Utah Climate and Water Report

January 1, 2017

Near Tony Grove Lake, Utah

Car buried by a healthy snowpack

Photo by Kent Sutcliffe

Utah Climate and Water Report

The purpose of the Climate and Water Report is to provide a snapshot of current and immediate past climatic conditions and other information useful to agricultural and water user interests in Utah. The report utilizes data from several sources that represent specific parameters (streamflow data from the United States Geological Survey, reservoir data from the Bureau of Reclamation, and other sources), geography including high elevation United States Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS) Snowpack Telemetry (SNOTEL) data, and agriculturally important data from the USDA-NRCS Soil Climate Analysis Network (SCAN). Data on precipitation, soil moisture, soil temperature, reservoir storage, and streamflow are analyzed and presented. These data analyses can be used to increase irrigation efficiency and agricultural production. As with all data and analyses, there are limitations due to data quality, quantity, and spatial application.

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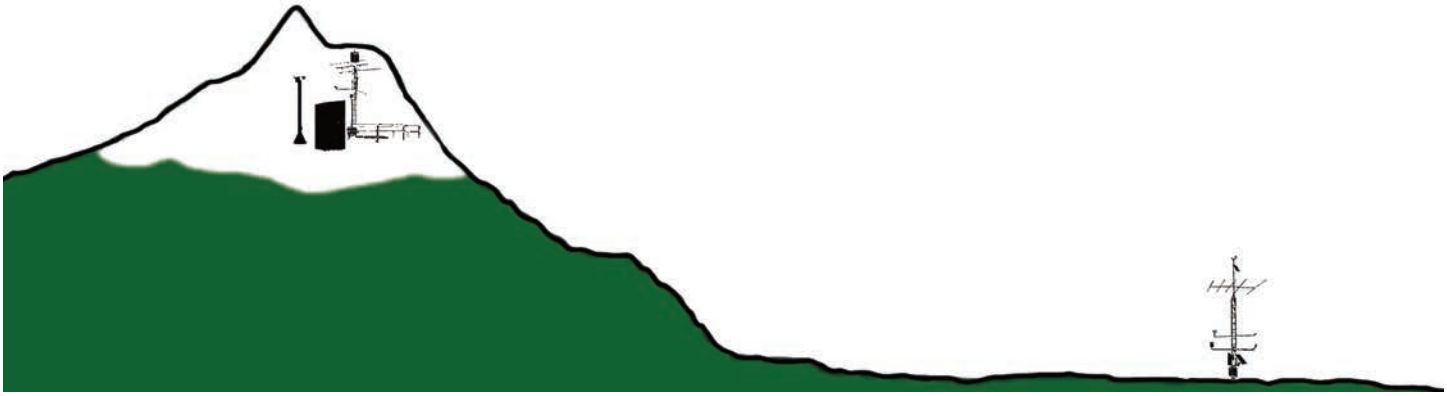
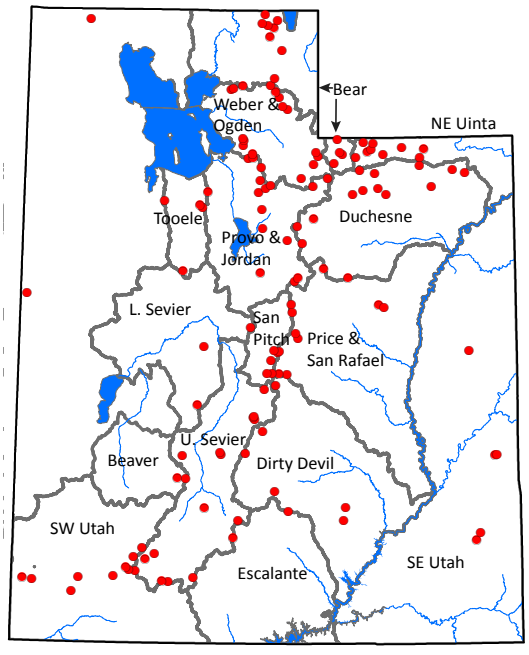


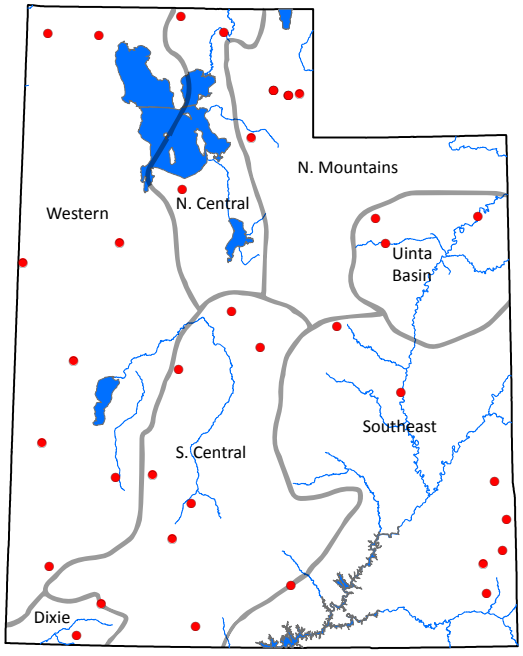
SNOTEL

- Mountainous areas
- High elevation (>6,000 ft)
- Water supply forecasting
- Installed where snow pack represents the water supply



SCAN

- Agricultural and range lands
- Mid elevation (3 – 7,000 ft).
- Irrigation efficiency and rangeland productivity
- Installed on spatially representative soils



Utah General Summary
January 1, 2017

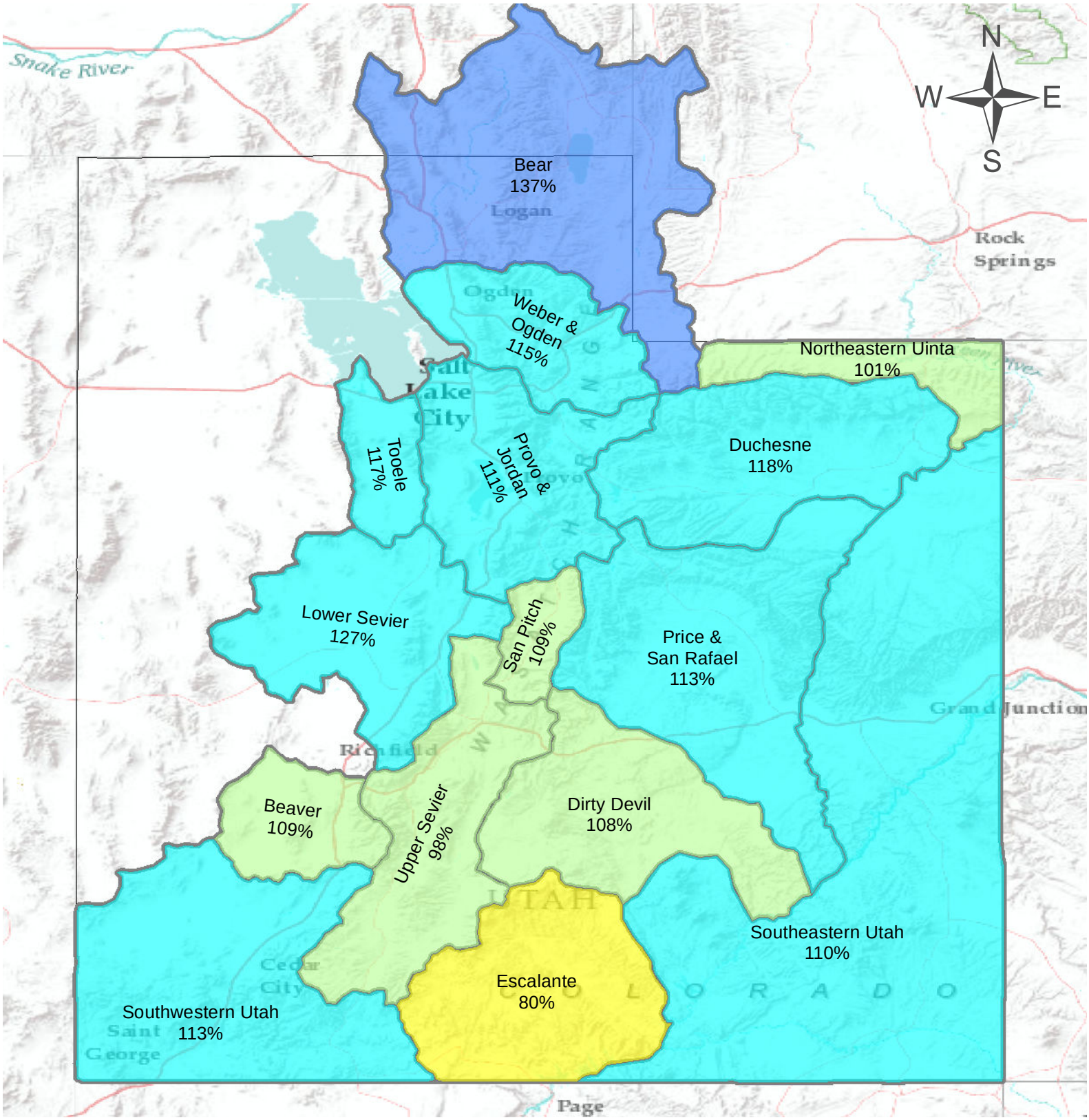
*This report has been reorganized to better reflect two distinct geographic areas being monitored – the low elevation valley sites (**S**oil **C**limate **A**nalysis **N**etwork) that are critical for agricultural production and operations, and the high elevation mountainous areas where water supply is generated (**SNO**w**TEL**emetry). Most of the graphs have been updated to utilize daily data versus the old monthly bar charts so that the timing and distribution of precipitation and other events can be seen. The timing distribution of precipitation can be as important as the overall amount in an agricultural context. These graphs are hyperlinked so that the user can simply click on the graph and be taken to the most recent version on the Snow Survey web page. Questions, comments and suggestions are welcome and should be directed to Randy.Julander@ut.usda.gov.*

Current Valley Conditions (SCAN)

Precipitation was impressive in December across the valley locations in Utah, averaging 1.5 inches. December soil moisture and precipitation was generally much higher than normal in the northern part of the state. For example, the North Central area received 2.4 inches of precipitation during the month, and soil moisture currently stands at 82%. In the South, both precipitation and soil moisture levels were near those of last year, near or slightly above average. The driest area was the Western and Dixie, with soil moisture below normal at 30%, despite getting 1.6 inches of precipitation in December. Soil moisture measurement is impacted by frozen soils, so it is important not to draw too many conclusions from it at this time of year. That said, statewide soil moisture is currently at 38% in valley locations; slightly higher than last year and about normal for this time of year. Soil temperatures statewide hovered around the freezing point, settling at the end of the month well below the freezing point.

Current Mountain Conditions (SNOTEL)

December and early January storms have brought snowpacks to well above normal conditions across the state. There are still 3 critical snow accumulation months ahead and any outcome is possible including the possibility of a below normal year. Last year is a good example – it had a decent start (January 1 snowpack was 115%) but in some areas like southern Utah it fizzled pretty badly. That bit of pessimism noted, it's still great to be way ahead early in the game. December mountain precipitation was phenomenal at 159% of average which brings the seasonal accumulated precipitation (Oct-Dec) to 116%. Soil moisture is above average and about 10% greater than last year. Reservoir storage is about the same as last year at 49%. While it's still very early in the water supply season, things are looking pretty good compared to the last few years.



Statewide Precipitation

As of January 1, 2017:

116% of Normal Precipitation

159% of Normal Precipitation Last Month

0 10 20 40 60 80 100 Miles

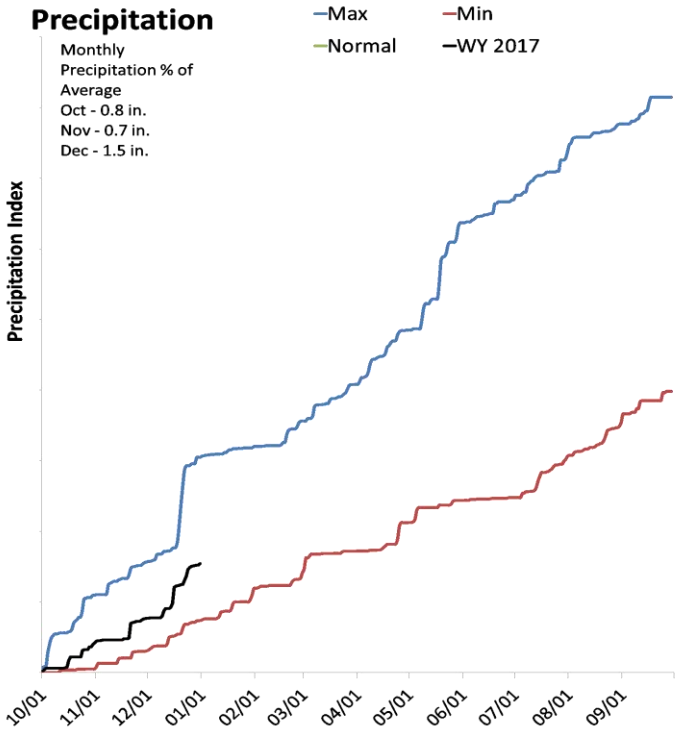
% of Normal

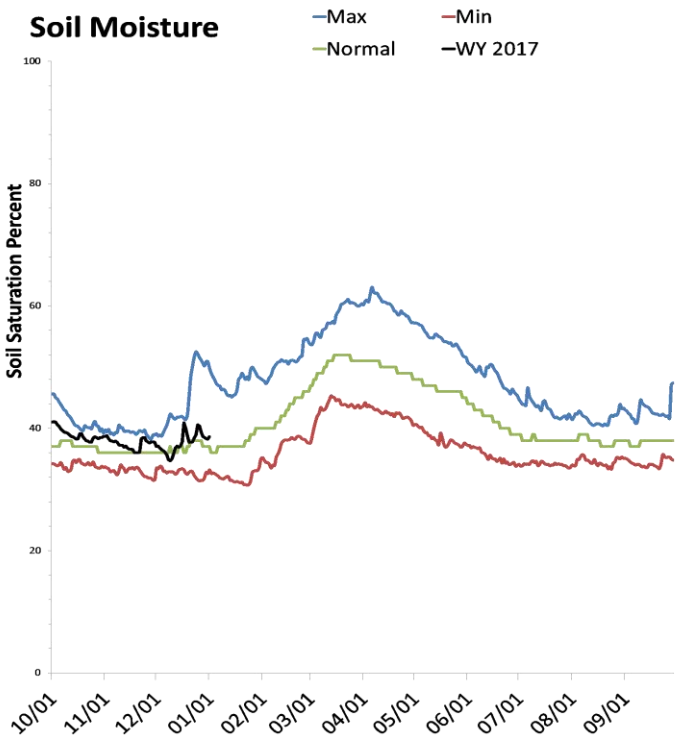
- < 50%
- 50 - 69%
- 70 - 89%
- 90 - 109%
- 110 - 129%
- 130 - 149%
- > 150%

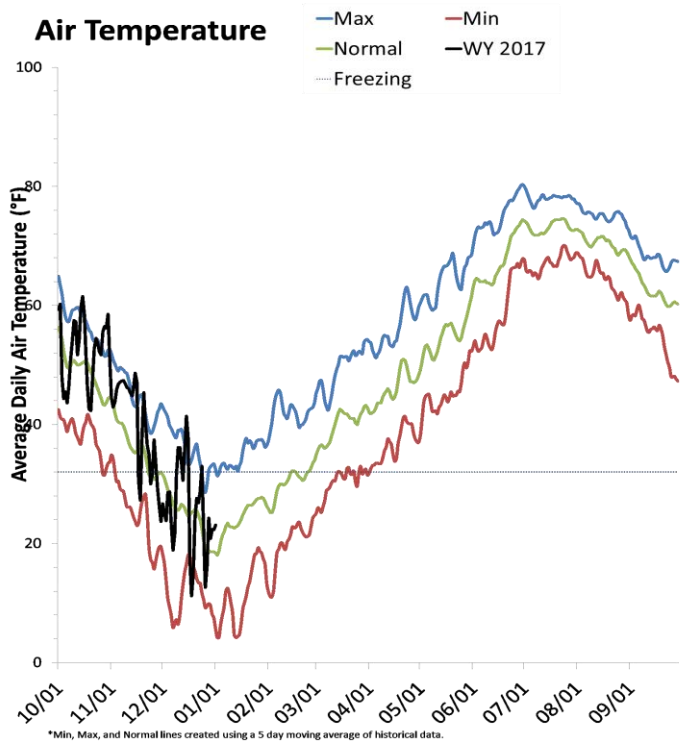
Statewide SCAN

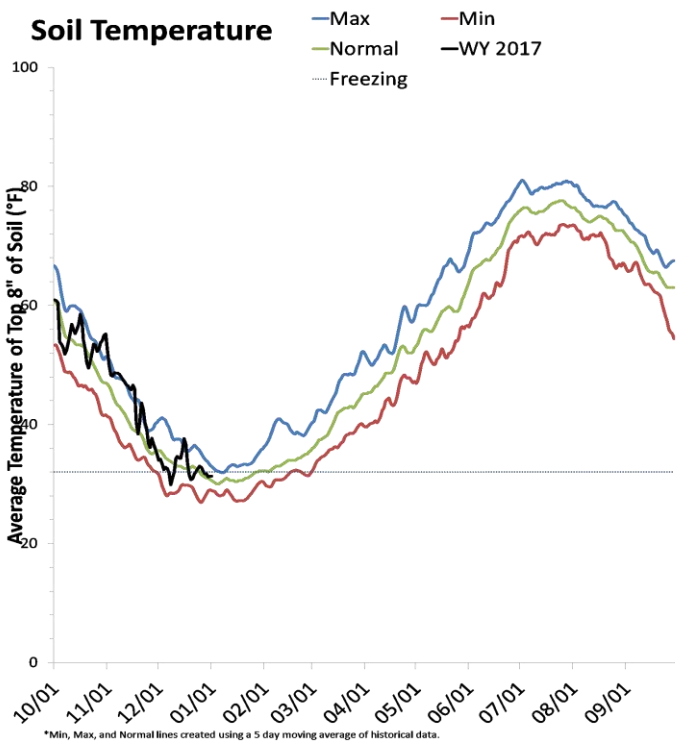
January 1, 2017

The average precipitation at SCAN sites within Utah was 1.5 inches in December, which brings the seasonal accumulation (Oct-Dec) to 3.1 inches. Soil moisture is at 38% compared to 35% last year.





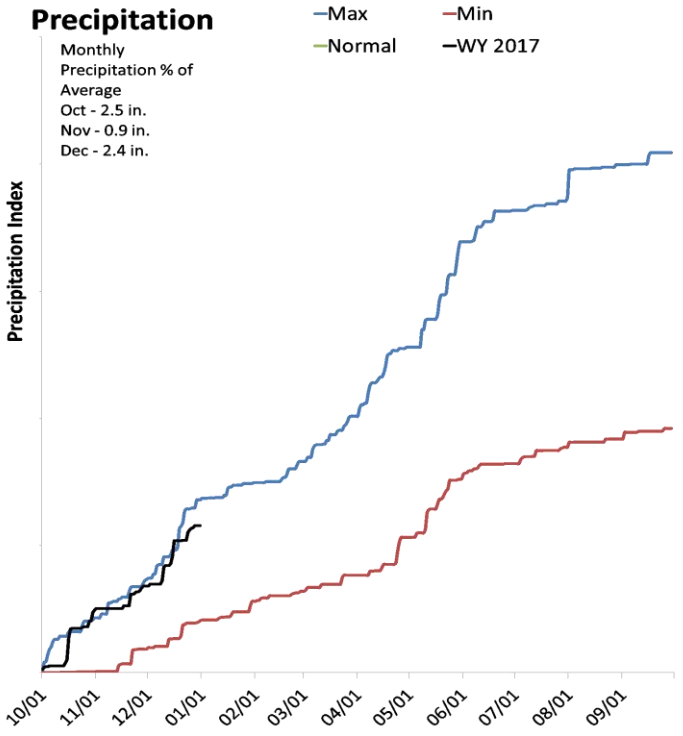


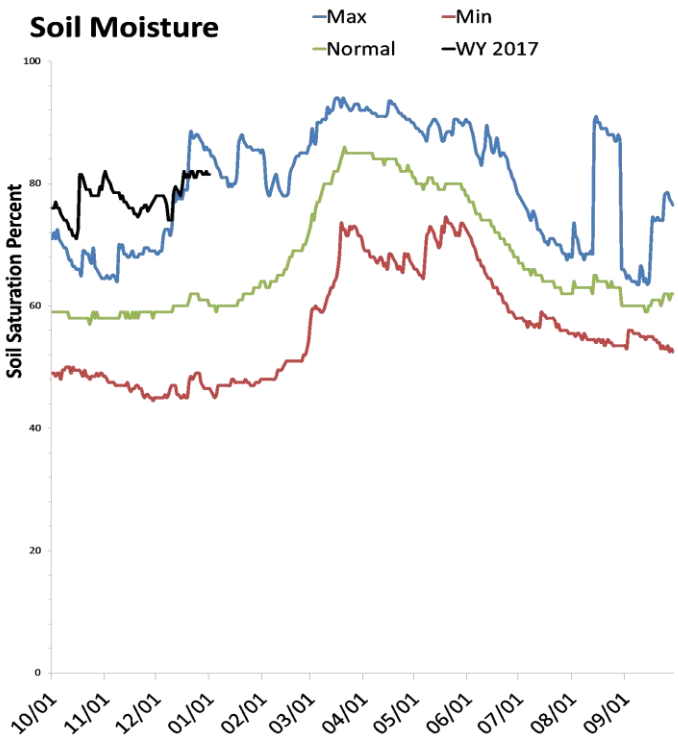


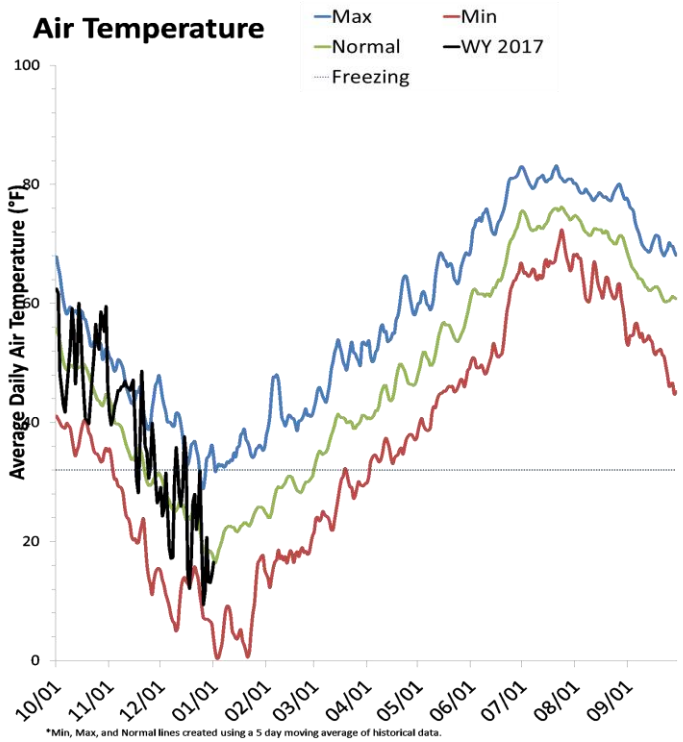
North Central

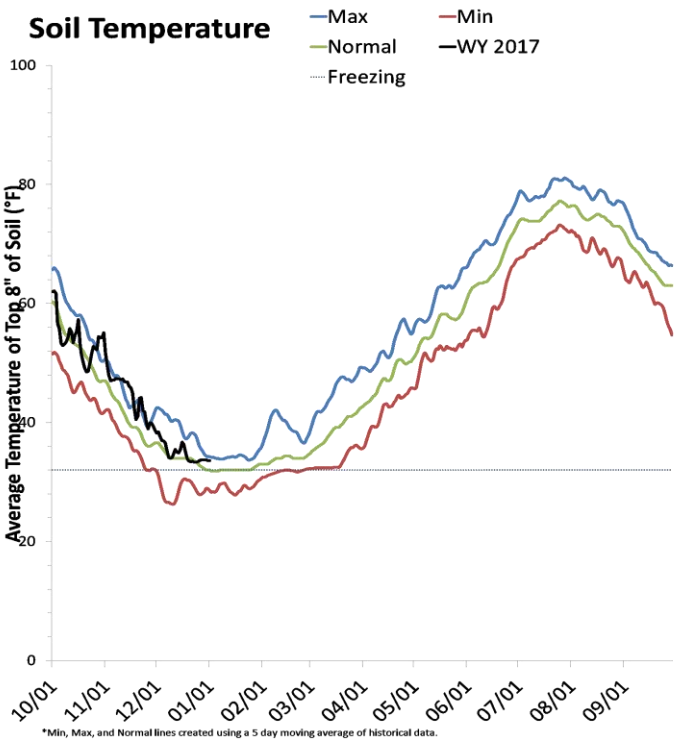
January 1, 2017

The average precipitation in December at SCAN sites within the basin was 2.4 inches, which brings the seasonal accumulation (Oct-Dec) to 5.8 inches. Soil moisture is at 82% compared to 69% last year.





