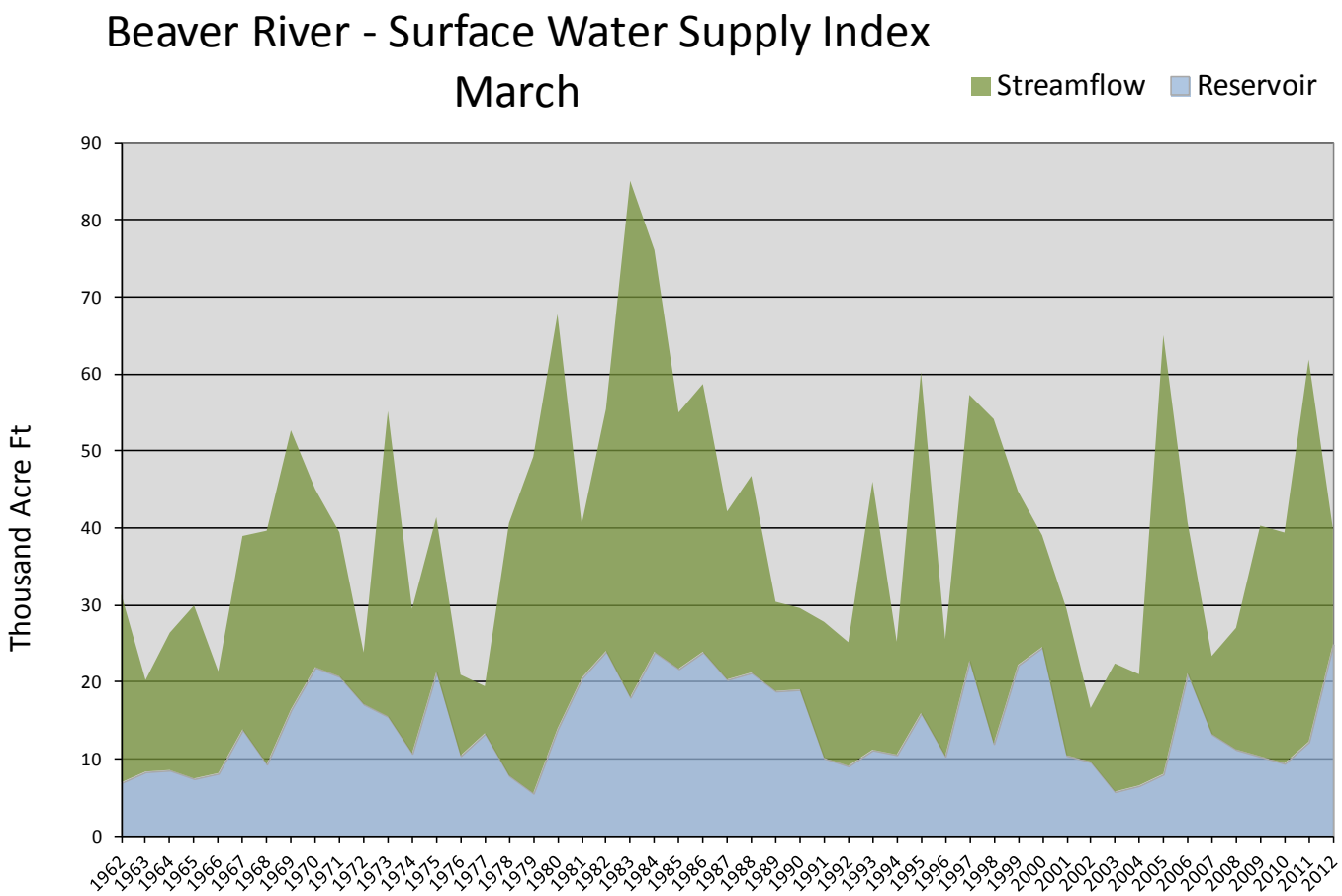
| *March 1, 2012* | **Lower Sevier Surface Water Supply Index** | | | | | |
|---|---|---|---|---|---|---|
| Basin or Region | February EOM* Sevier Bridge Reservoir | April-July Forecast Inflow to Sevier Bridge Reservoir | Reservoir + Streamflow | SWSI# | Percentile | Years with similar SWSI |
| | *KAF^* | *KAF* | *KAF* | | *%* | |
| **Lower Sevier** | **114.8** | **195** | **310** | **2.44** | **79** | **69,97,99,73** |