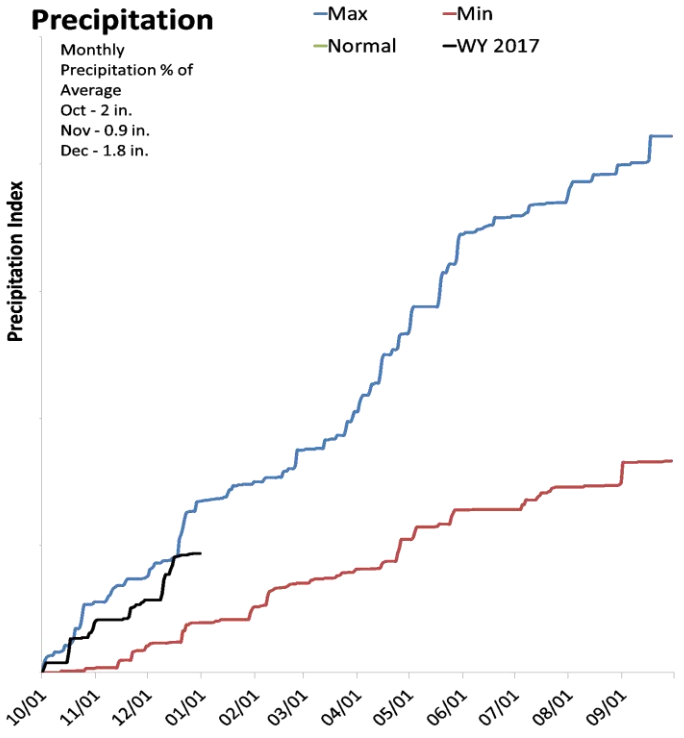


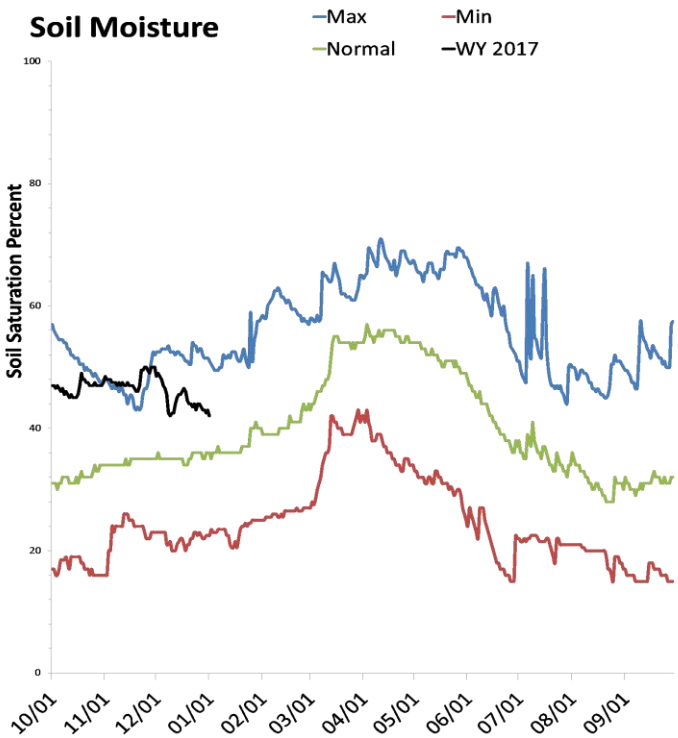


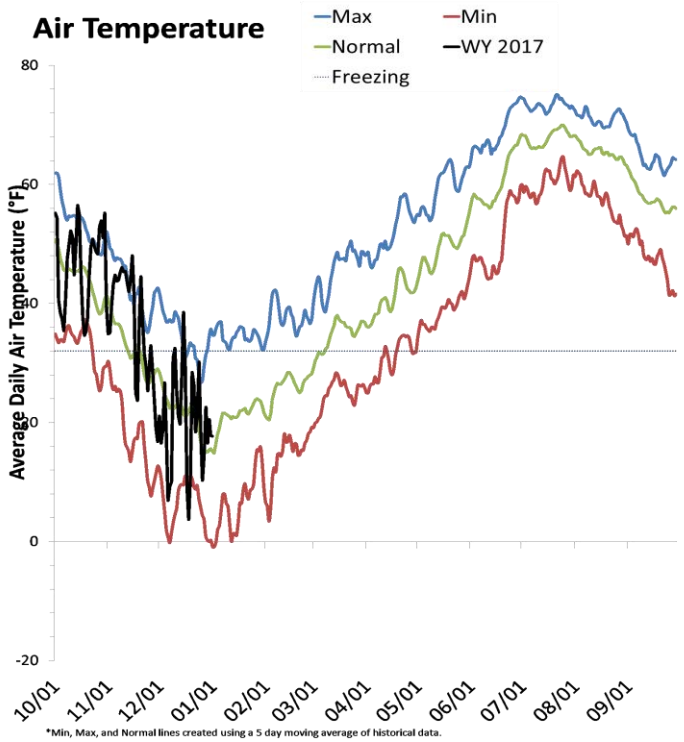
Northern Mountains

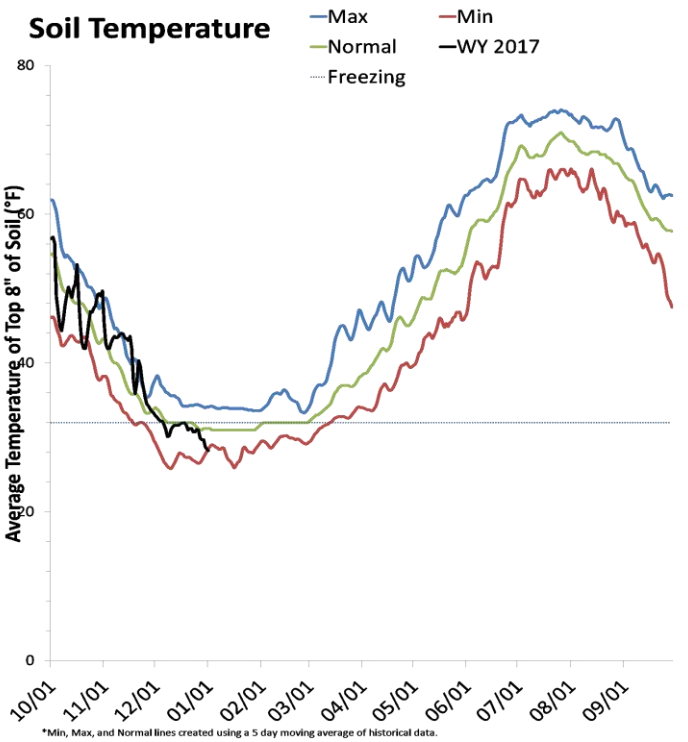
January 1, 2017

The average precipitation in December at SCAN sites within the basin was 1.8 inches, which brings the seasonal accumulation (Oct-Dec) to 4.7 inches. Soil moisture is at 41% compared to 34% last year.





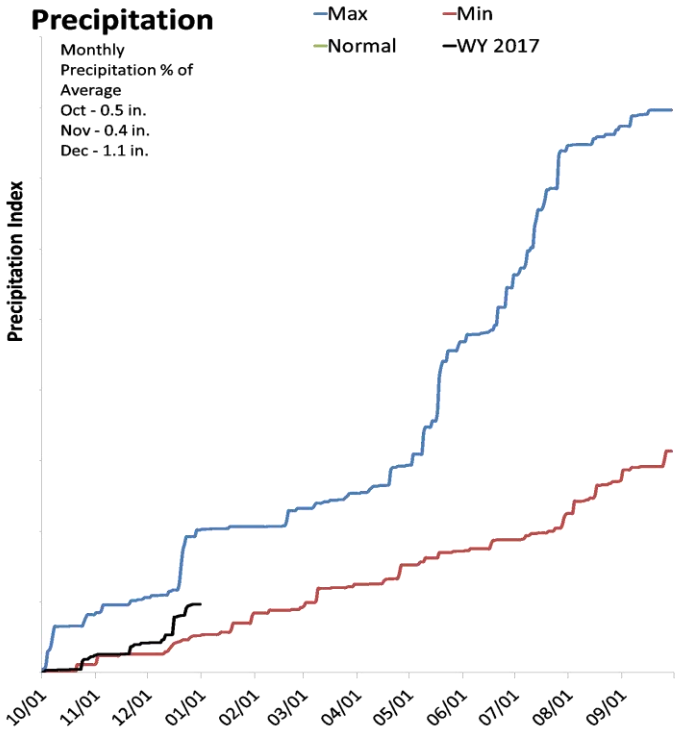


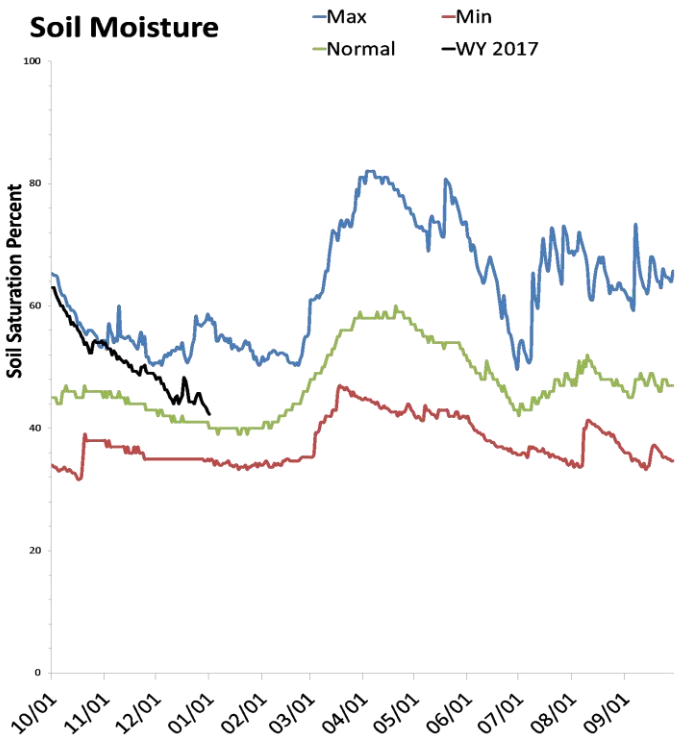


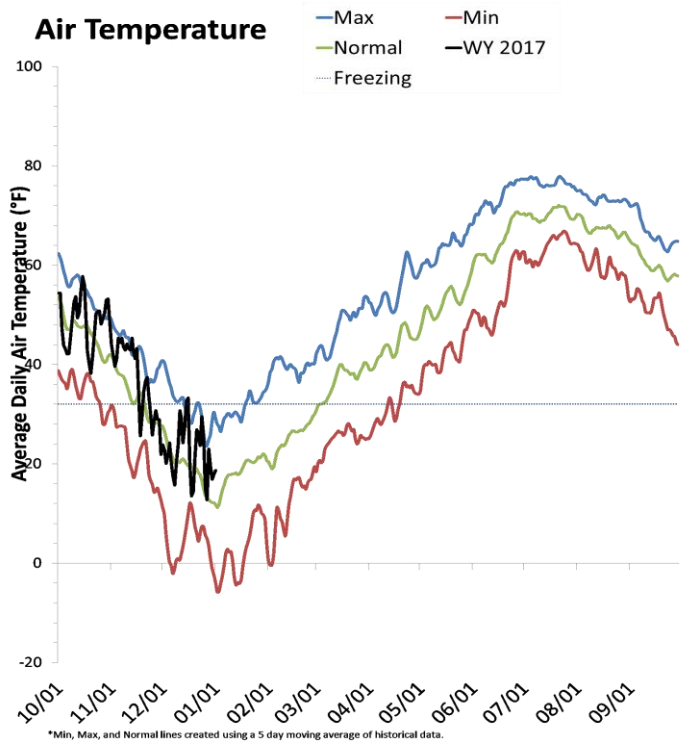
Uinta Basin

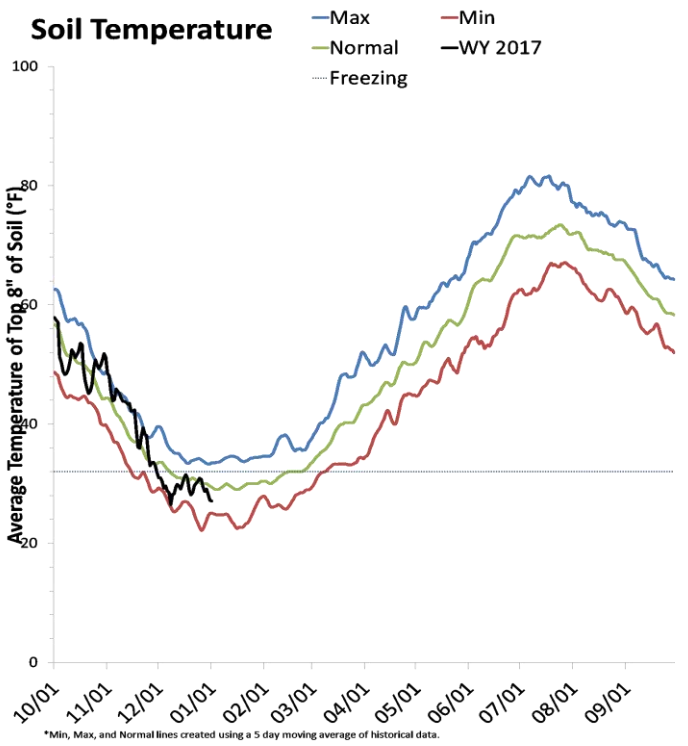
January 1, 2017

The average precipitation in December at SCAN sites within the basin was 1.1 inches, which brings the seasonal accumulation (Oct-Dec) to 1.9 inches. Soil moisture is at 43% compared to 37% last year.





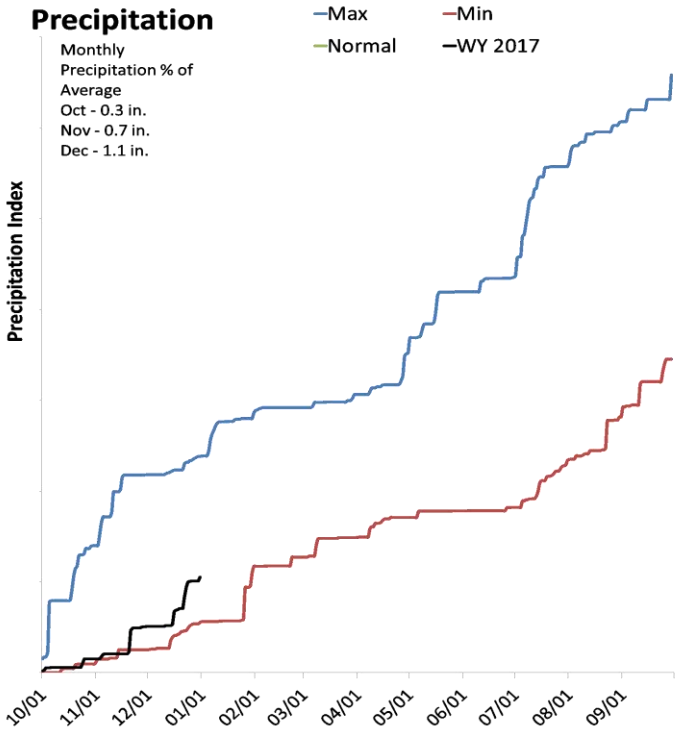


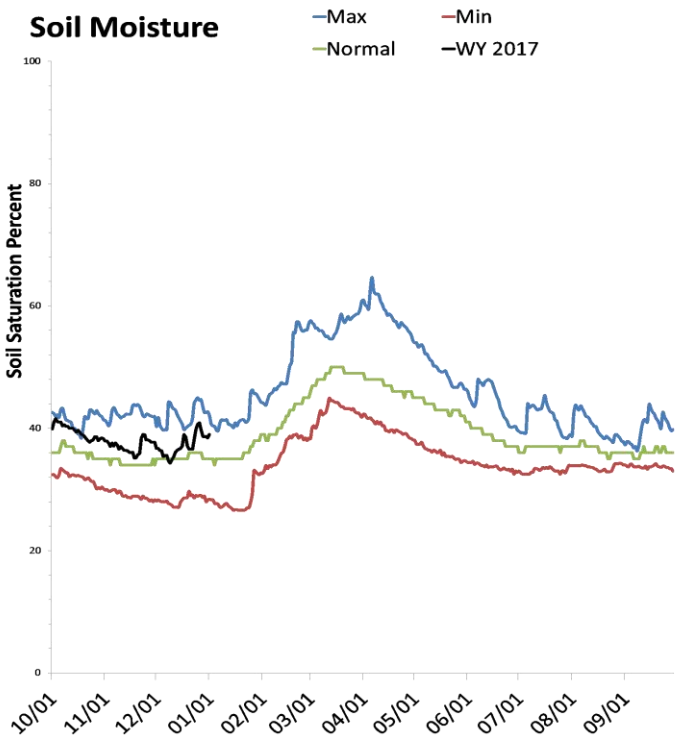


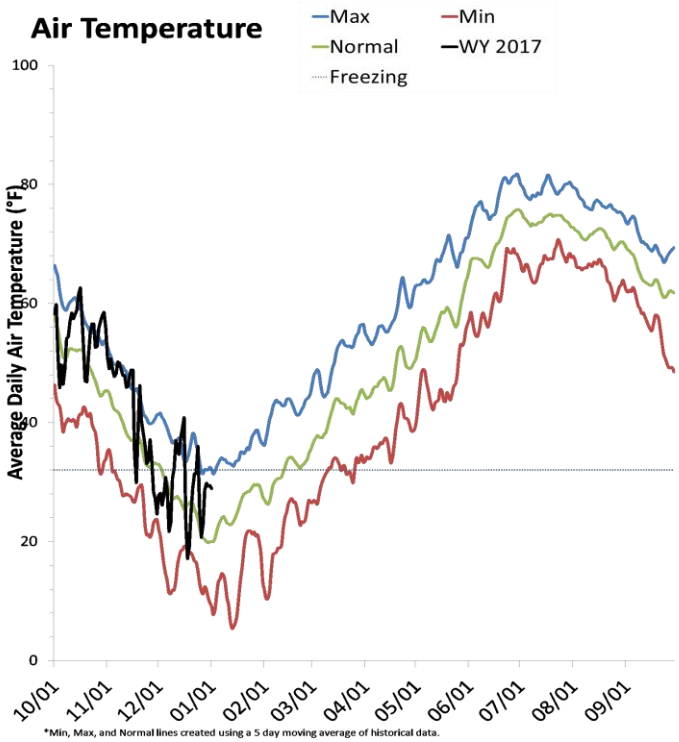
Southeast

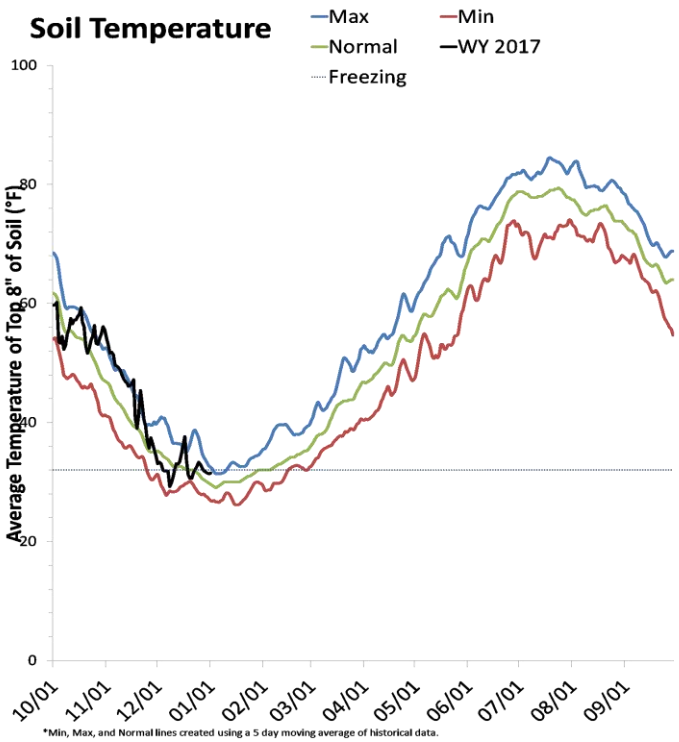
January 1, 2017

The average precipitation in December at SCAN sites within the basin was 1.1 inches, which brings the seasonal accumulation (Oct-Dec) to 2.1 inches. Soil moisture is at 39% compared to 39% last year.