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

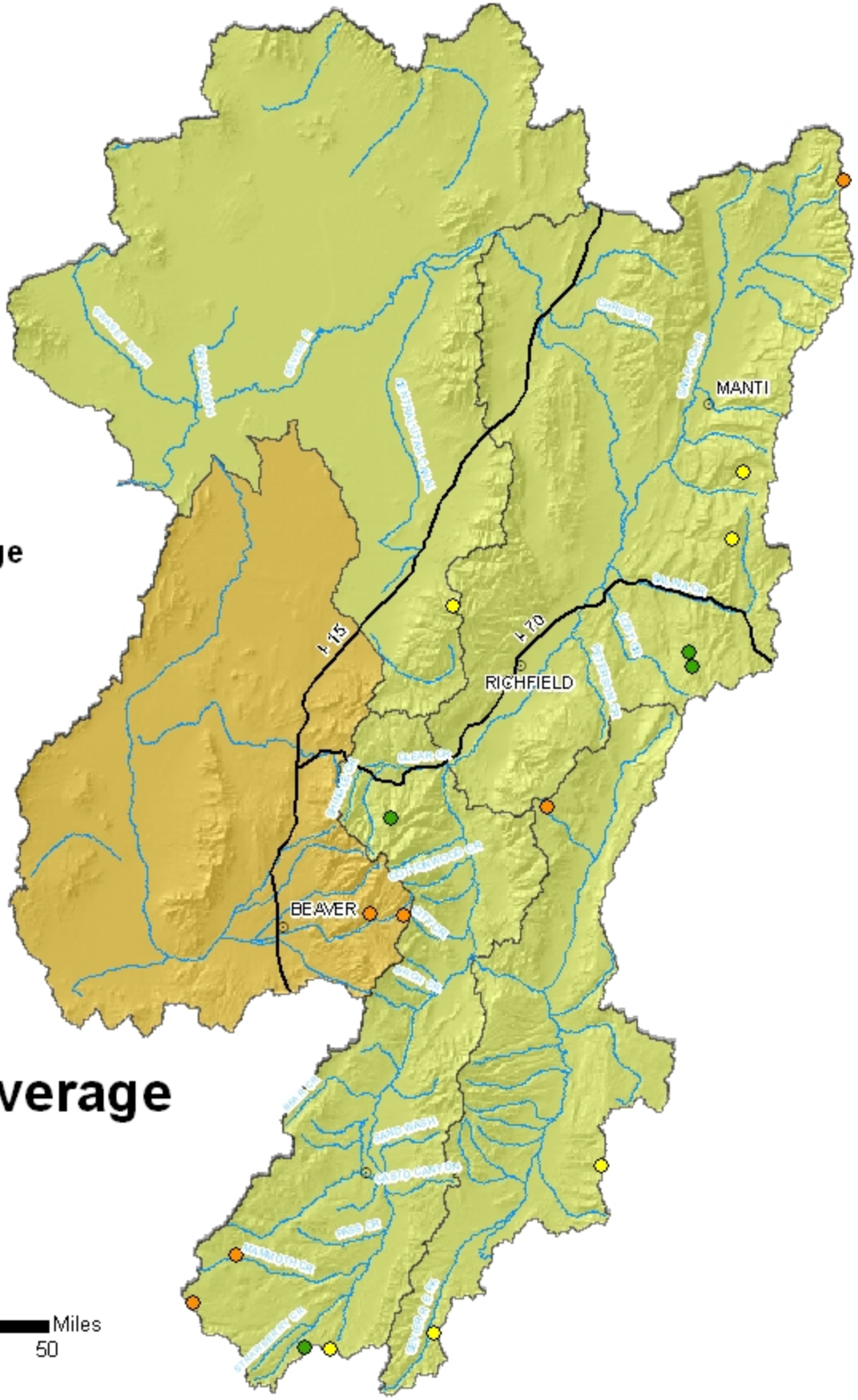


| *March 1, 2012* | **Beaver Surface Water Supply Index** | | | | | |
|---|---|---|---|---|---|---|
| Basin or Region | February EOM* Minersville Reservoir | April-July forecast Beaver River at Beaver | Reservoir + Streamflow | SWSI# | Percentile | Years with similar SWSI |
| | *KAF^* | *KAF* | *KAF* | | *%* | |
| **Beaver** | **24.9** | **15.0** | **39.9** | **0.16** | **52** | **71,68,09,81** |