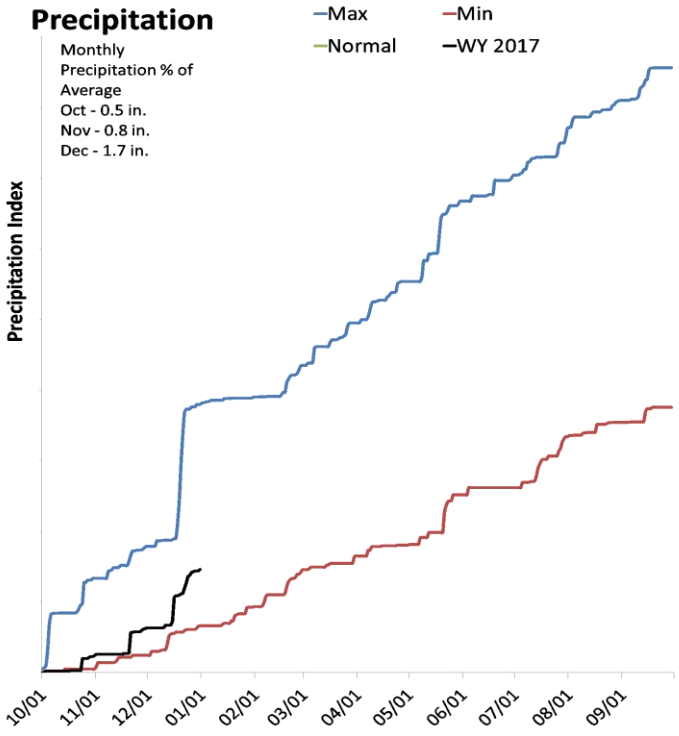


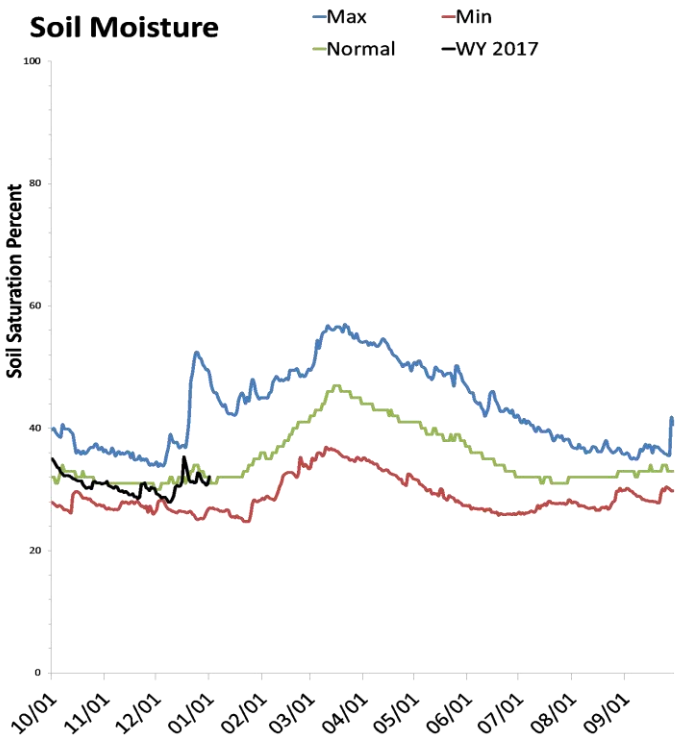


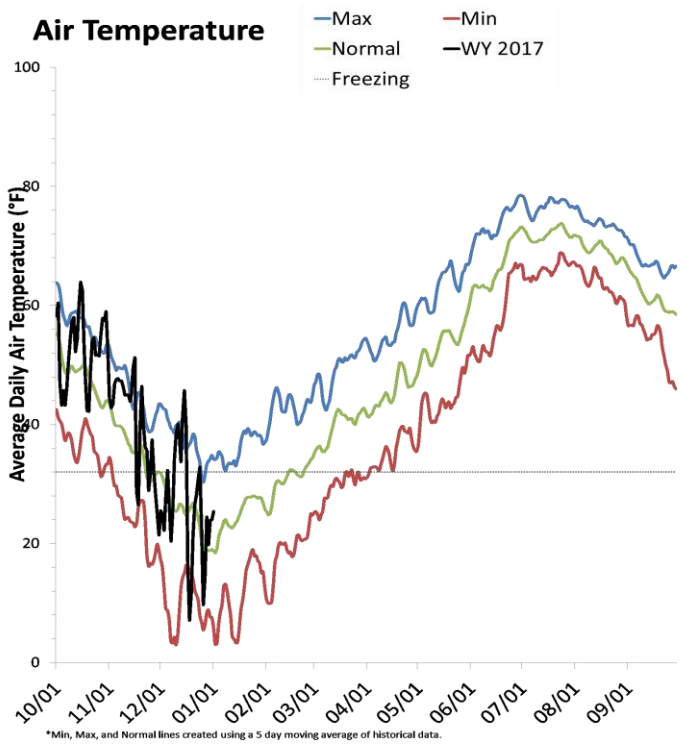
South Central

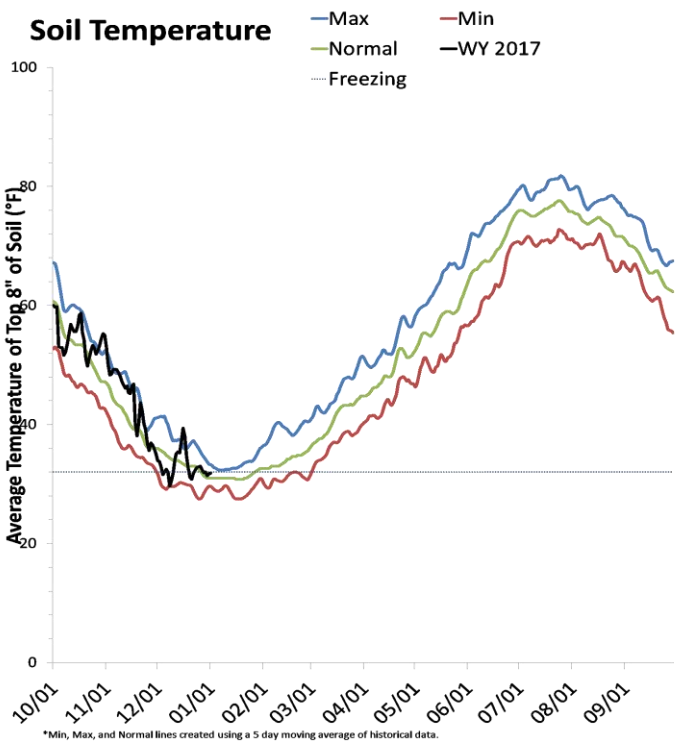
January 1, 2017

The average precipitation in December at SCAN sites within the basin was 1.7 inches, which brings the seasonal accumulation (Oct-Dec) to 2.9 inches. Soil moisture is at 31% compared to 31% last year.





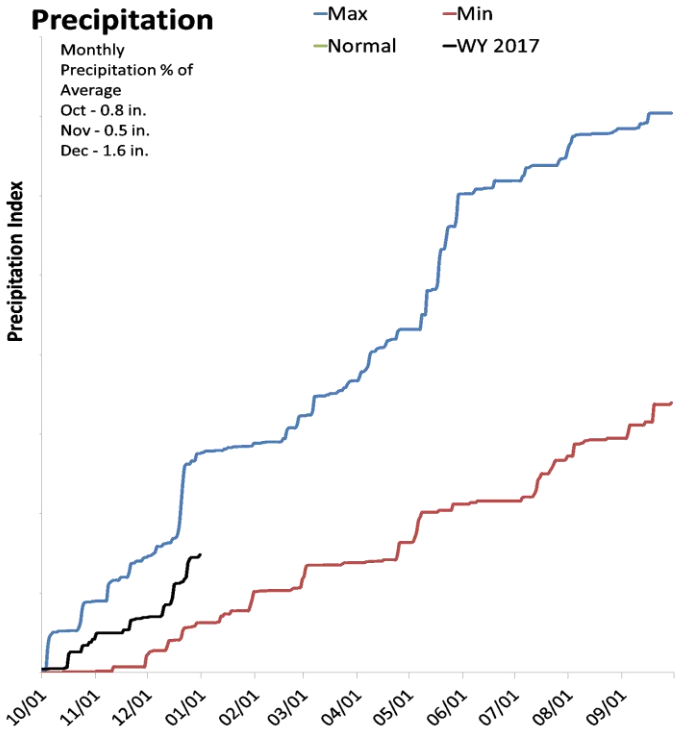


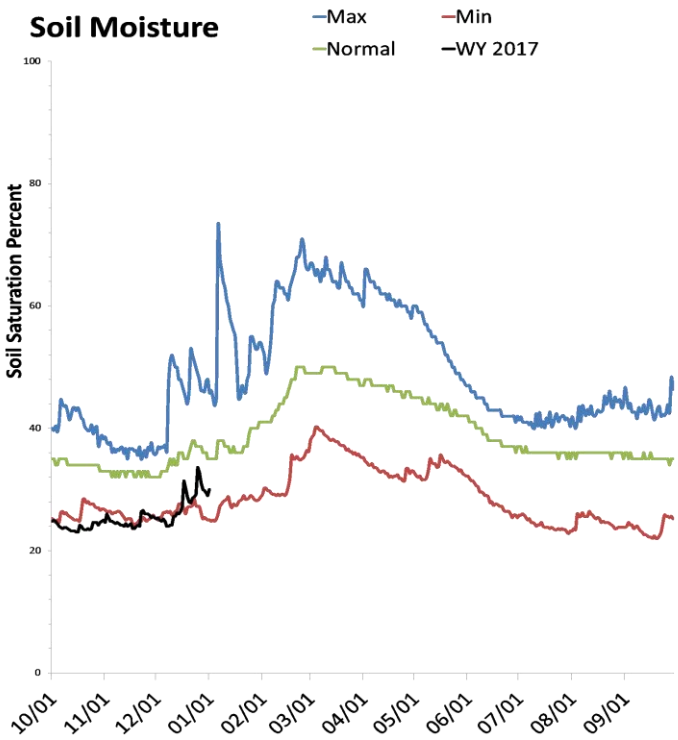


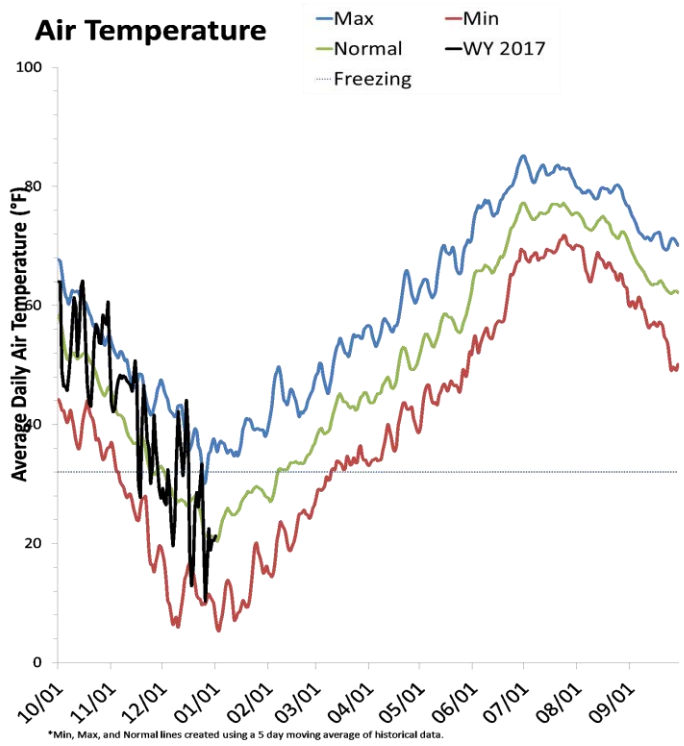
Western and Dixie

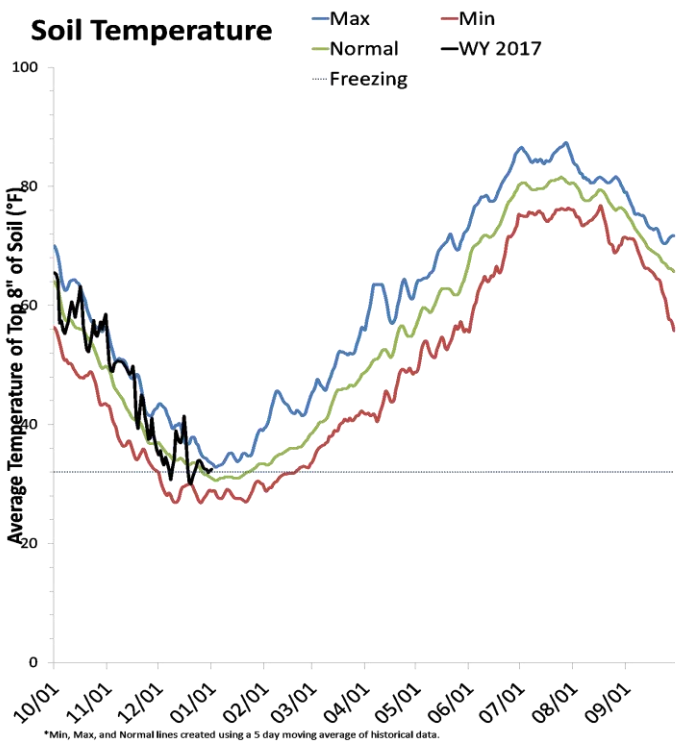
January 1, 2017

The average precipitation in December at SCAN sites within the basin was 1.6 inches, which brings the seasonal accumulation (Oct-Dec) to 3 inches. Soil moisture is at 30% compared to 25% last year.





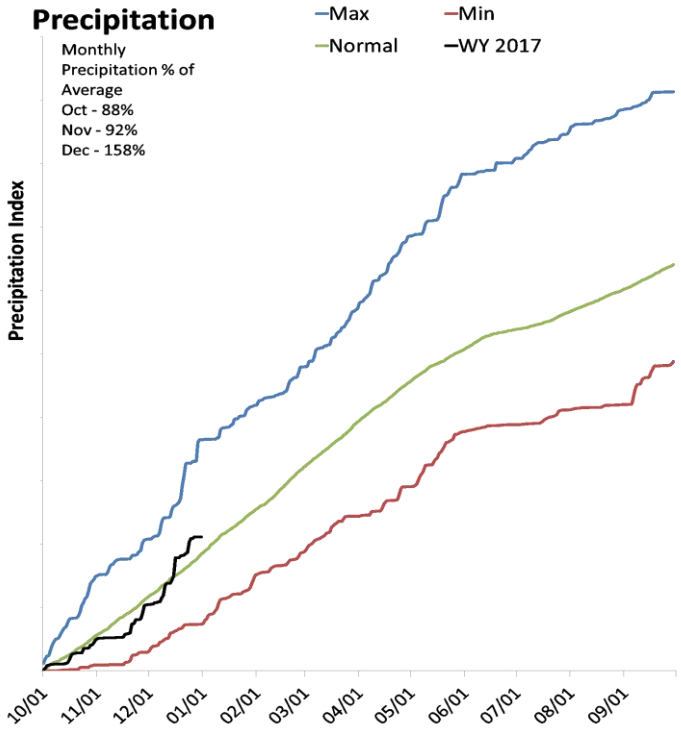


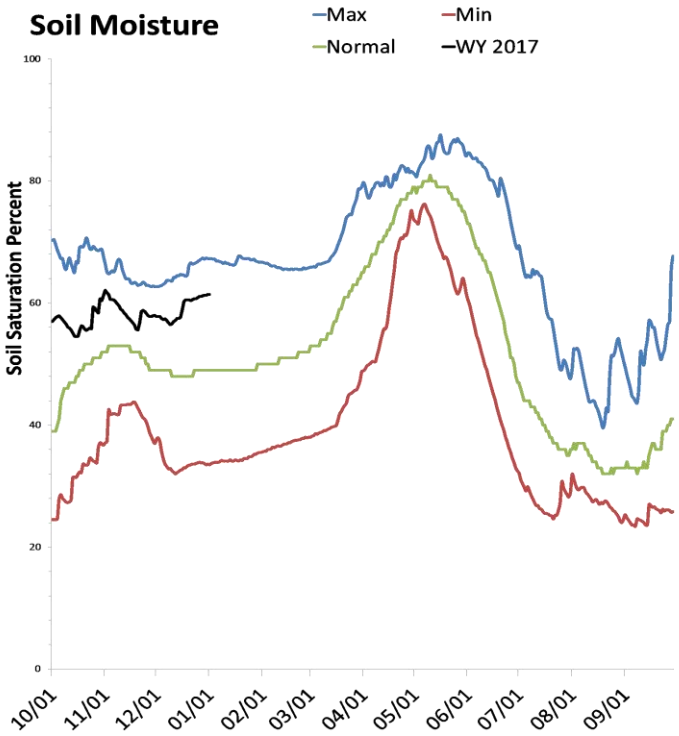


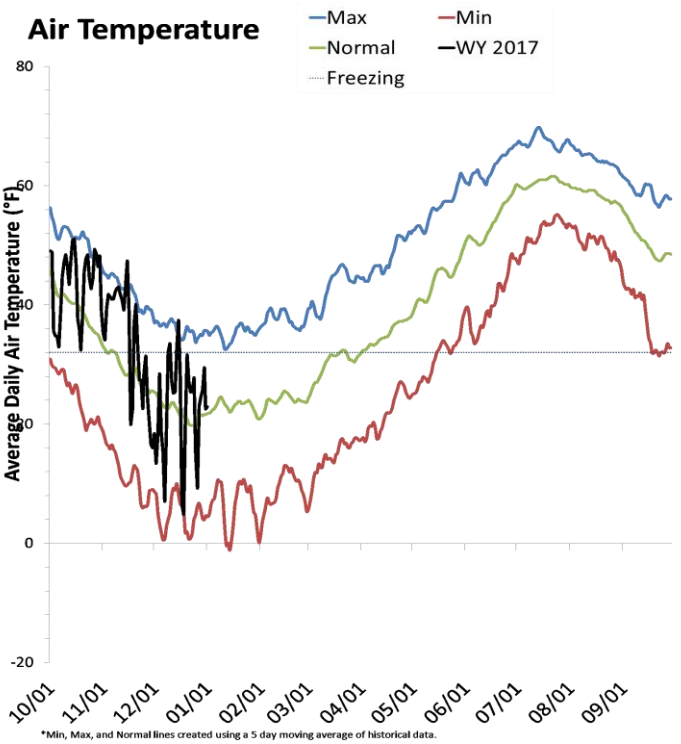
Statewide SNOTEL

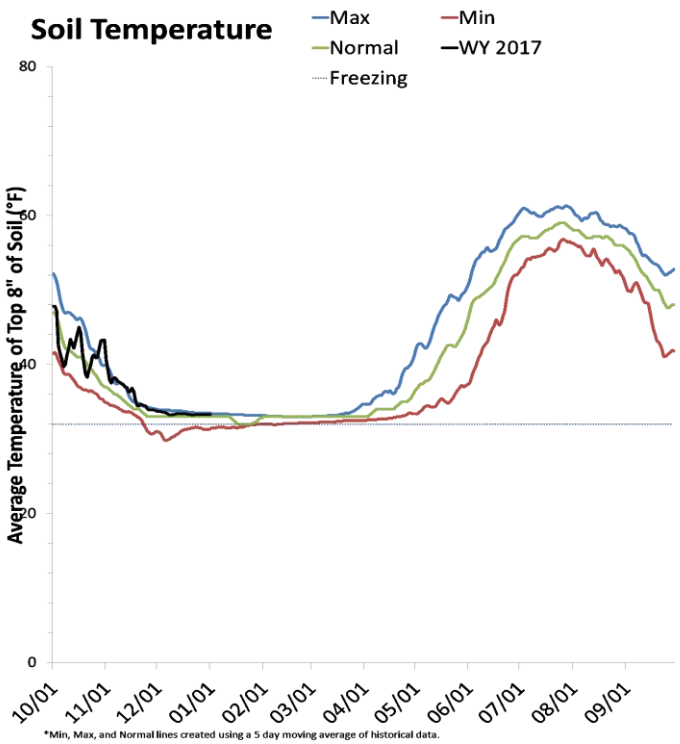
January 1, 2017

Precipitation at SNOTEL sites during December was much above average at 159%, which brings the seasonal accumulation (Oct-Dec) to 116% of average. Soil moisture is at 61% compared to 49% last year. Reservoir storage is at 49% of capacity, compared to 50% last year.





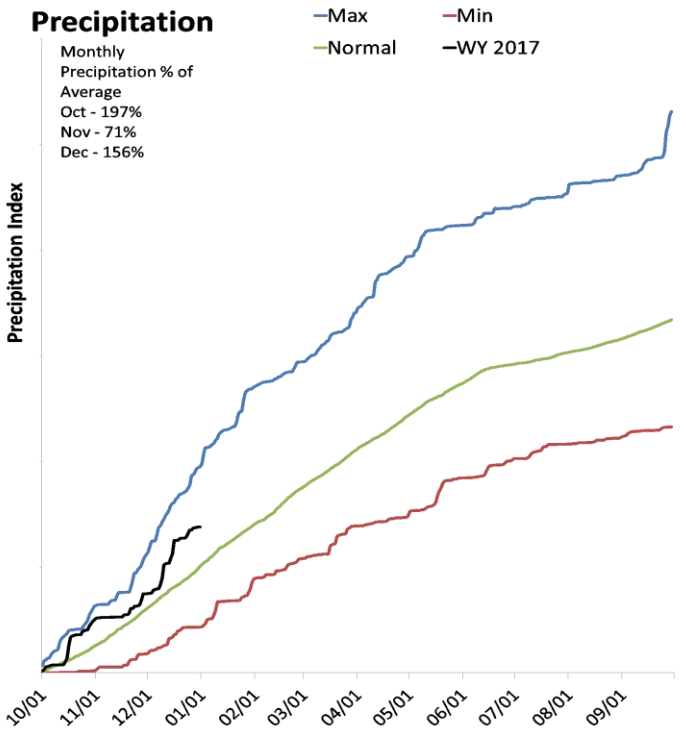


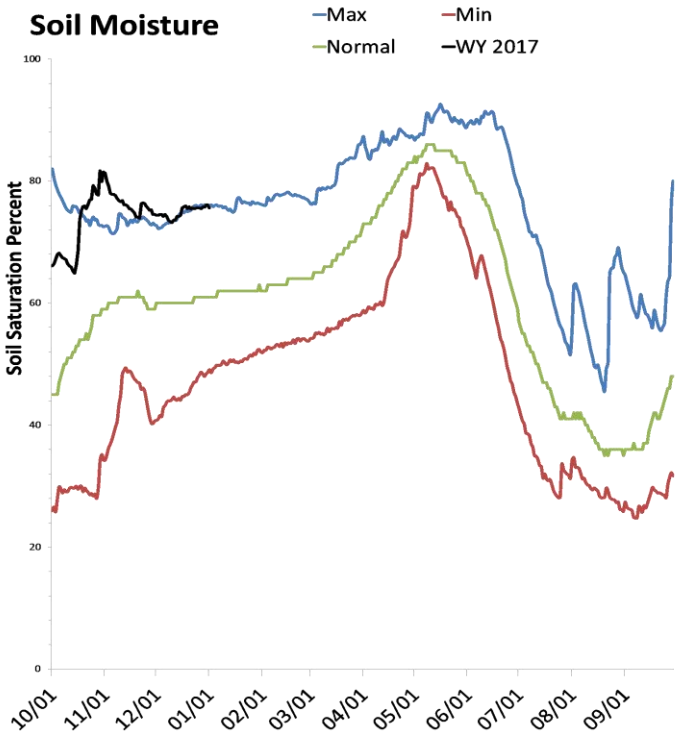


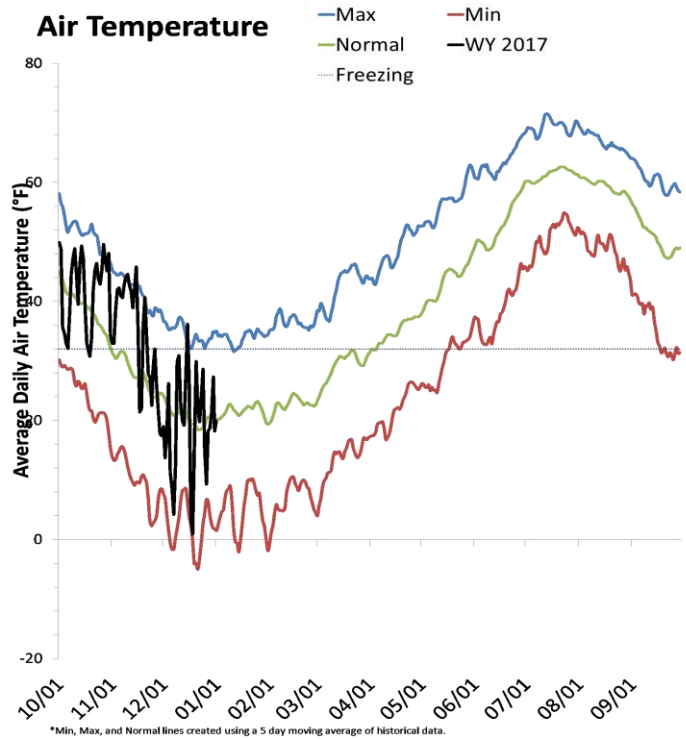
Bear River Basin

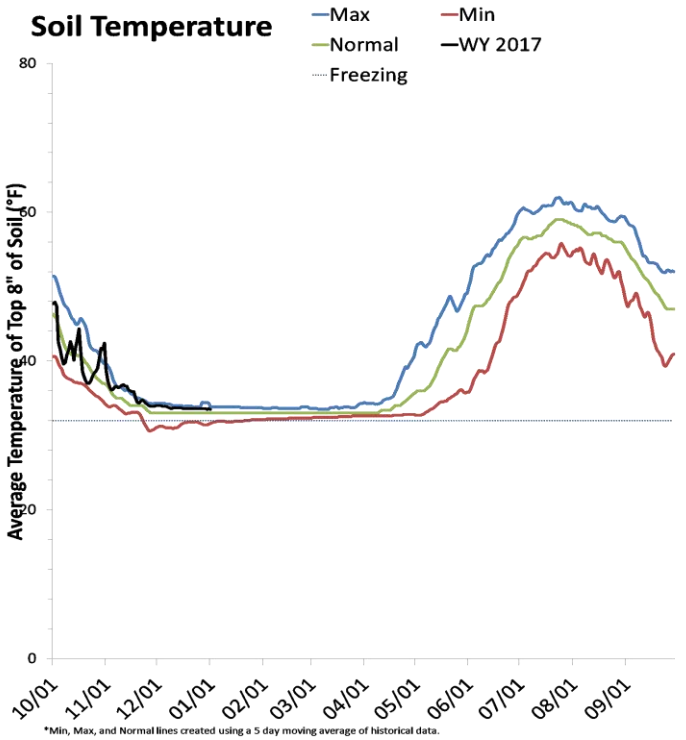
January 1, 2017

Precipitation in December was much above average at 157%, which brings the seasonal accumulation (Oct-Dec) to 137% of average. Soil moisture is at 76% compared to 59% last year. Reservoir storage is at 38% of capacity, compared to 37% last year. The water availability index for the Bear River is 47%, 87% for Woodruff Narrows and 42% for the Little Bear.









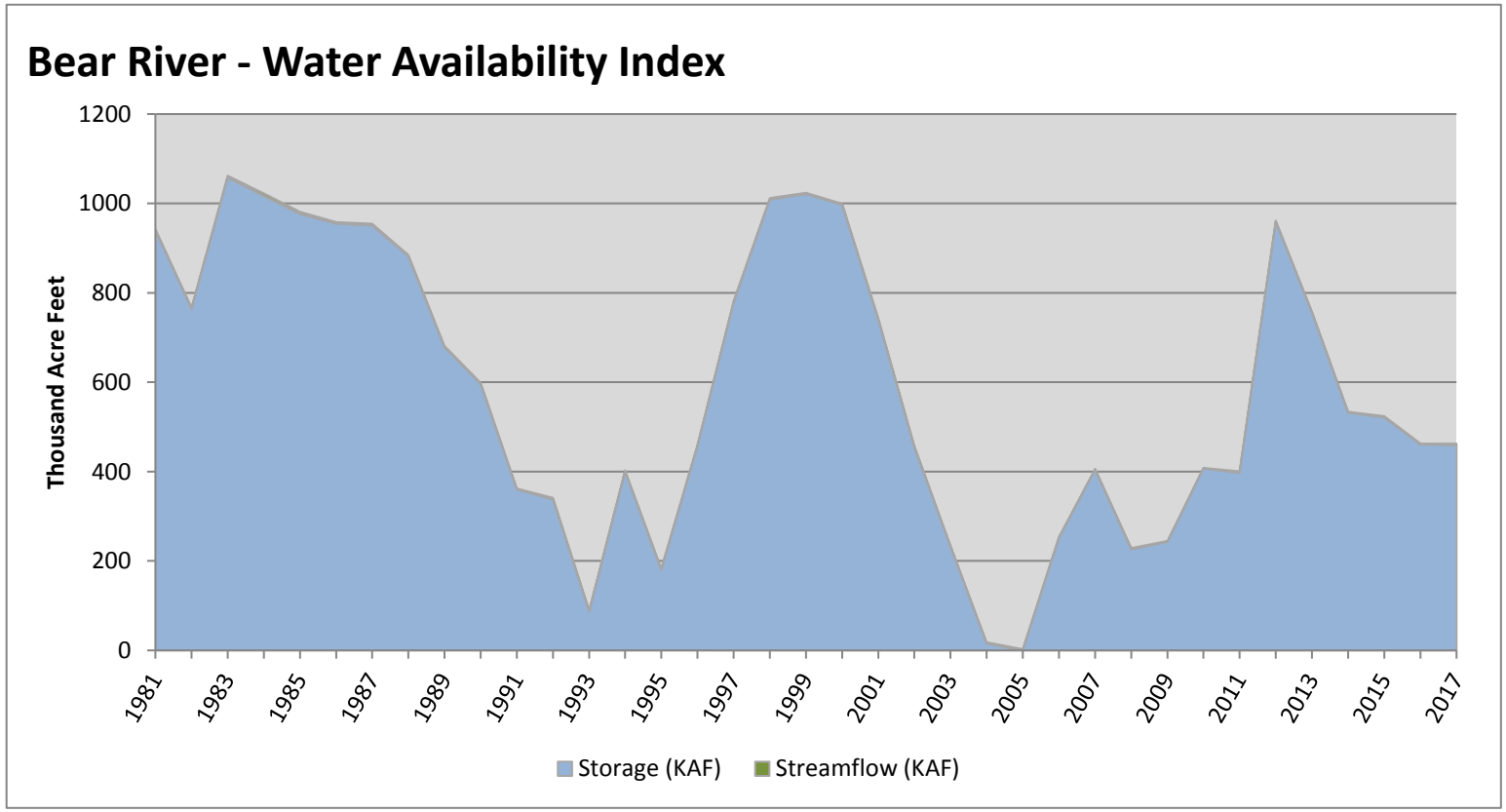
SNOTEL Data

January 1, 2017

Water Availability Index

Basin or Region	Dec EOM* Storage	December Flow	Storage + Flow	Percentile	WAI#	Years with similiar WAI
	KAF^	KAF^	KAF^	%		
Bear River	**459.11**	**3.61**	**462.72**	**47**	**-0.22**	**96, 16, 15, 14**

*EOM, end of month; #WAI, Water Availability Index; ^KAF, thousand acre-feet.

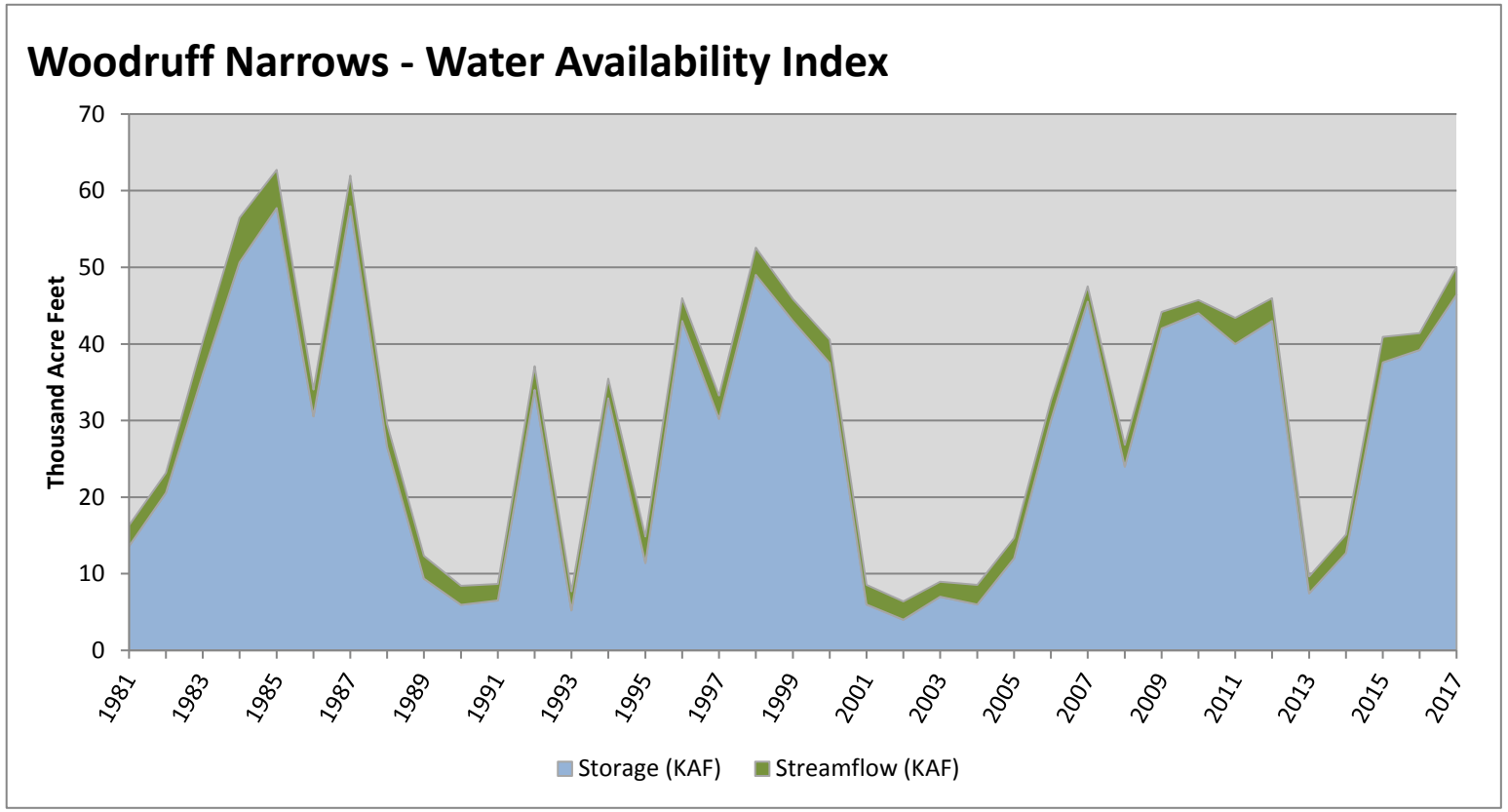


January 1, 2017

Water Availability Index

Basin or Region	Dec EOM* Storage	December Flow	Storage + Flow	Percentile	WAI#	Years with similiar WAI
	KAF^	KAF^	KAF^	%		
Woodruff Narrows	**46.42**	**3.61**	**50.03**	**87**	**3.07**	**12, 07, 98, 84**

*EOM, end of month; #WAI, Water Availability Index; ^KAF, thousand acre-feet.

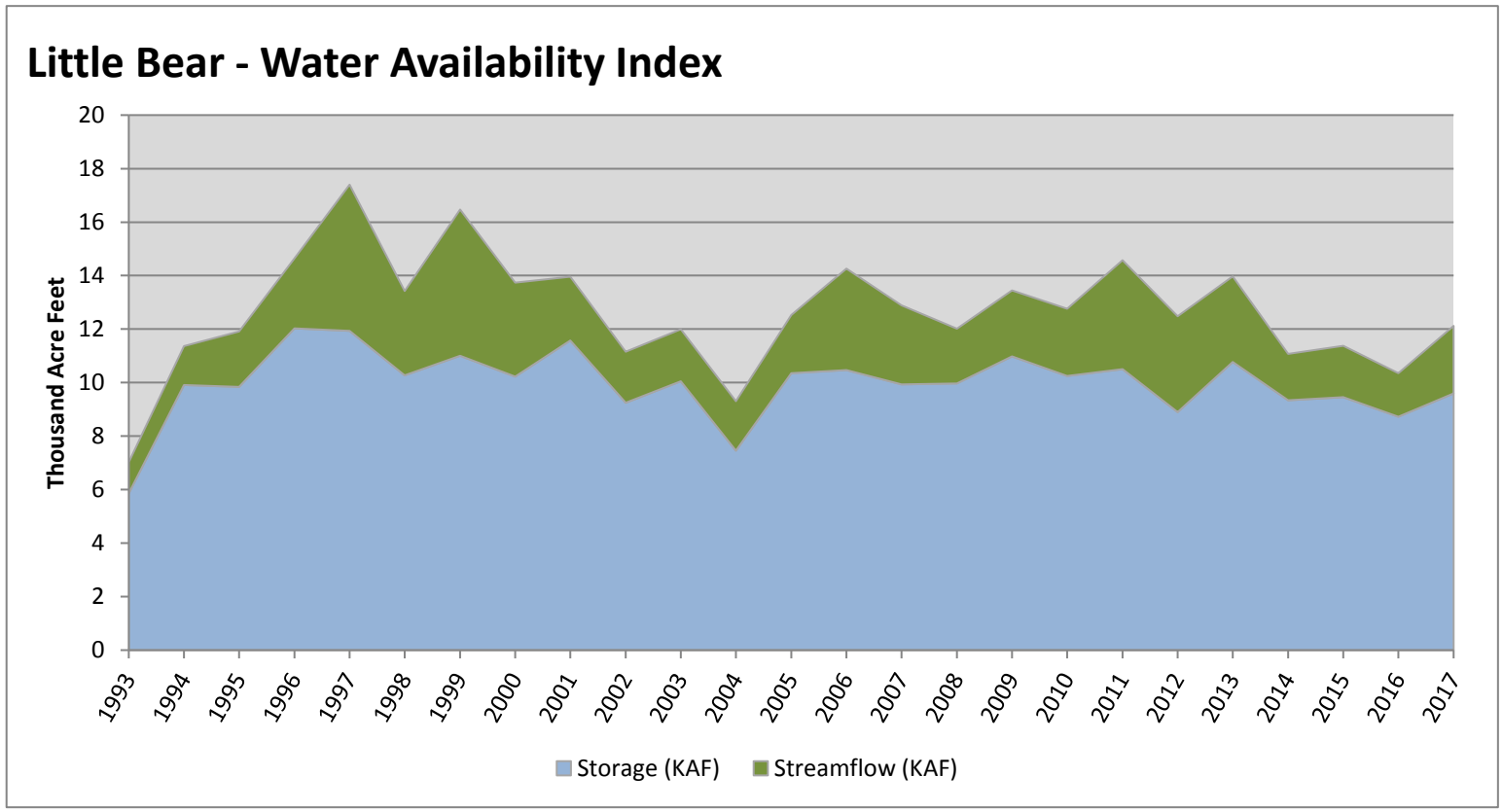


January 1, 2017

Water Availability Index

Basin or Region	Dec EOM* Storage	December Flow	Storage + Flow	Percentile	WAI#	Years with similiar WAI
	KAF^	KAF^	KAF^	%		
Little Bear	**9.60**	**2.52**	**12.12**	**42**	**-0.64**	**03, 08, 12, 05**

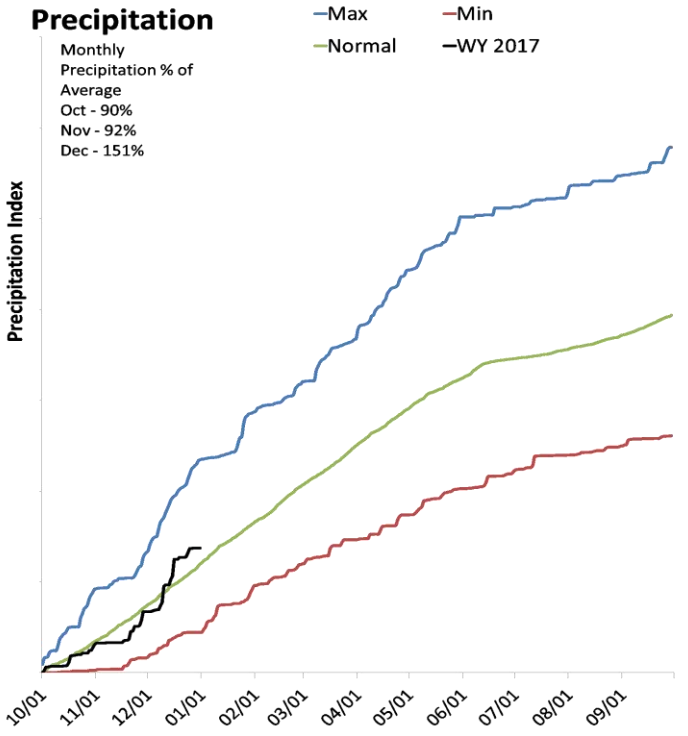
*EOM, end of month; #WAI, Water Availability Index; ^KAF, thousand acre-feet.

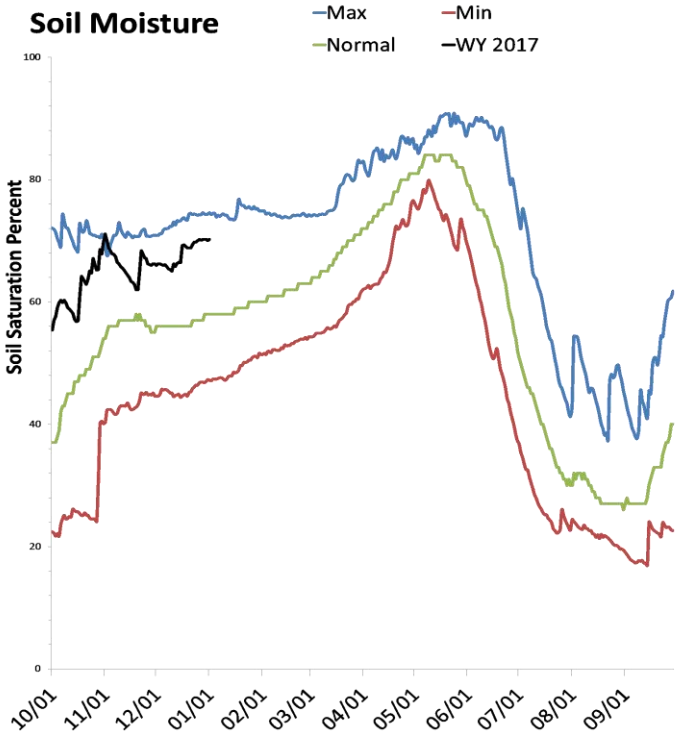


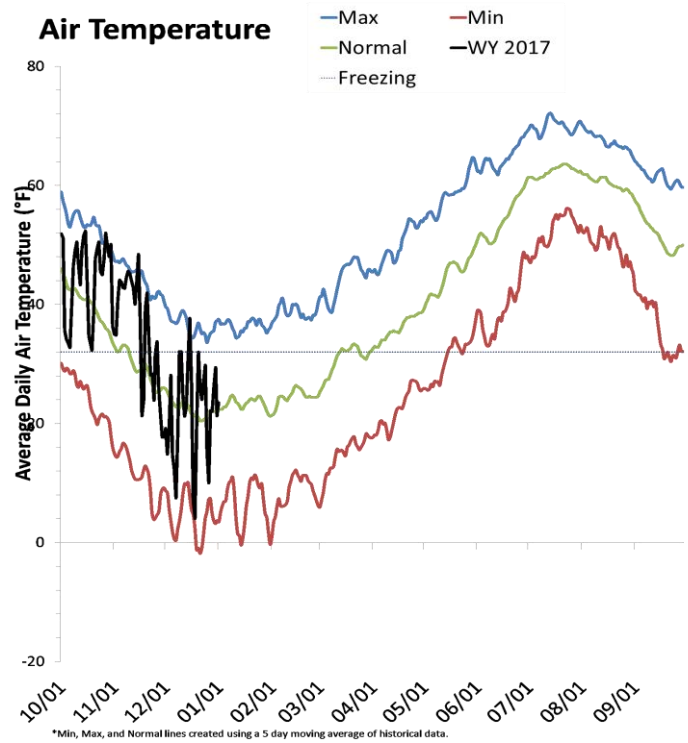
Weber & Ogden River Basins

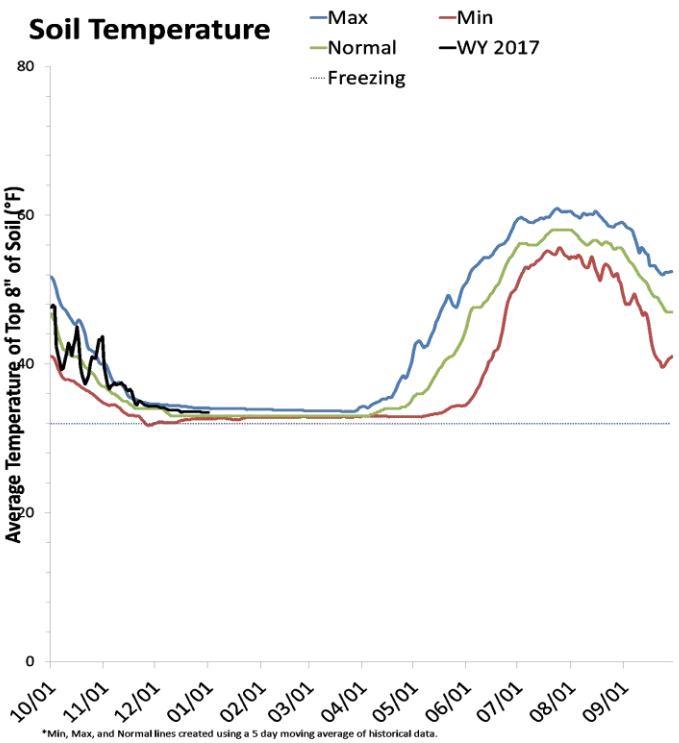
January 1, 2017

Precipitation in December was much above average at 152%, which brings the seasonal accumulation (Oct-Dec) to 115% of average. Soil moisture is at 70% compared to 49% last year. Reservoir storage is at 56% of capacity, compared to 43% last year. The water availability index for the Ogden River is 79% and 36% for the Weber River.









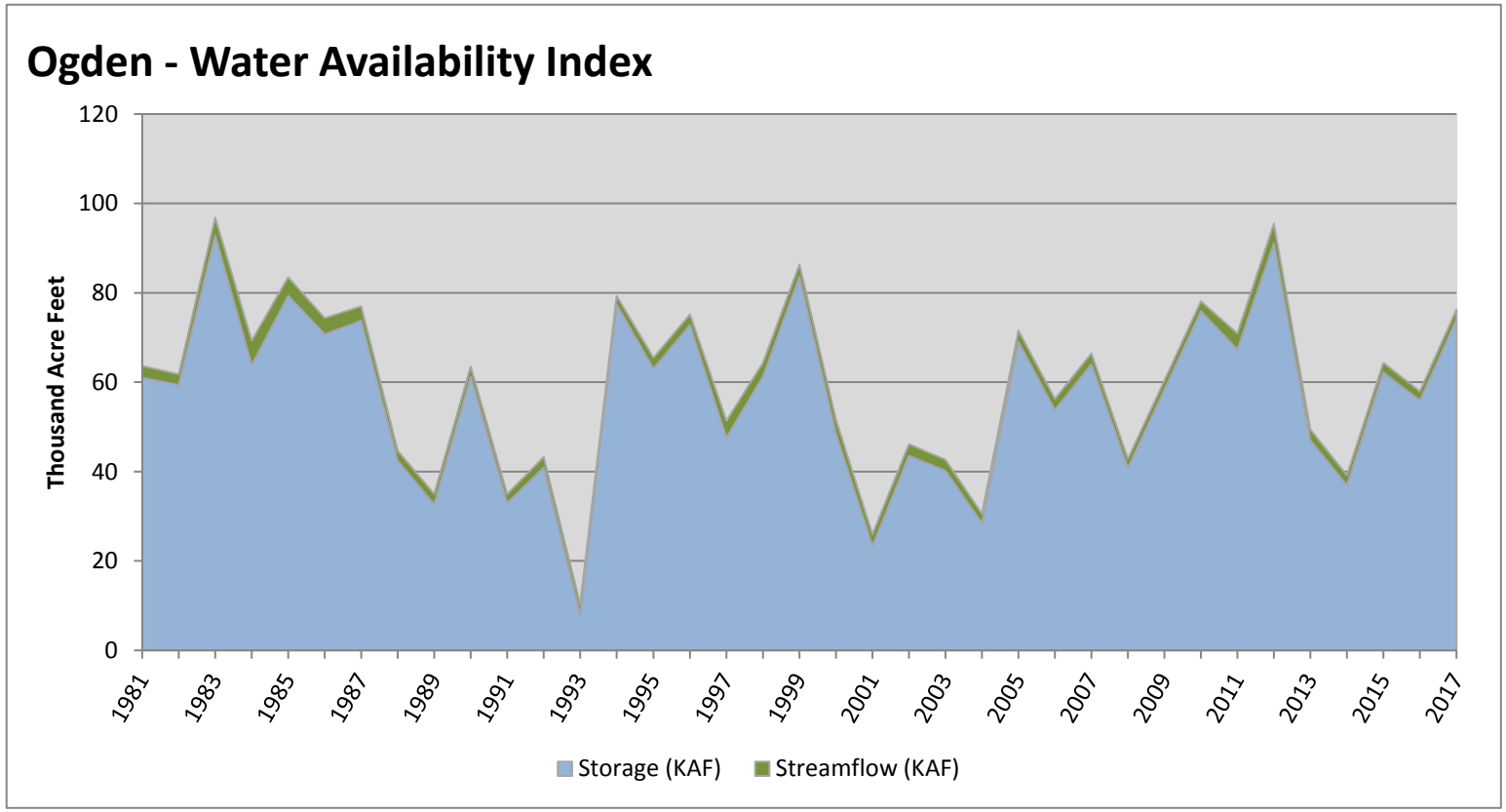
SNOTEL Data

January 1, 2017

Water Availability Index

Basin or Region	Dec EOM* Storage	December Flow	Storage + Flow	Percentile	WAI#	Years with similiar WAI
	KAF^	KAF^	KAF^	%		
Ogden	**73.95**	**2.31**	**76.26**	**79**	**2.41**	**86, 96, 87, 10**

*EOM, end of month; #WAI, Water Availability Index; ^KAF, thousand acre-feet.