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



# Sevier & Beaver Basins




**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
## 75 %

0 5 10 20 30 40 50 Miles

*Provisional Data*
*Subject to Revision*

SEVIER & BEAVER RIVER BASINS as of March 1, 2012

## SEVIER & BEAVER RIVER BASINS
### Streamflow Forecasts - March 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 | 3.1 | 15.0 | 58 | 31 | 49 | 26 |
| Sevier R at Hatch | APR-JUL | 7.5 | 20 | 29 | 53 | 38 | 51 | 55 |
| Sevier R nr Kingston | APR-JUL | 0.3 | 6.3 | 18.0 | 55 | 33 | 55 | 33 |
| EF Sevier R nr Kingston | APR-JUL | 3.9 | 17.6 | 27 | 77 | 36 | 50 | 35 |
| Sevier R bl Piute Dam | APR-JUL | 2.6 | 24 | 45 | 68 | 66 | 98 | 66 |
| Clear Ck ab Diversions nr Sevier | APR-JUL | 1.5 | 8.4 | 13.0 | 59 | 17.6 | 24 | 22 |
| Salina Ck nr Emery | APR-JUL | 0.18 | 2.60 | 5.20 | 58 | 7.80 | 11.50 | 9.00 |
| Salina Ck at Salina | APR-JUL | 0.5 | 4.7 | 10.0 | 51 | 17.3 | 32 | 19.7 |
| Manti Ck Blw Dugway Ck Nr Manti | APR-JUL | 6.1 | 8.8 | 11.0 | 60 | 13.4 | 17.4 | 18.3 |
| Sevier R nr Gunnison | APR-JUL | 4.0 | 35 | 56 | 53 | 77 | 107 | 106 |
| Chicken Ck nr Levan | APR-JUL | 0.77 | 1.50 | 2.20 | 49 | 3.10 | 4.80 | 4.50 |
| Oak Creek nr Oak City | APR-JUL | 0.42 | 0.68 | 0.90 | 54 | 1.15 | 1.56 | 1.66 |
| Beaver R nr Beaver | APR-JUL | 0.5 | 9.1 | 15.0 | 56 | 21 | 29 | 27 |
| Minersville Res Inflow | APR-JUL | 1.9 | 5.5 | 9.5 | 57 | 15.1 | 27 | 16.6 |

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

| Reservoir | Usable Capacity | *** Usable Storage *** This Year | Last Year | Avg |
|---|---|---|---|---|
| GUNNISON | 20.3 | 20.4 | 14.5 | 14.6 |
| MINERSVILLE (RkyFd) | 23.3 | 24.9 | 12.2 | 16.2 |
| OTTER CREEK | 52.5 | 50.7 | 25.2 | 40.0 |
| PIUTE | 71.8 | 63.5 | 63.0 | 53.3 |
| SEVIER BRIDGE | 236.0 | 230.9 | 114.8 | 175.6 |
| PANGUITCH LAKE | 22.3 | 7.8 | 20.8 | 146.8 |

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

| Watershed | Number of Data Sites | This Year as % of Last Yr | Average |
|---|---|---|---|
| UPPER SEVIER RIVER | 8 | 50 | 74 |
| EAST FORK SEVIER RIVER | 3 | 56 | 73 |
| SOUTH FORK SEVIER RIVER | 5 | 46 | 75 |
| LOWER SEVIER RIVER | 6 | 70 | 79 |
| BEAVER RIVER | 2 | 44 | 63 |
| SEVIER & BEAVER RIVER BAS | 16 | 56 | 75 |

* 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.