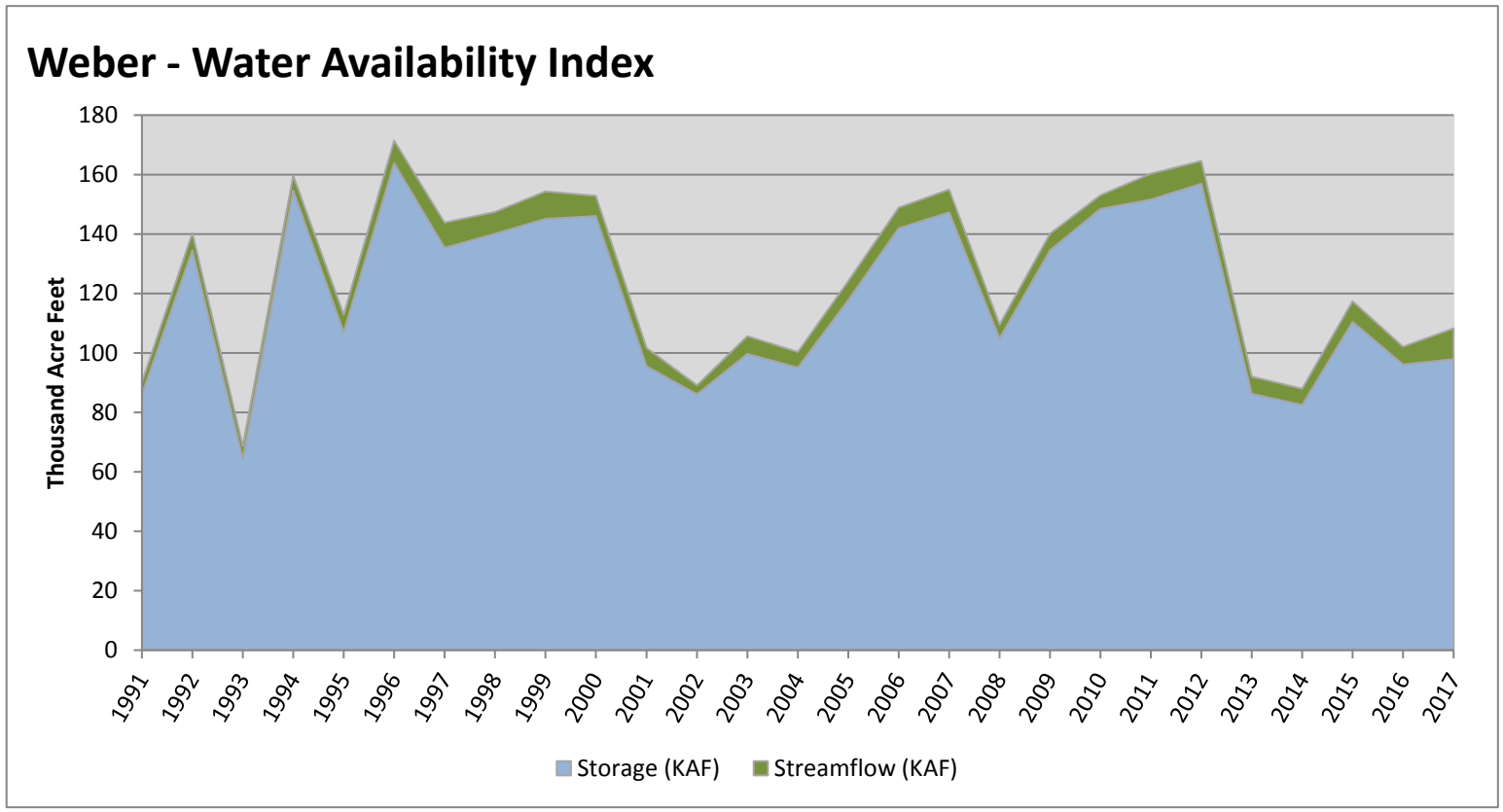


January 1, 2017

Water Availability Index

Basin or Region	Dec EOM* Storage	December Flow	Storage + Flow	Percentile	WAI#	Years with similiar WAI
	KAF^	KAF^	KAF^	%		
Weber	**97.85**	**10.42**	**108.27**	**36**	**-1.19**	**16, 03, 08, 95**

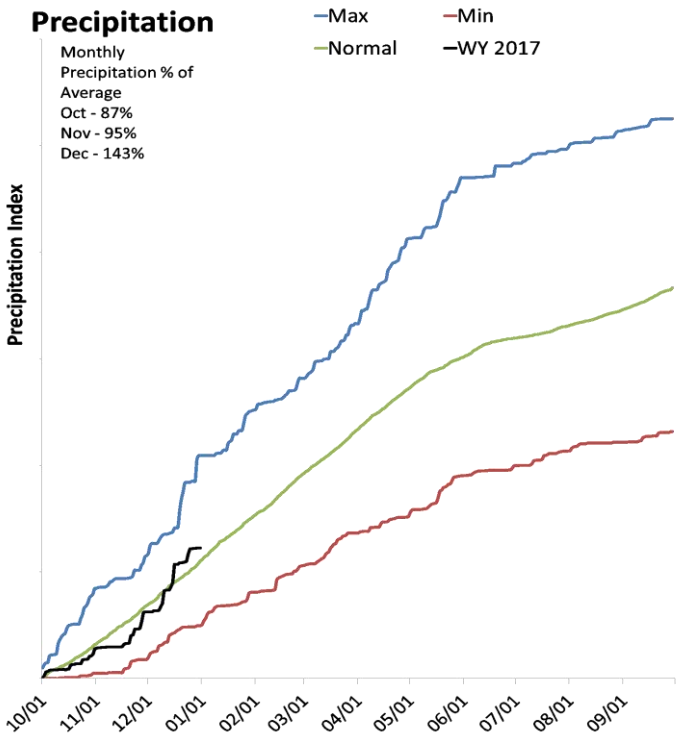
*EOM, end of month; #WAI, Water Availability Index; ^KAF, thousand acre-feet.

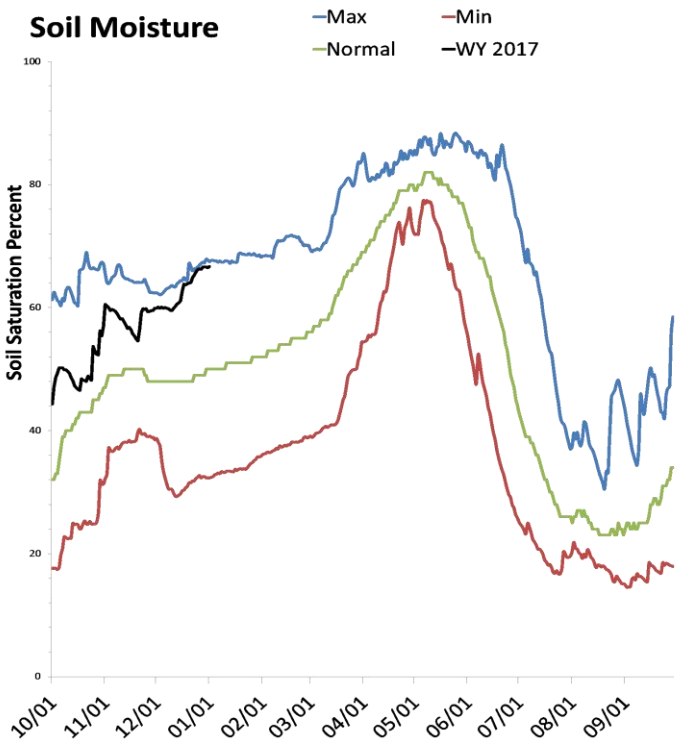


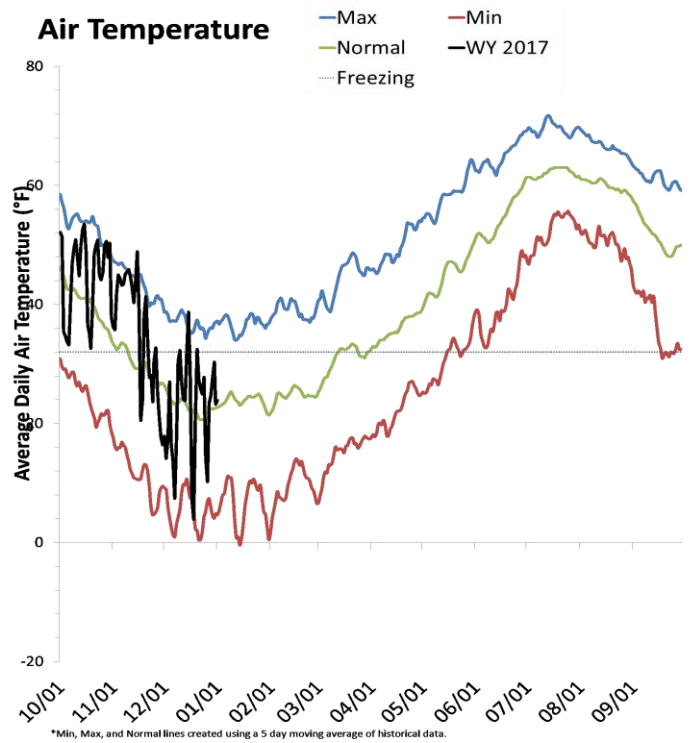
Provo & Jordan River Basins

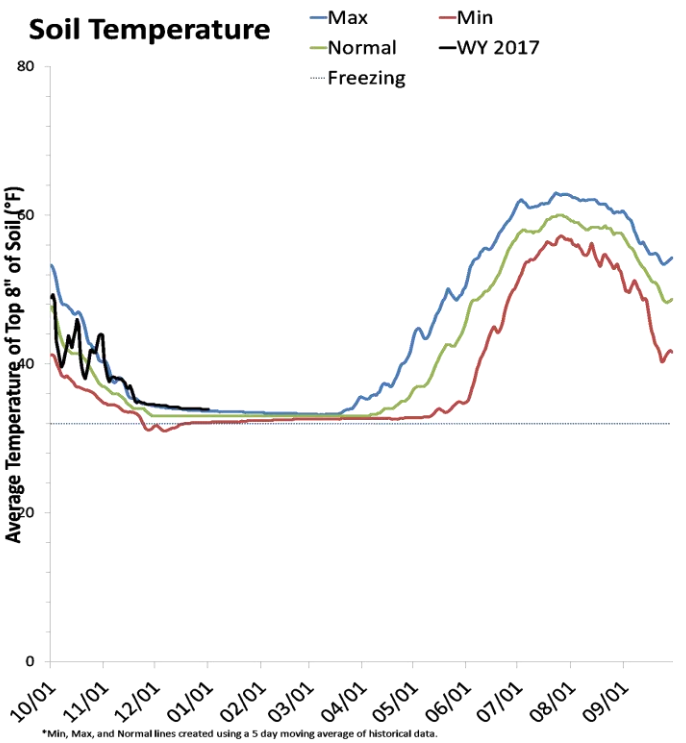
January 1, 2017

Precipitation in December was much above average at 143%, which brings the seasonal accumulation (Oct-Dec) to 111% of average. Soil moisture is at 66% compared to 39% last year. Reservoir storage is at 58% of capacity, compared to 61% last year. The water availability index for the Provo River is 35%.







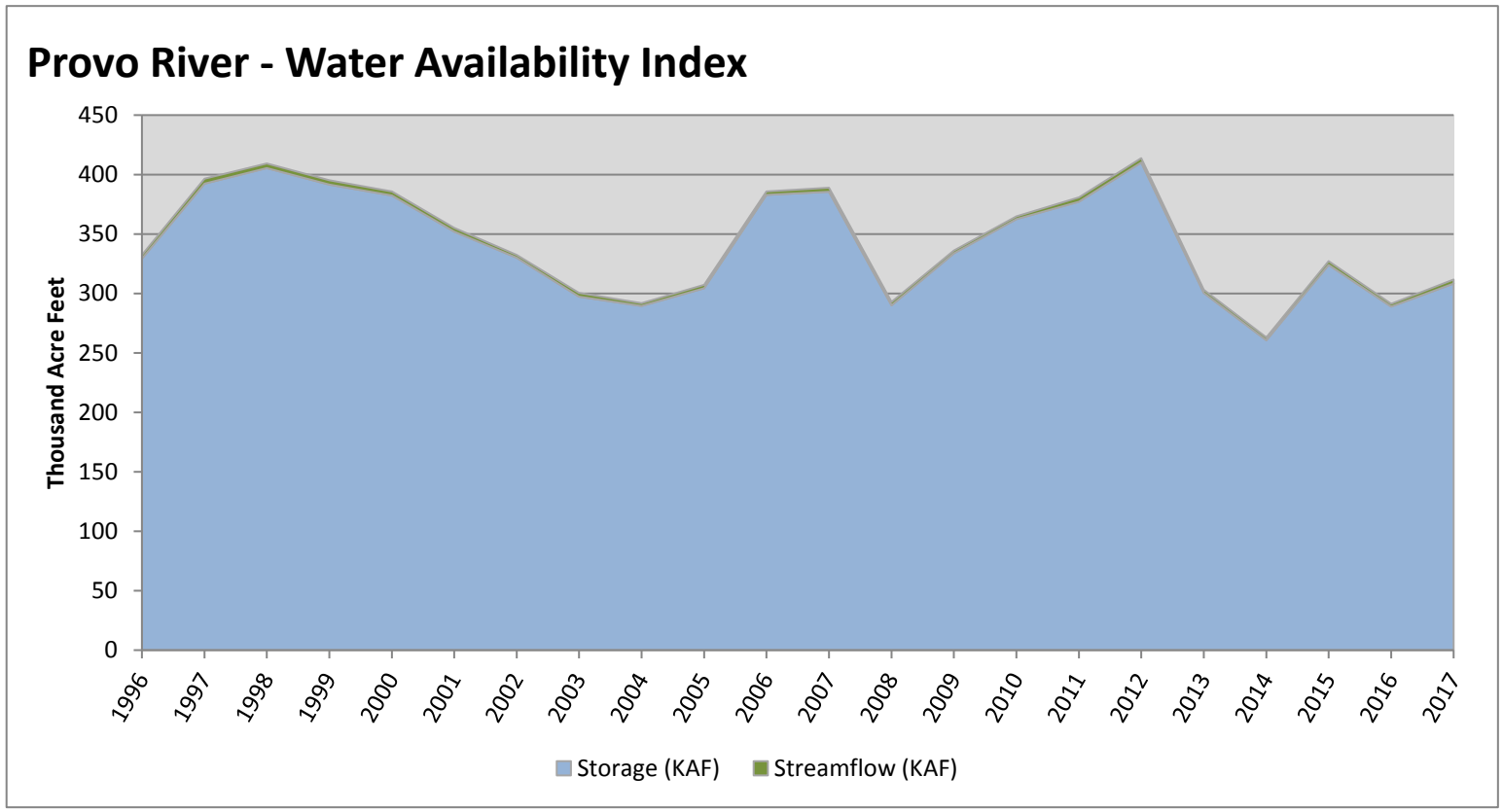


January 1, 2017

Water Availability Index

Basin or Region	Dec EOM* Storage	December Flow	Storage + Flow	Percentile	WAI#	Years with similiar WAI
	KAF^	KAF^	KAF^	%		
Provo River	**308.35**	**3.25**	**311.60**	**35**	**-1.27**	**13, 05, 15, 96**

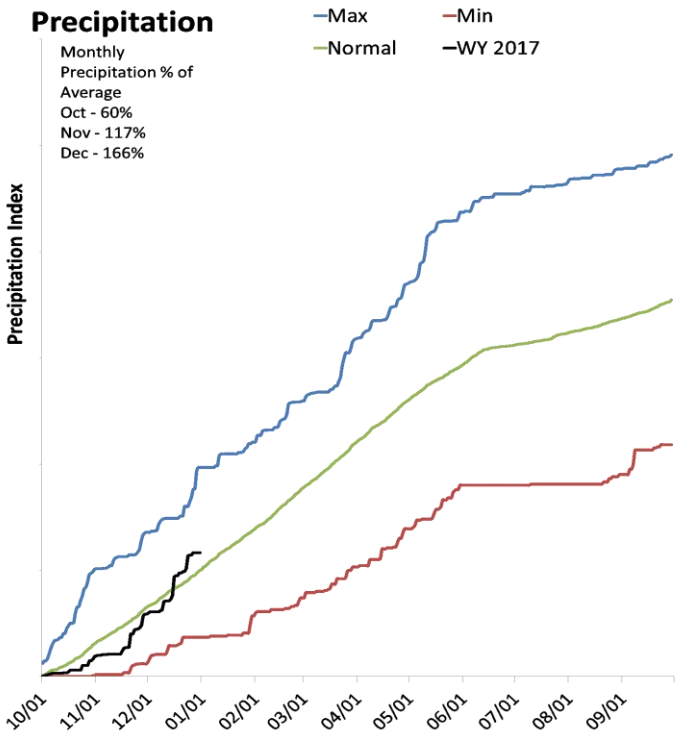
*EOM, end of month; #WAI, Water Availability Index; ^KAF, thousand acre-feet.

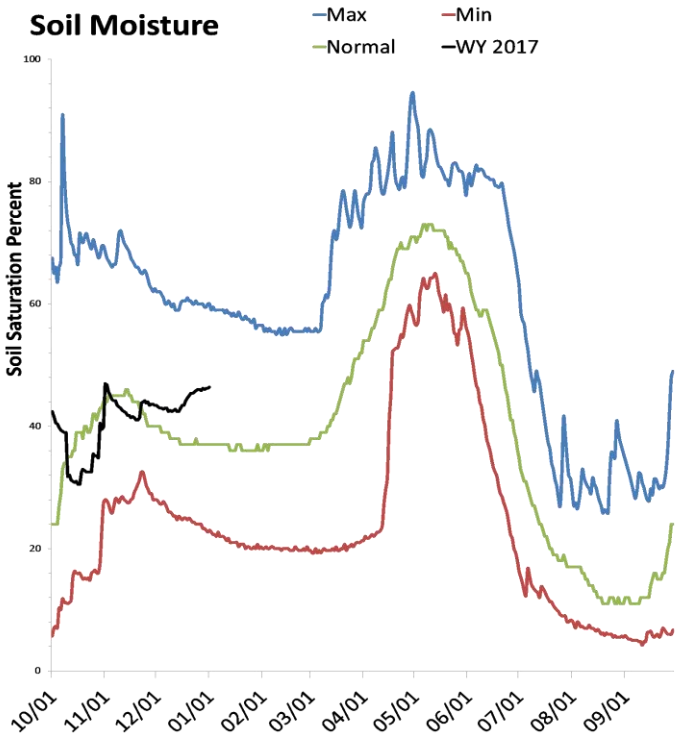


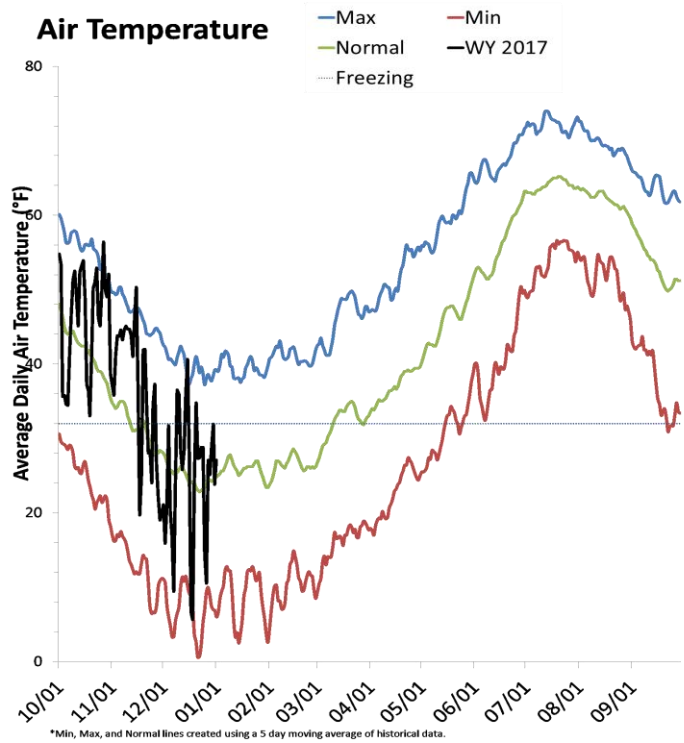
Tooele Valley & West Desert Basins

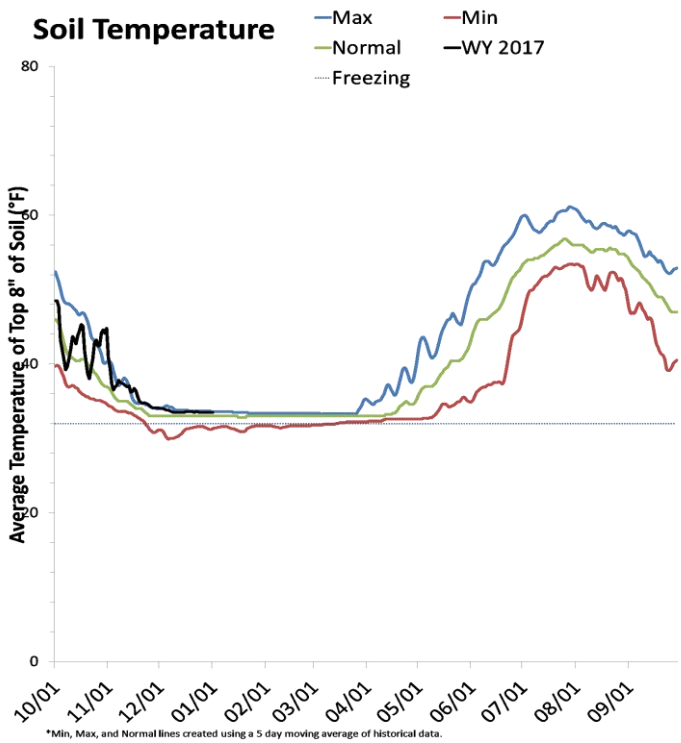
January 1, 2017

Precipitation in December was much above average at 166%, which brings the seasonal accumulation (Oct-Dec) to 117% of average. Soil moisture is at 46% compared to 30% last year. Reservoir storage is at 20% of capacity, compared to 33% last year.







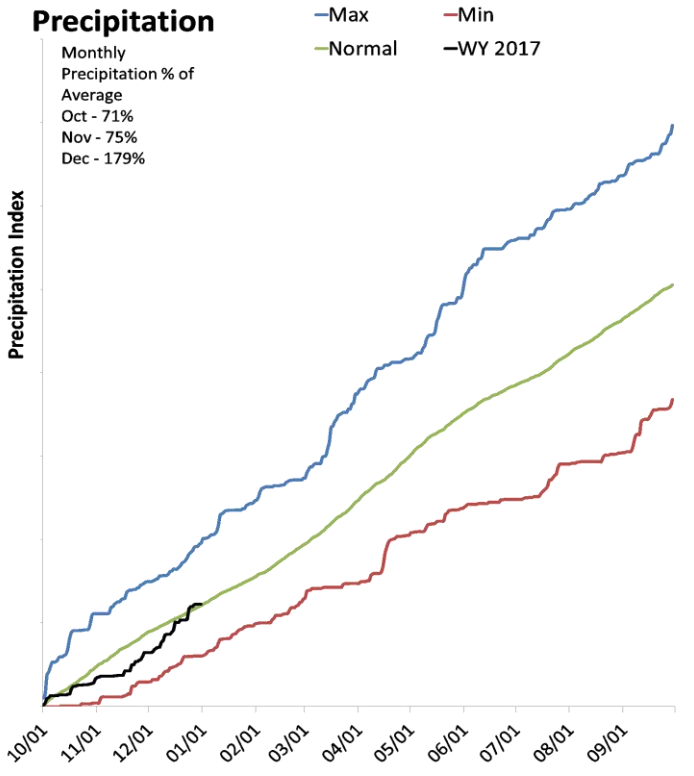


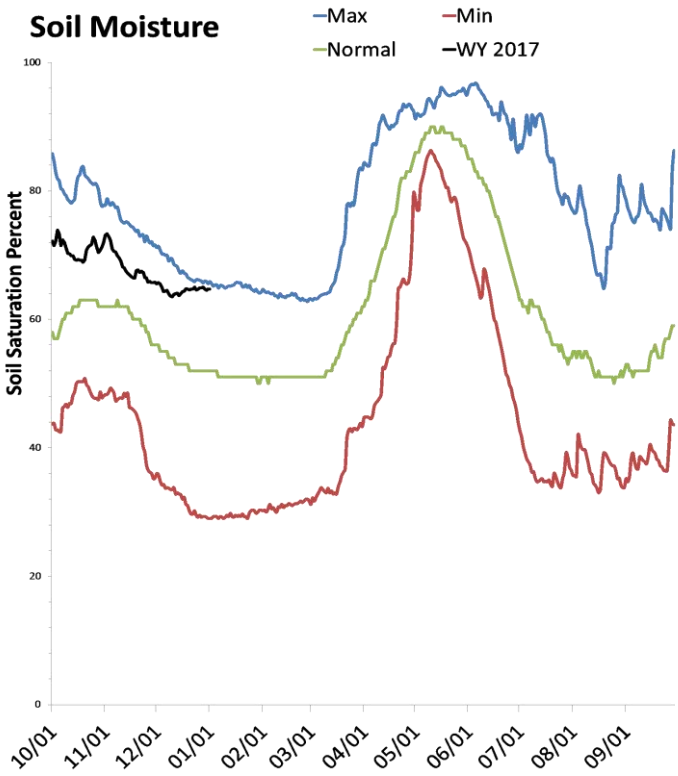
SNOTEL Data

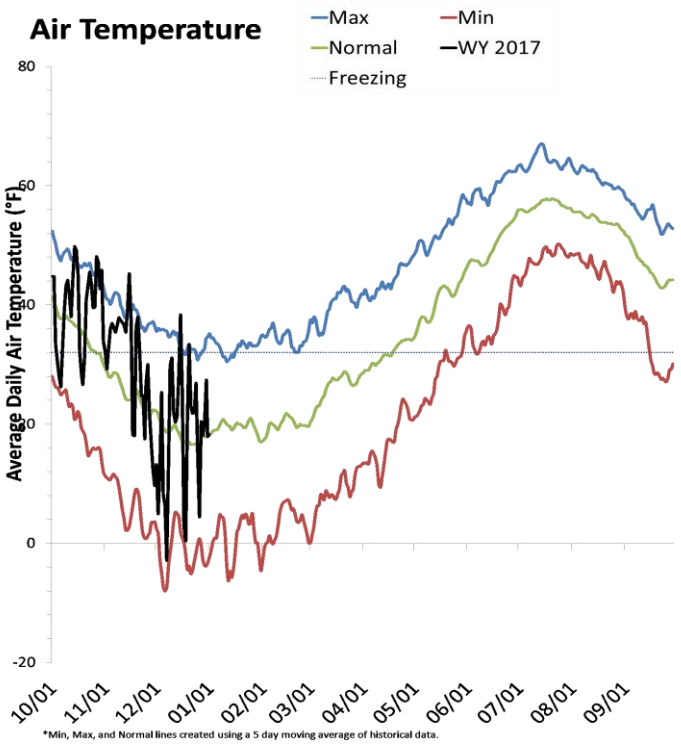
Northeastern Uinta Basin

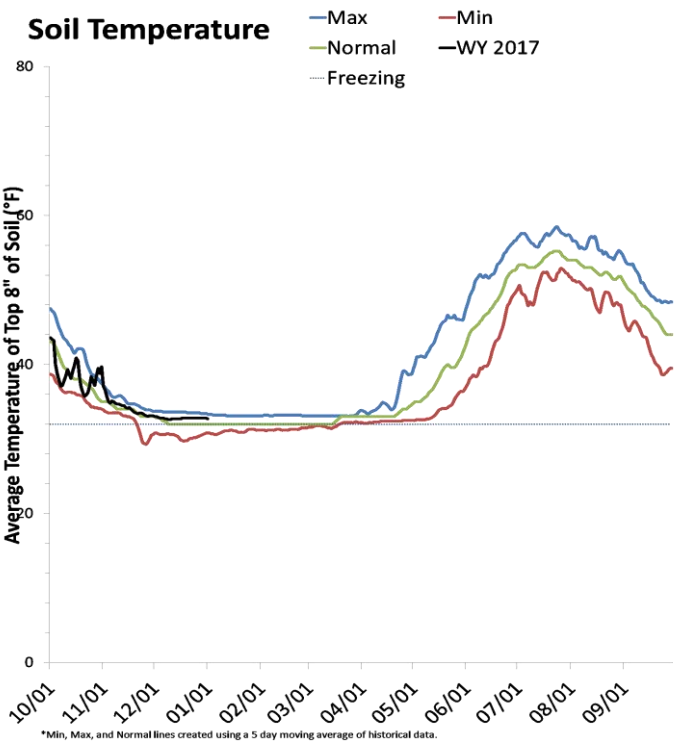
January 1, 2017

Precipitation in December was much above average at 182%, which brings the seasonal accumulation (Oct-Dec) to 101% of average. Soil moisture is at 65% compared to 55% last year. Reservoir storage is at 83% of capacity, compared to 85% last year. The Water availability Index for Blacks Fork is 69% and 76% for Smiths Creek.









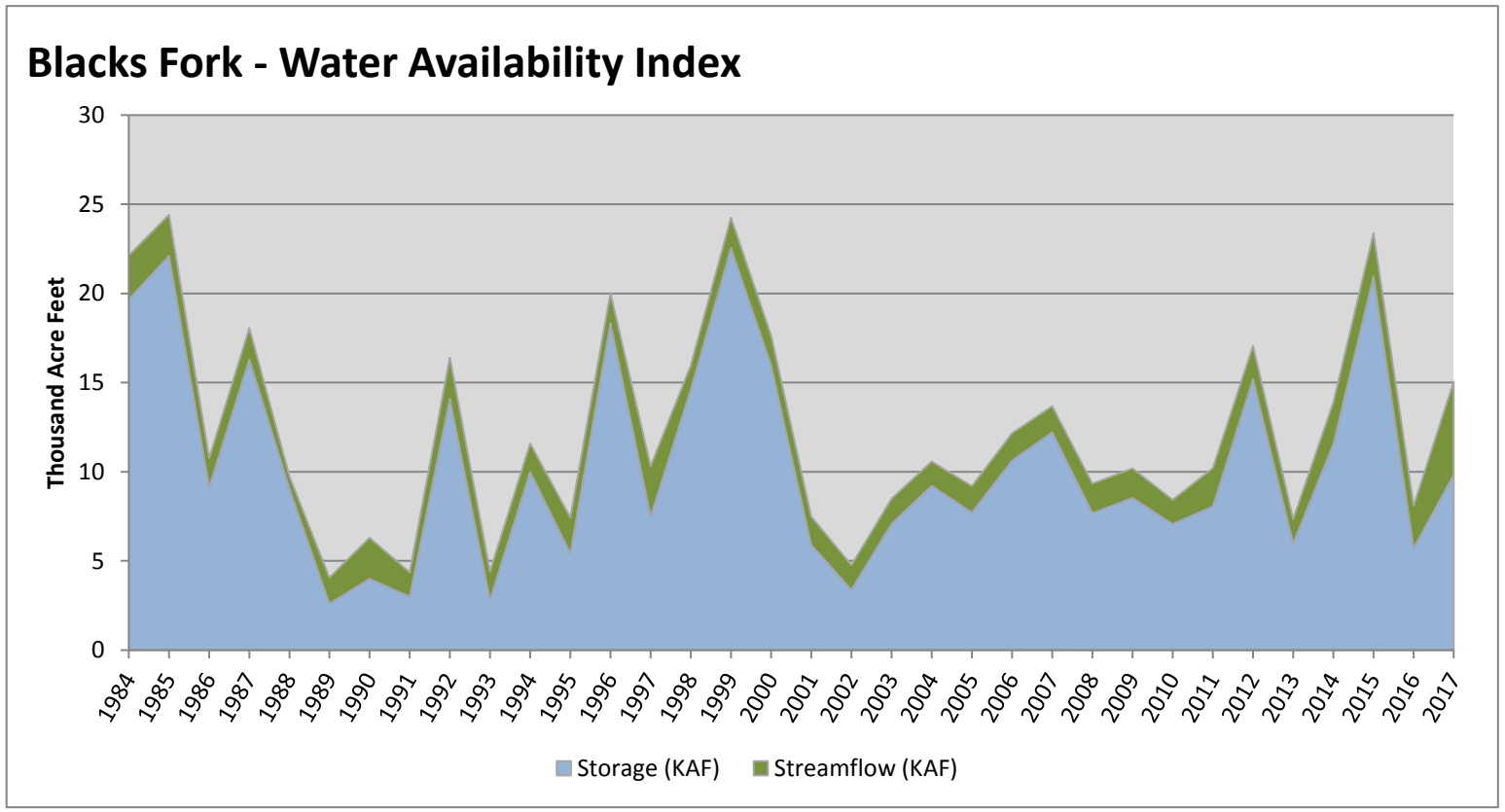
SNOTEL Data

January 1, 2017

Water Availability Index

Basin or Region	Dec EOM* Storage	December Flow	Storage + Flow	Percentile	WAI#	Years with similiar WAI
	KAF^	KAF^	KAF^	%		
Blacks Fork	**9.83**	**5.23**	**15.06**	**69**	**1.55**	**07, 14, 98, 92**

*EOM, end of month; #WAI, Water Availability Index; ^KAF, thousand acre-feet.

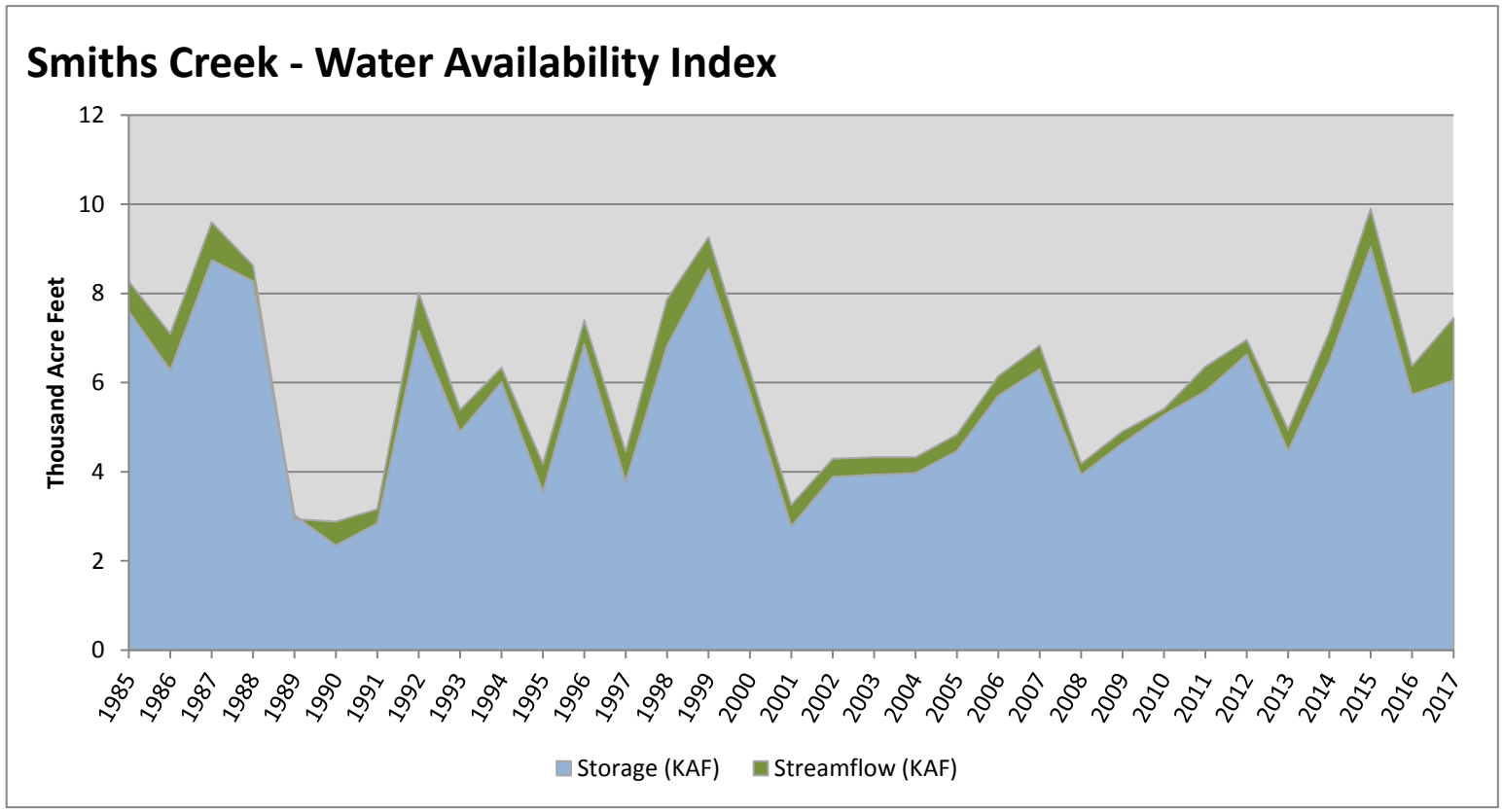


January 1, 2017

Water Availability Index

Basin or Region	Dec EOM* Storage	December Flow	Storage + Flow	Percentile	WAI#	Years with similiar WAI
	KAF^	KAF^	KAF^	%		
Smiths Creek	**6.05**	**1.40**	**7.45**	**76**	**2.21**	**14, 96, 98, 92**

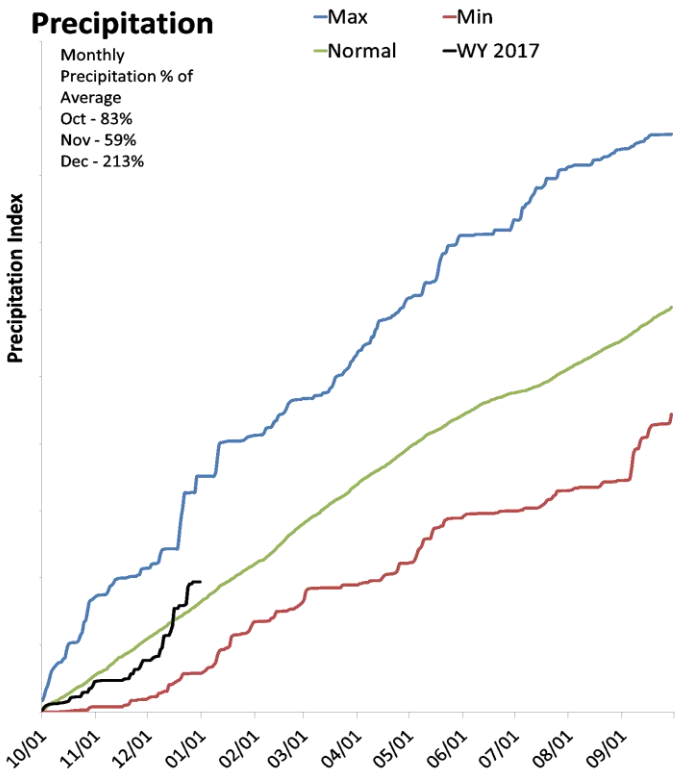
*EOM, end of month; #WAI, Water Availability Index; ^KAF, thousand acre-feet.

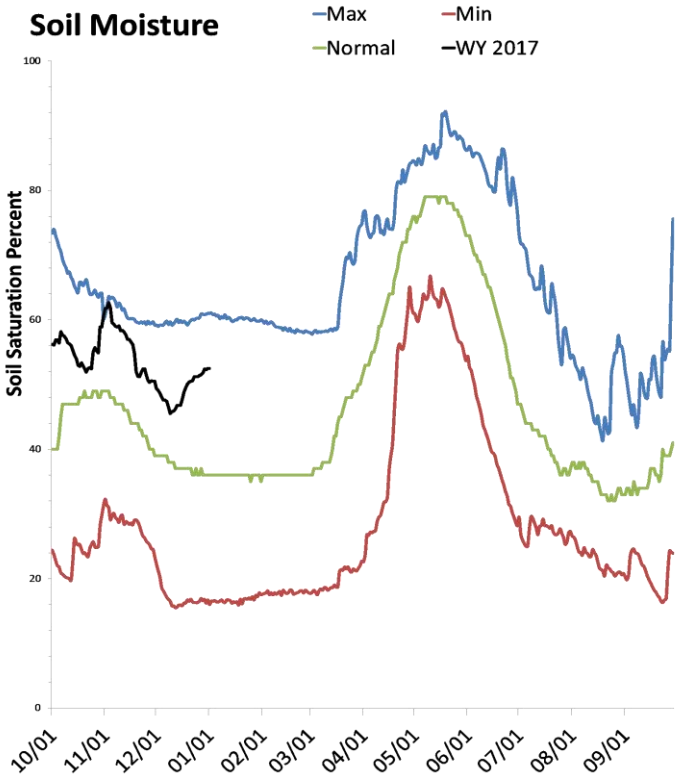


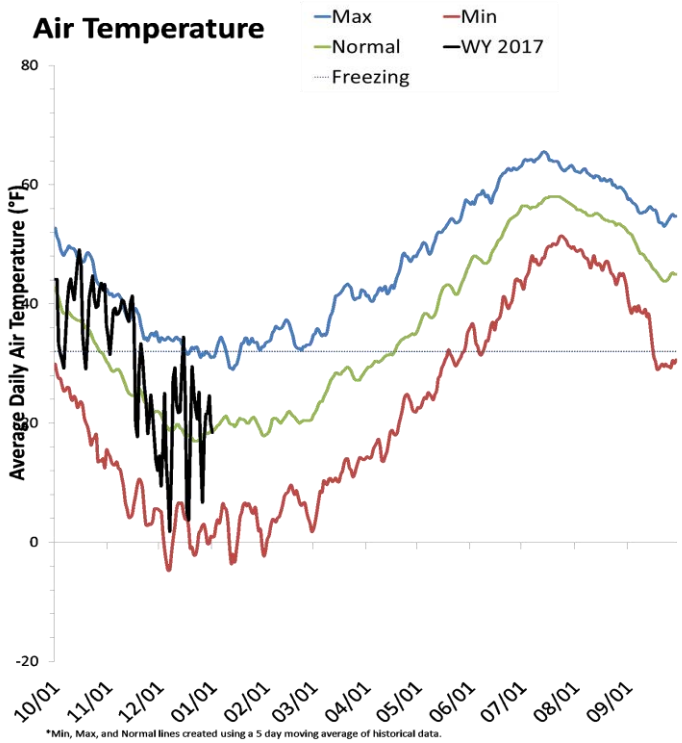
Duchesne River Basin

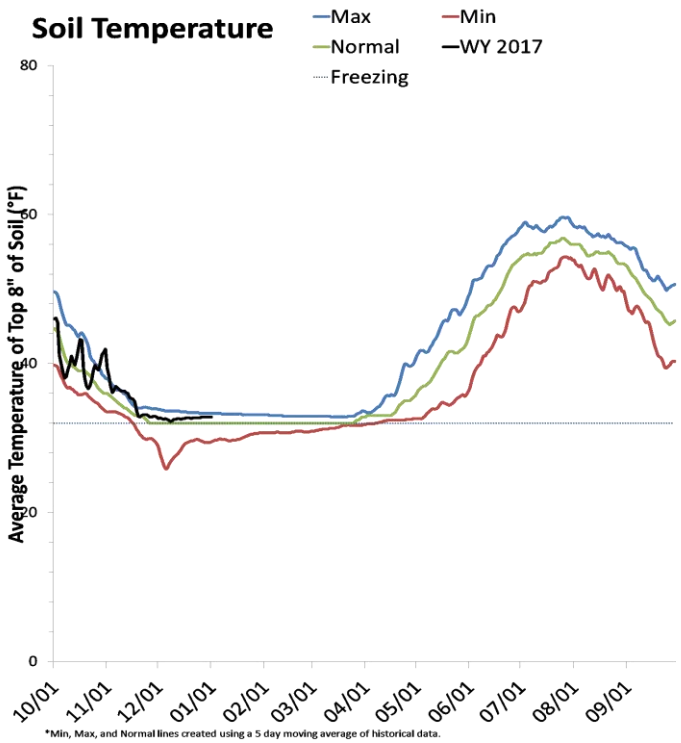
January 1, 2017

Precipitation in December was much above average at 213%, which brings the seasonal accumulation (Oct-Dec) to 118% of average. Soil moisture is at 52% compared to 34% last year. Reservoir storage is at 71% of capacity, compared to 71% last year. The water availability index for the Western Uintas is 81% and 63% for the Eastern Uintas.









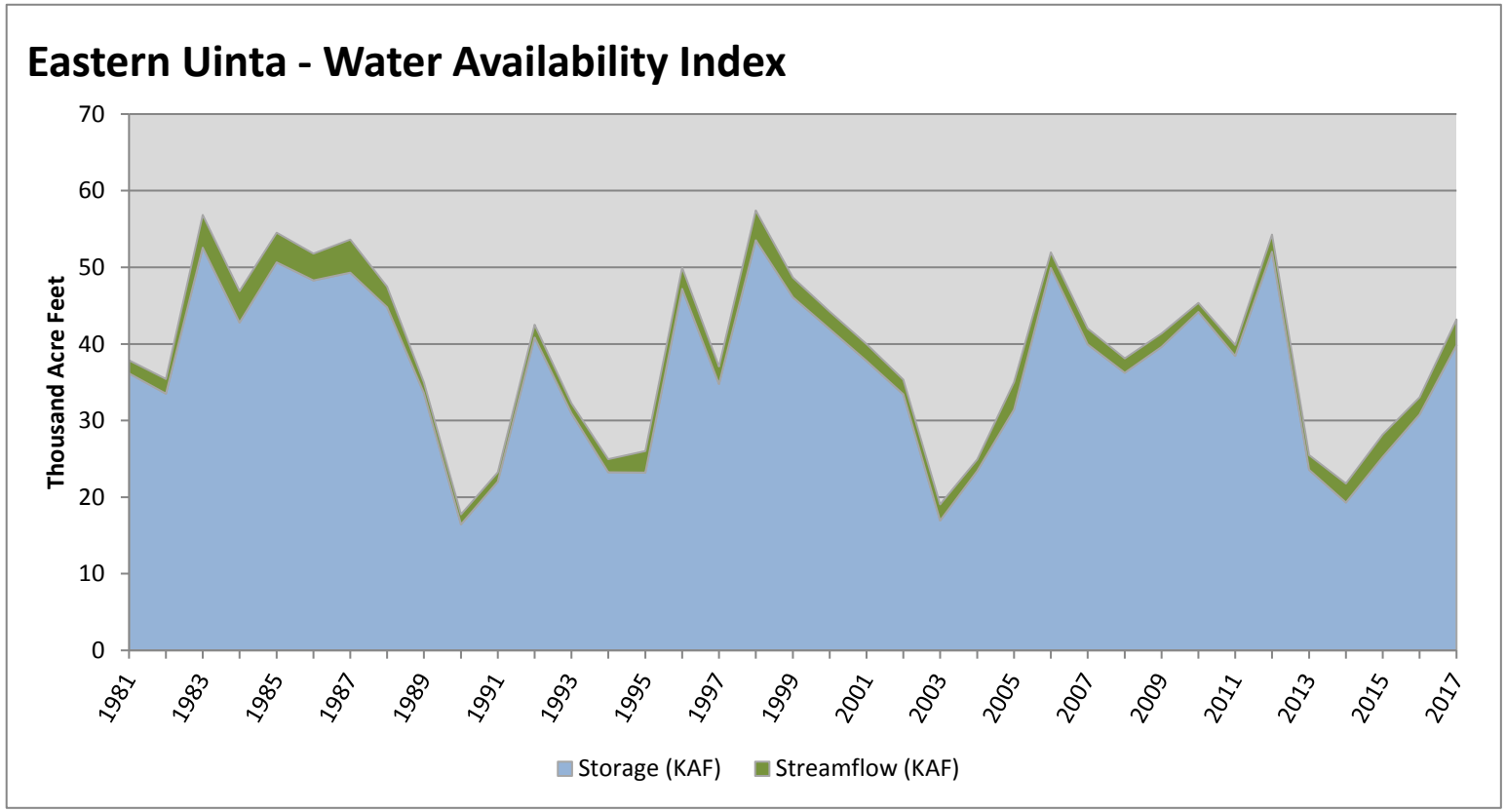
SNOTEL Data

January 1, 2017

Water Availability Index

Basin or Region	Dec EOM* Storage	December Flow	Storage + Flow	Percentile	WAI#	Years with similiar WAI
	KAF^	KAF^	KAF^	%		
Eastern Uinta	**39.81**	**3.38**	**43.19**	**63**	**1.1**	**07, 92, 00, 10**

*EOM, end of month; #WAI, Water Availability Index; ^KAF, thousand acre-feet.

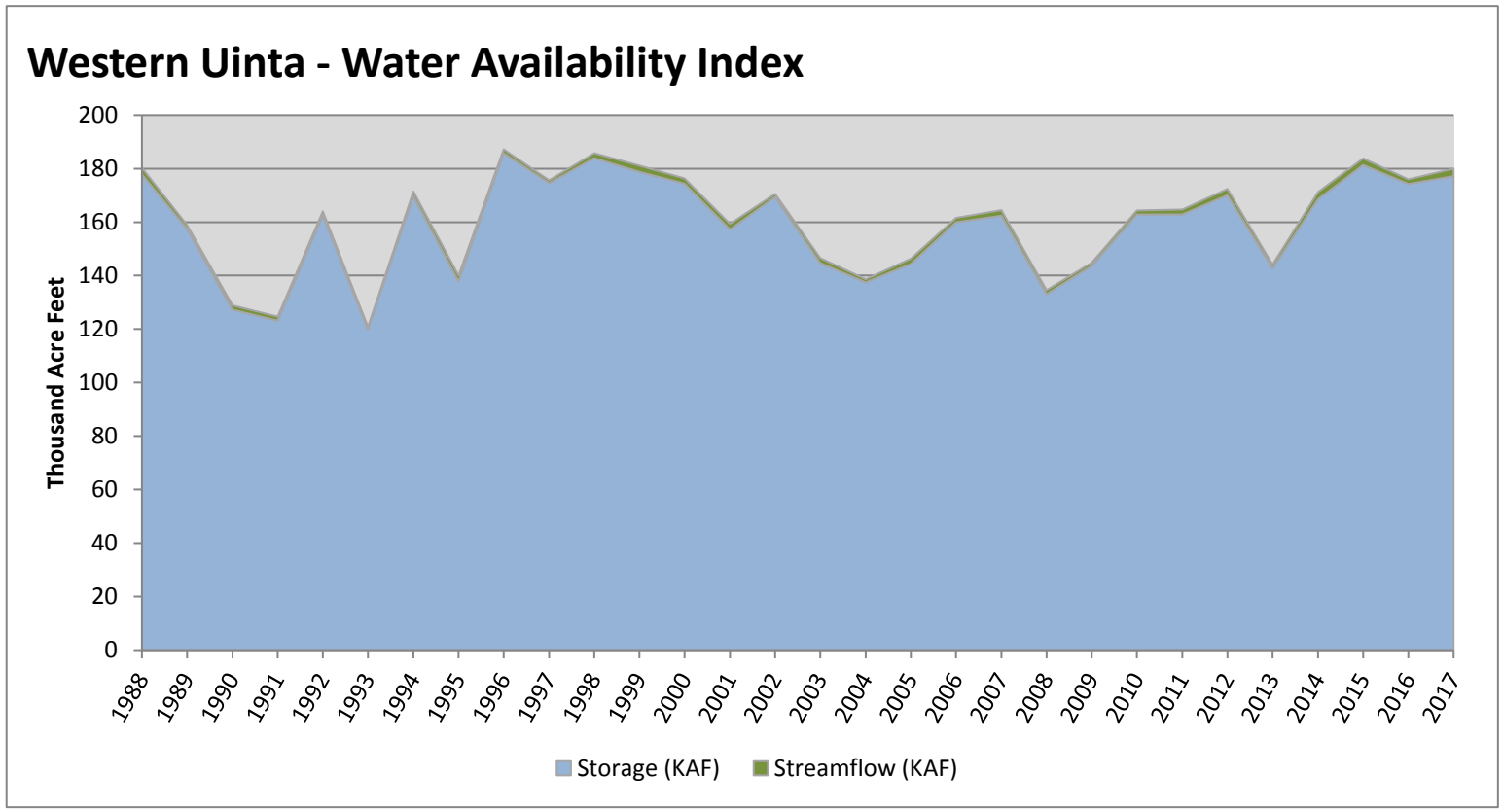


January 1, 2017

Water Availability Index

Basin or Region	Dec EOM* Storage	December Flow	Storage + Flow	Percentile	WAI#	Years with similiar WAI
	KAF^	KAF^	KAF^	%		
Western Uinta	**177.12**	**2.80**	**179.92**	**81**	**2.55**	**16, 00, 88, 99**

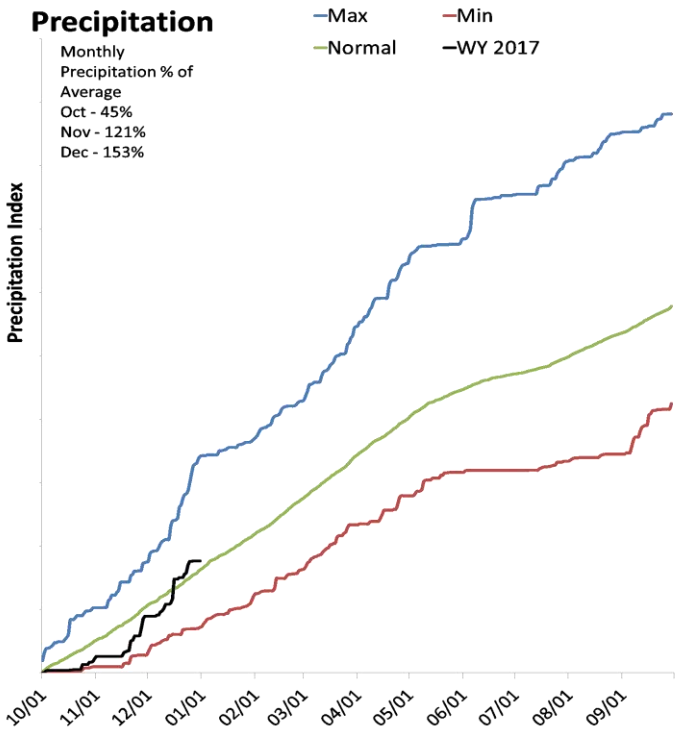
*EOM, end of month; #WAI, Water Availability Index; ^KAF, thousand acre-feet.

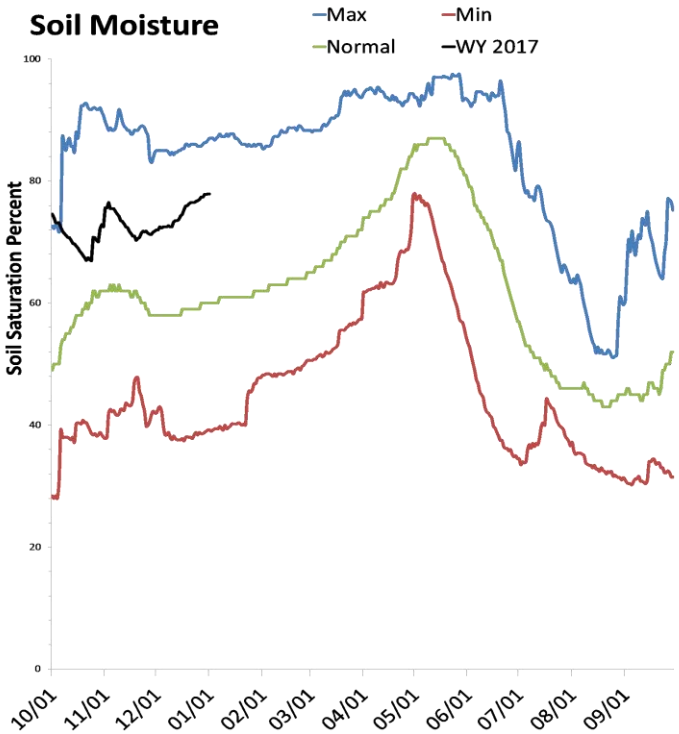


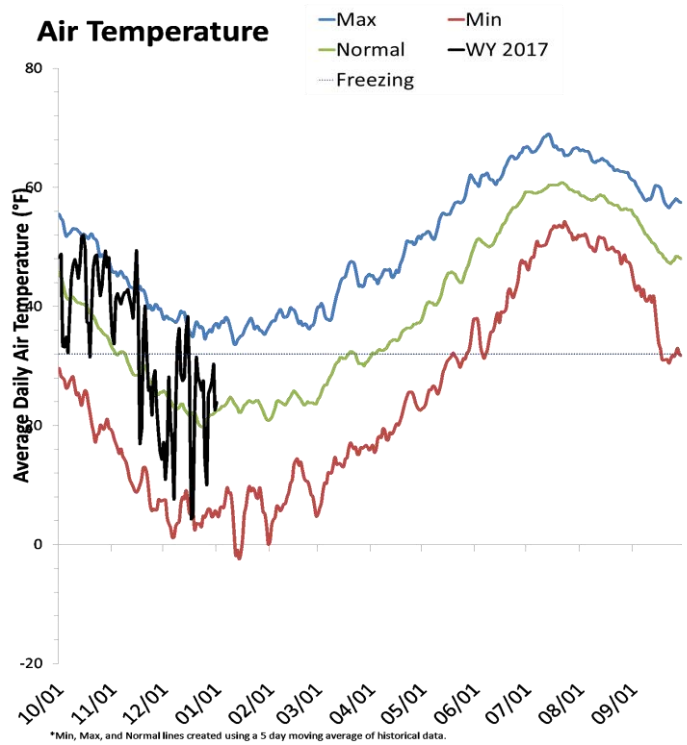
San Pitch River Basin

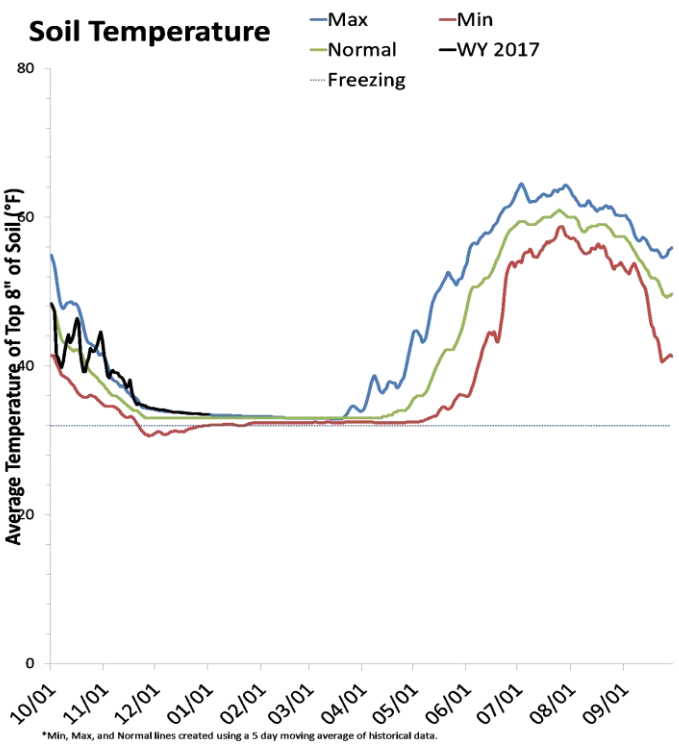
January 1, 2017

Precipitation in December was much above average at 152%, which brings the seasonal accumulation (Oct-Dec) to 109% of average. Soil Moisture is at 78% compared to 59% last year. Reservoir storage is at 1% of capacity, compared to 1% last year.The water availability index for the San Pitch is 13%.







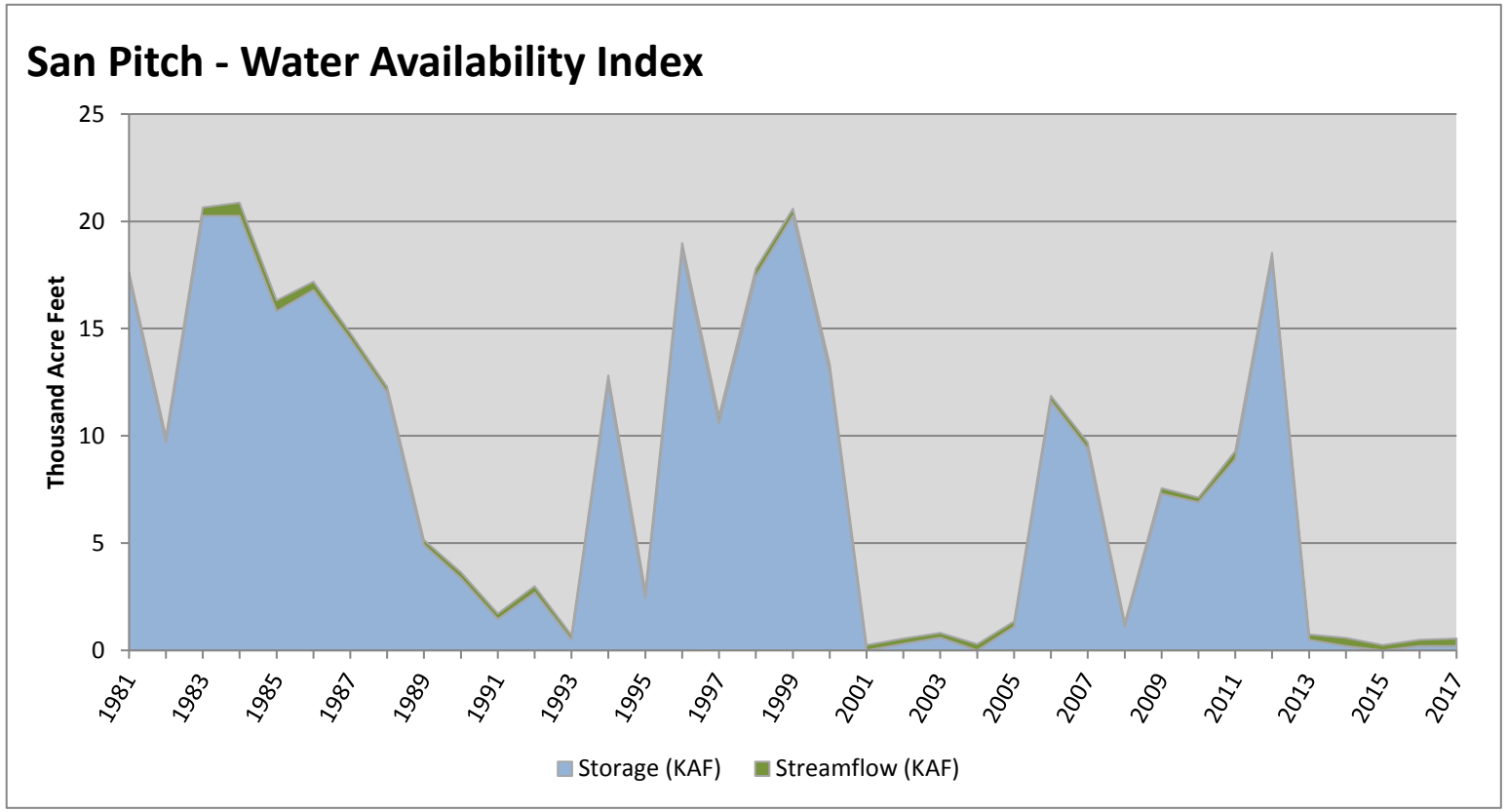


January 1, 2017

Water Availability Index

Basin or Region	Dec EOM* Storage	December Flow	Storage + Flow	Percentile	WAI#	Years with similiar WAI
	KAF^	KAF^	KAF^	%		
San Pitch	**0.20**	**0.35**	**0.55**	**13**	**-3.07**	**04, 16, 02, 14**

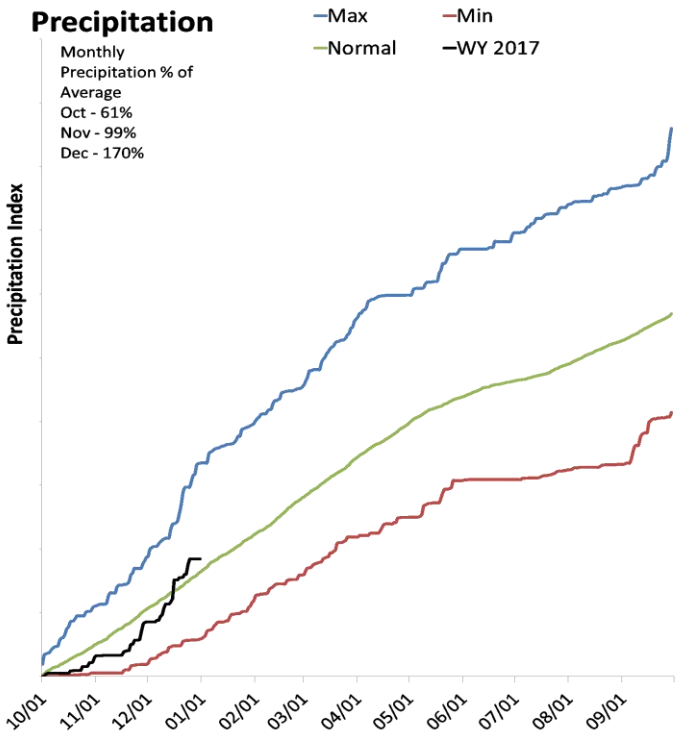
*EOM, end of month; #WAI, Water Availability Index; ^KAF, thousand acre-feet.

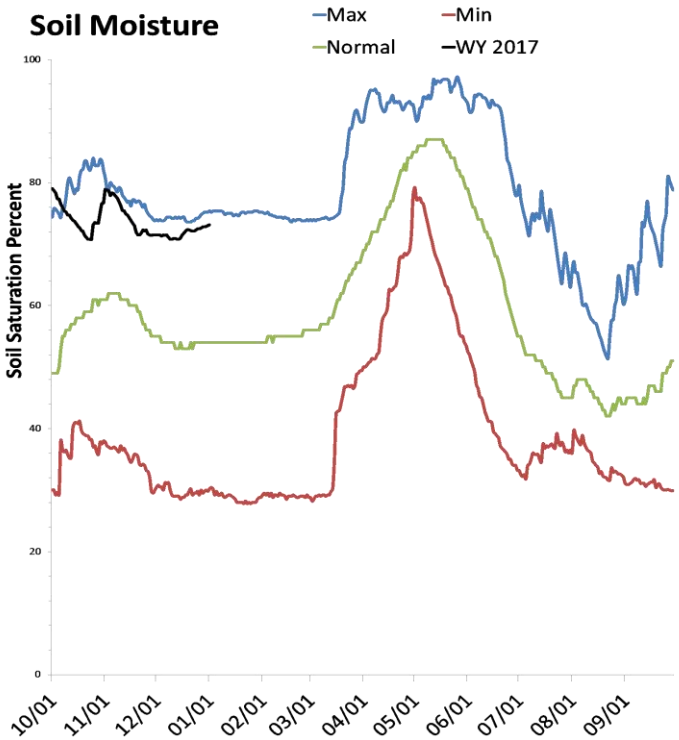


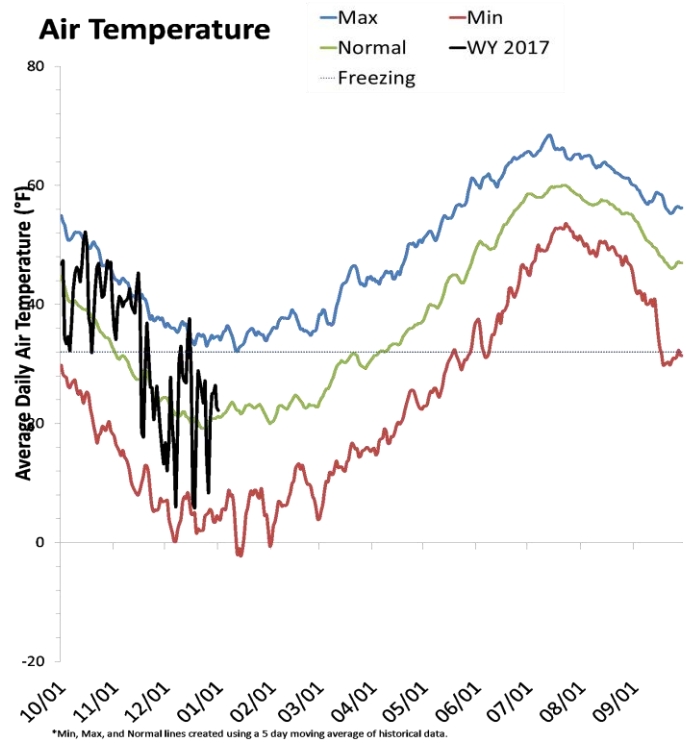
Price & San Rafael Basins

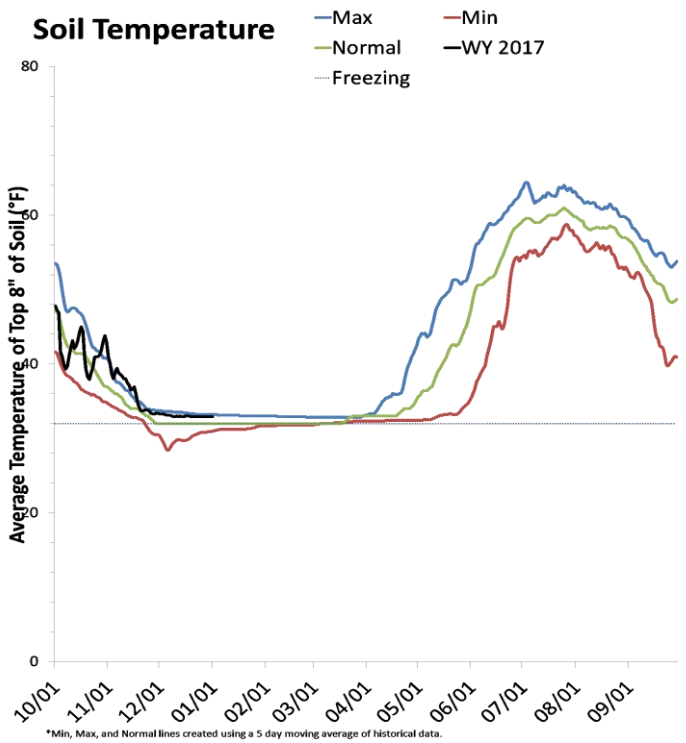
January 1, 2017

Precipitation in December was much above average at 171%, which brings the seasonal accumulation (Oct-Dec) to 113% of average. Soil moisture is at 72% compared to 55% last year. Reservoir storage is at 37% of capacity, compared to 38% last year. The water availability index for the Price River is 24%, and 11% for Joe's Valley.









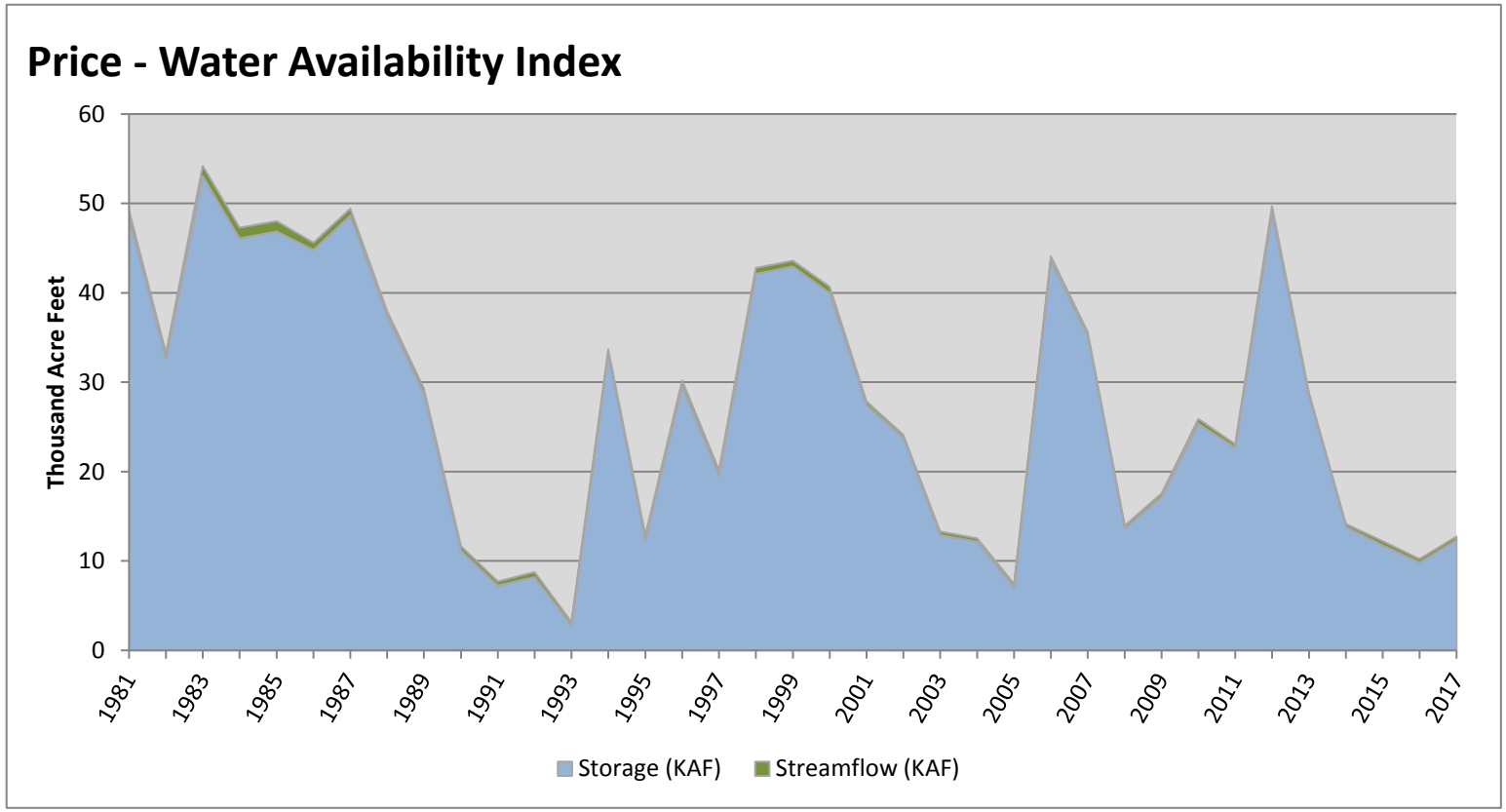
SNOTEL Data

January 1, 2017

Water Availability Index

Basin or Region	Dec EOM* Storage	December Flow	Storage + Flow	Percentile	WAI#	Years with similiar WAI
	KAF^	KAF^	KAF^	%		
Price	**12.35**	**0.39**	**12.74**	**24**	**-2.19**	**15, 04, 95, 03**

*EOM, end of month; #WAI, Water Availability Index; ^KAF, thousand acre-feet.

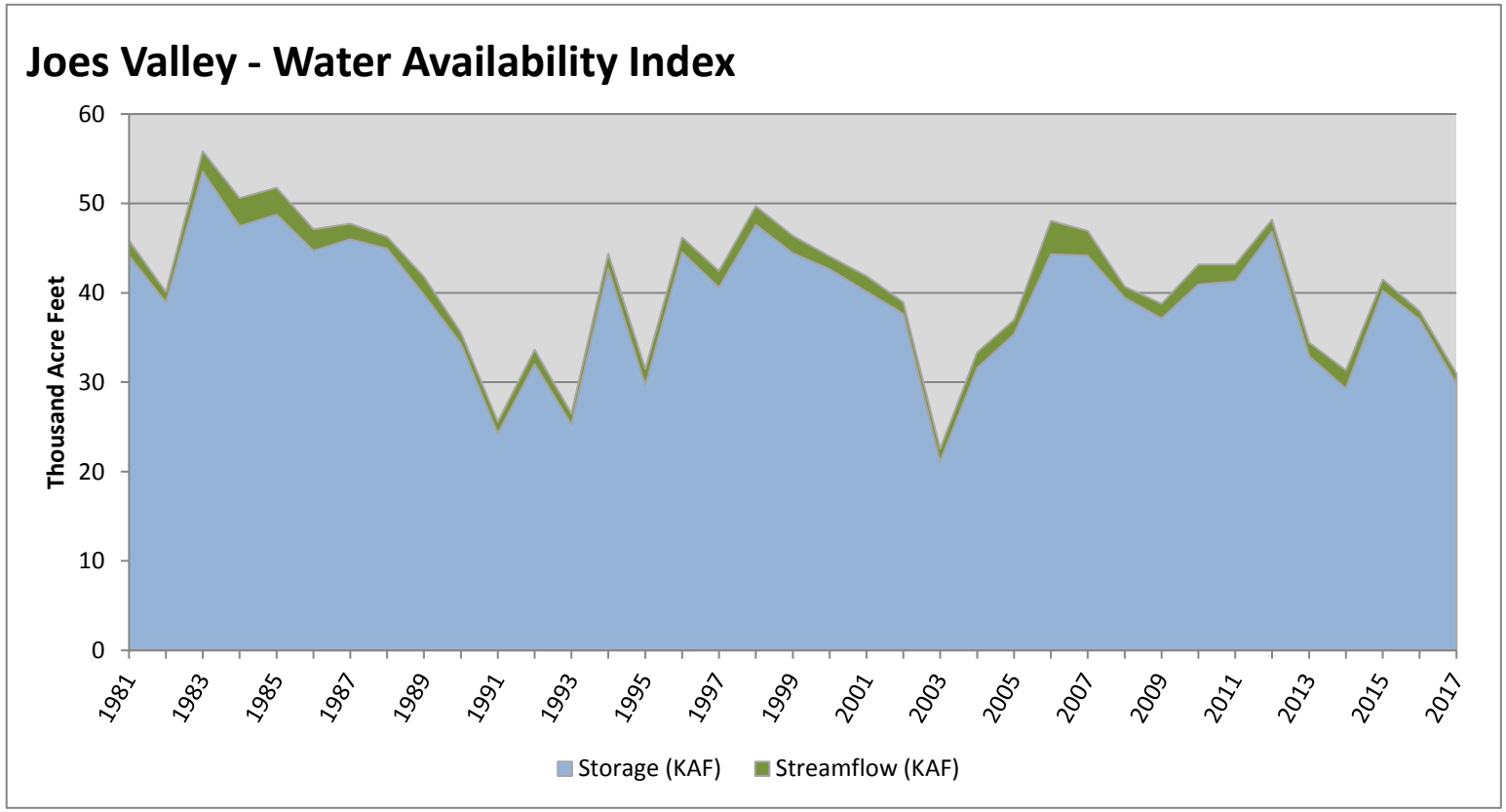


January 1, 2017

Water Availability Index

Basin or Region	Dec EOM* Storage	December Flow	Storage + Flow	Percentile	WAI#	Years with similiar WAI
	KAF^	KAF^	KAF^	%		
Joes Valley	**29.84**	**1.11**	**30.95**	**11**	**-3.29**	**91, 93, 14, 95**

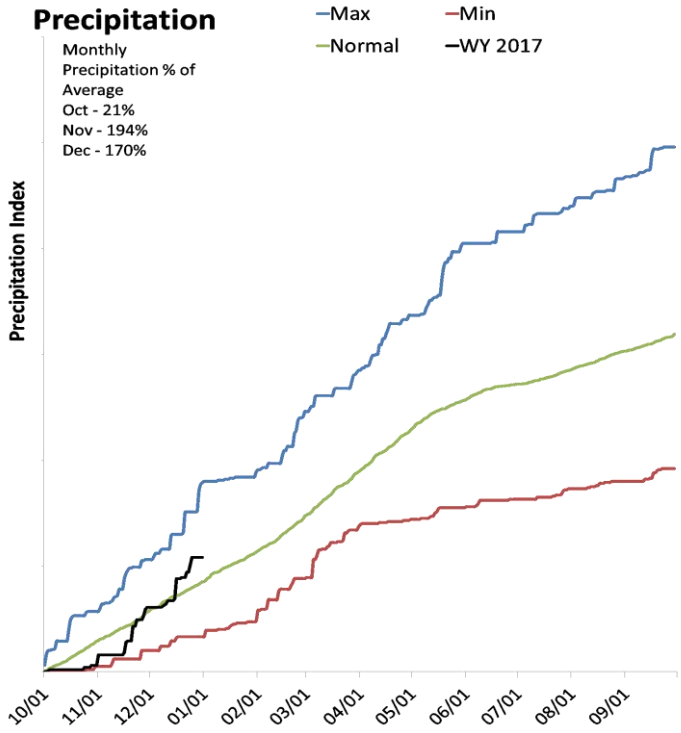
*EOM, end of month; #WAI, Water Availability Index; ^KAF, thousand acre-feet.

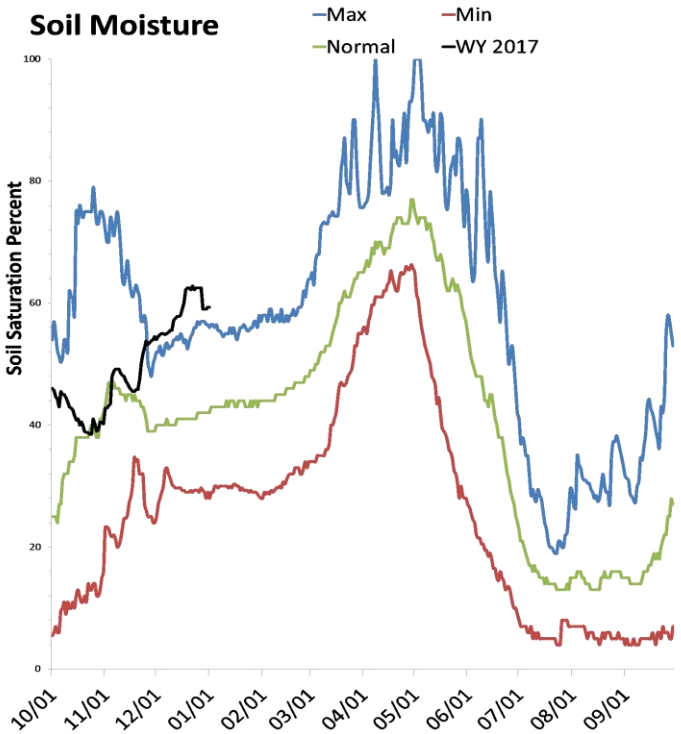


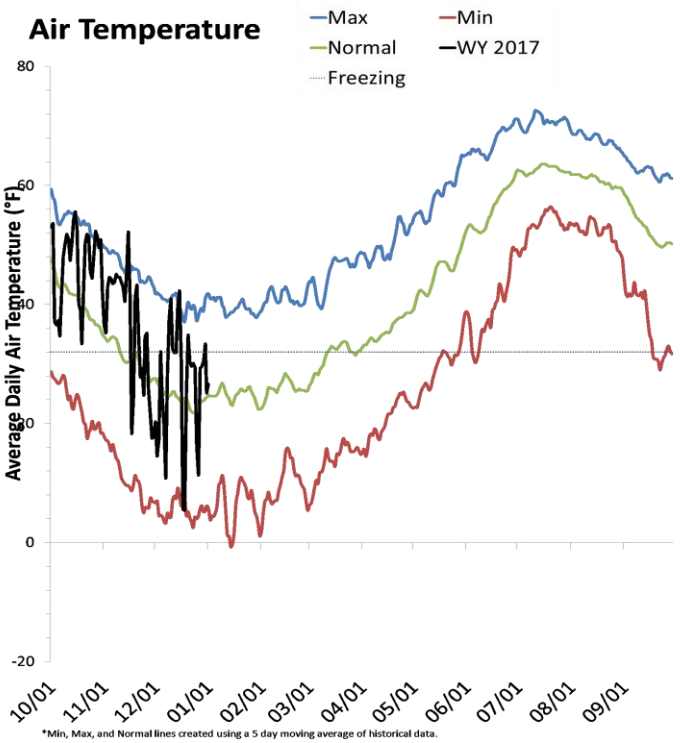
Lower Sevier Basin

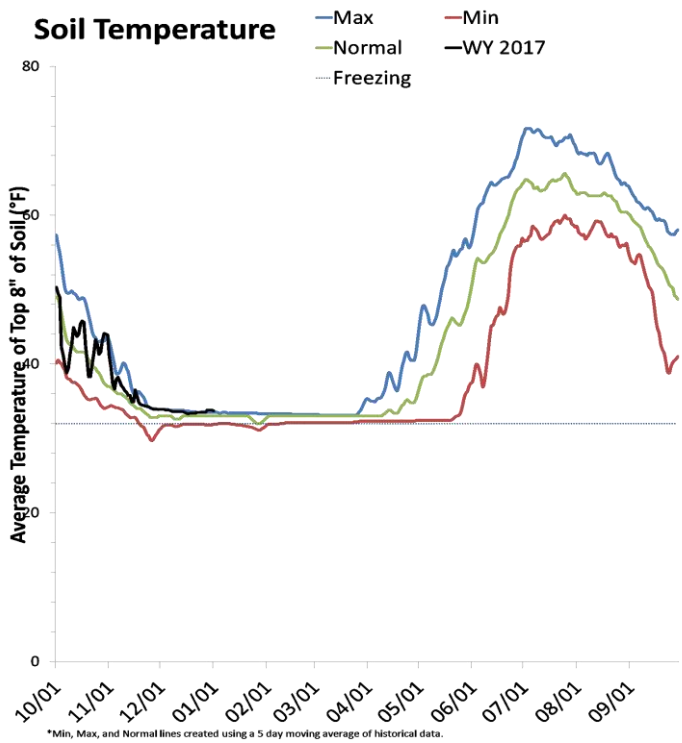
January 1, 2017

Precipitation in December was much above average at 168%, which brings the seasonal accumulation (Oct-Dec) to 127% of average. Soil moisture is at 60% compared to 37% last year. Reservoir storage is at 4% of capacity, compared to 26% last year. The water availability index for the Lower Sevier is 3%.







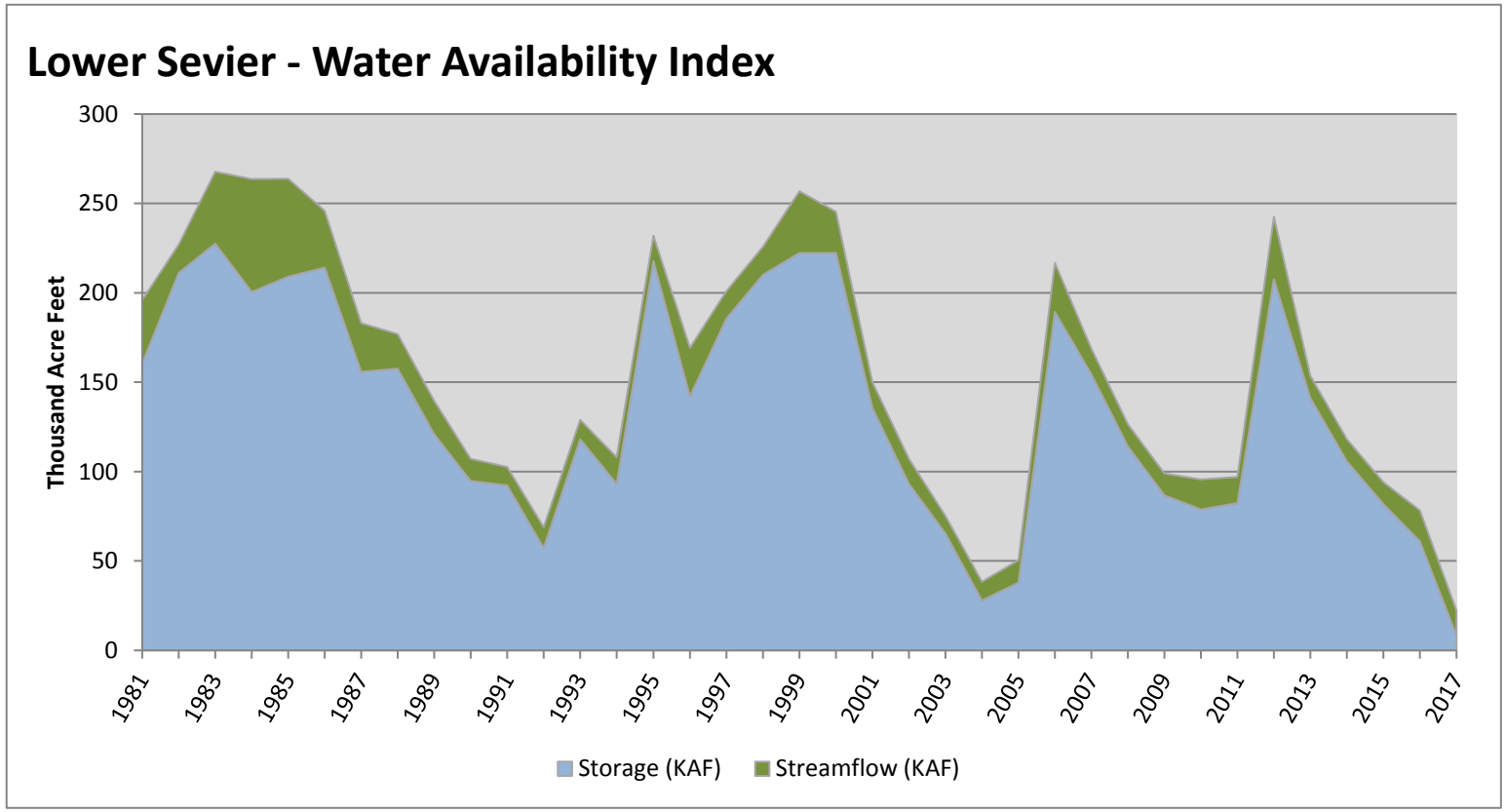


January 1, 2017

Water Availability Index

Basin or Region	Dec EOM* Storage	December Flow	Storage + Flow	Percentile	WAI#	Years with similiar WAI
	KAF^	KAF^	KAF^	%		
Lower Sevier	**8.29**	**14.09**	**22.38**	**3**	**-3.95**	**04, 05, 92, 03**

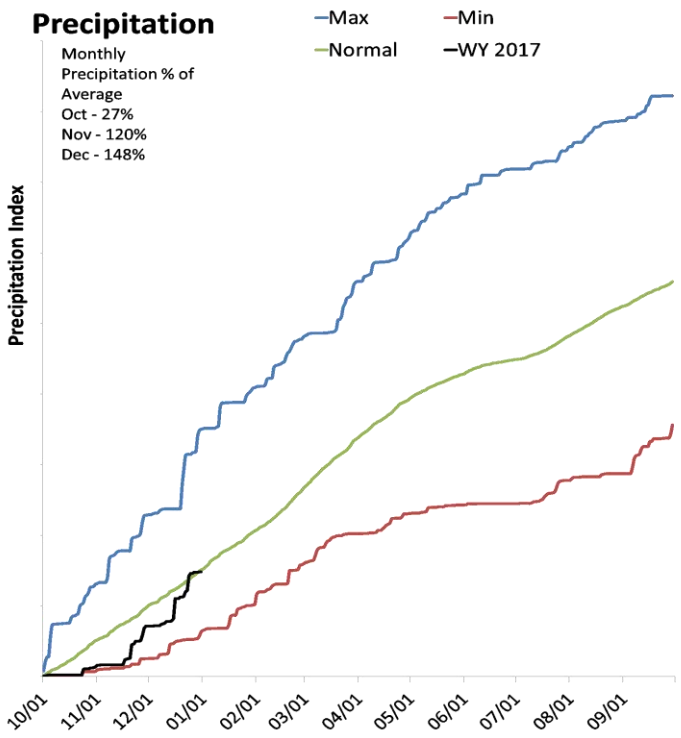
*EOM, end of month; #WAI, Water Availability Index; ^KAF, thousand acre-feet.

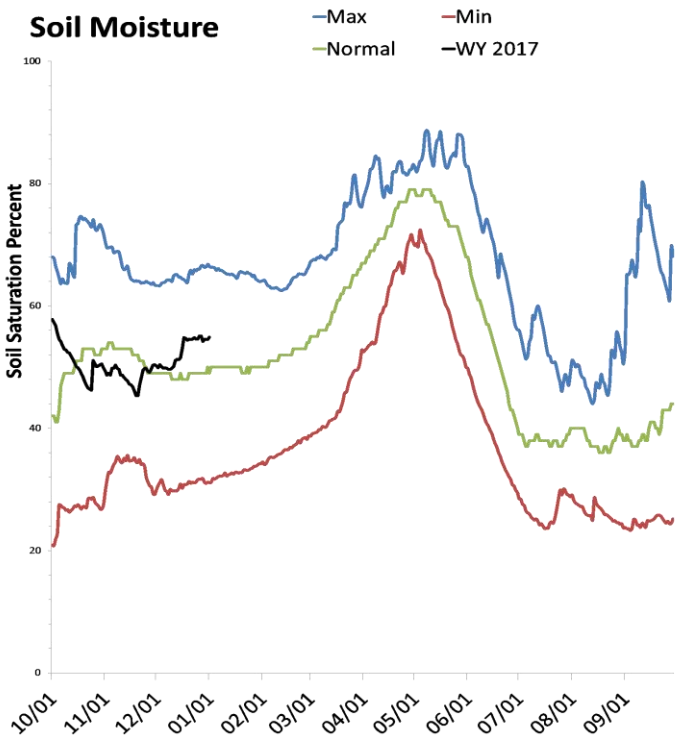


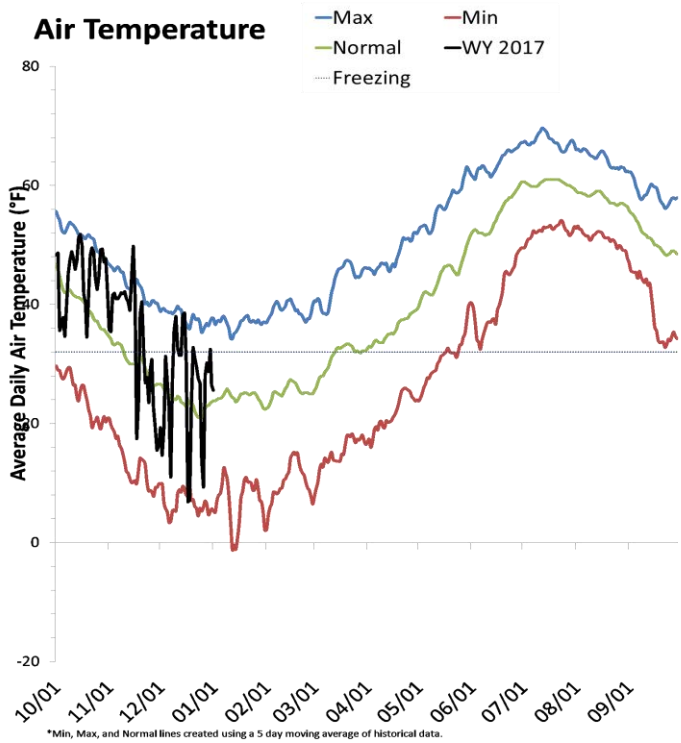
Upper Sevier Basin

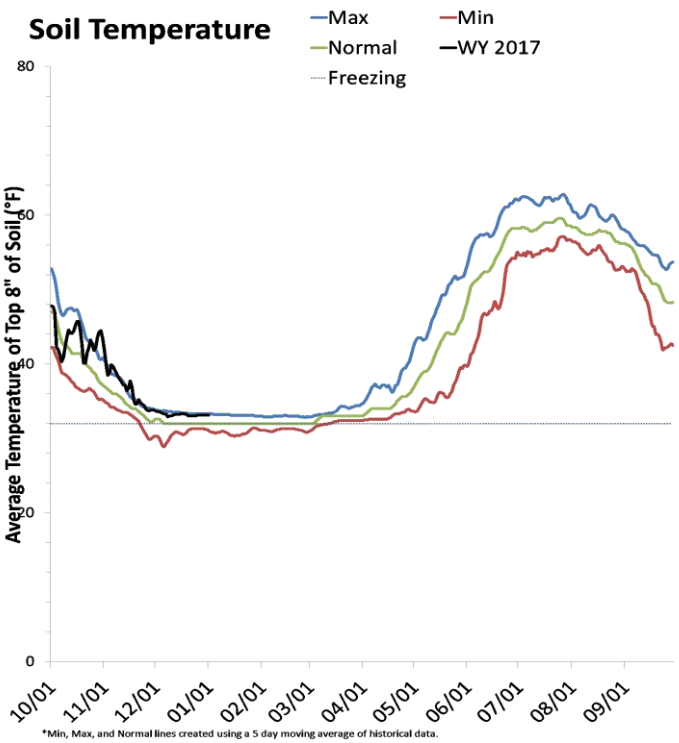
January 1, 2017

Precipitation in December was much above average at 148%, which brings the seasonal accumulation (Oct-Dec) to 98% of average. Soil moisture is at 55% compared to 56% last year. Reservoir storage is at 26% of capacity, compared to 28% last year. The water availability index for the Upper Sevier is 26%.









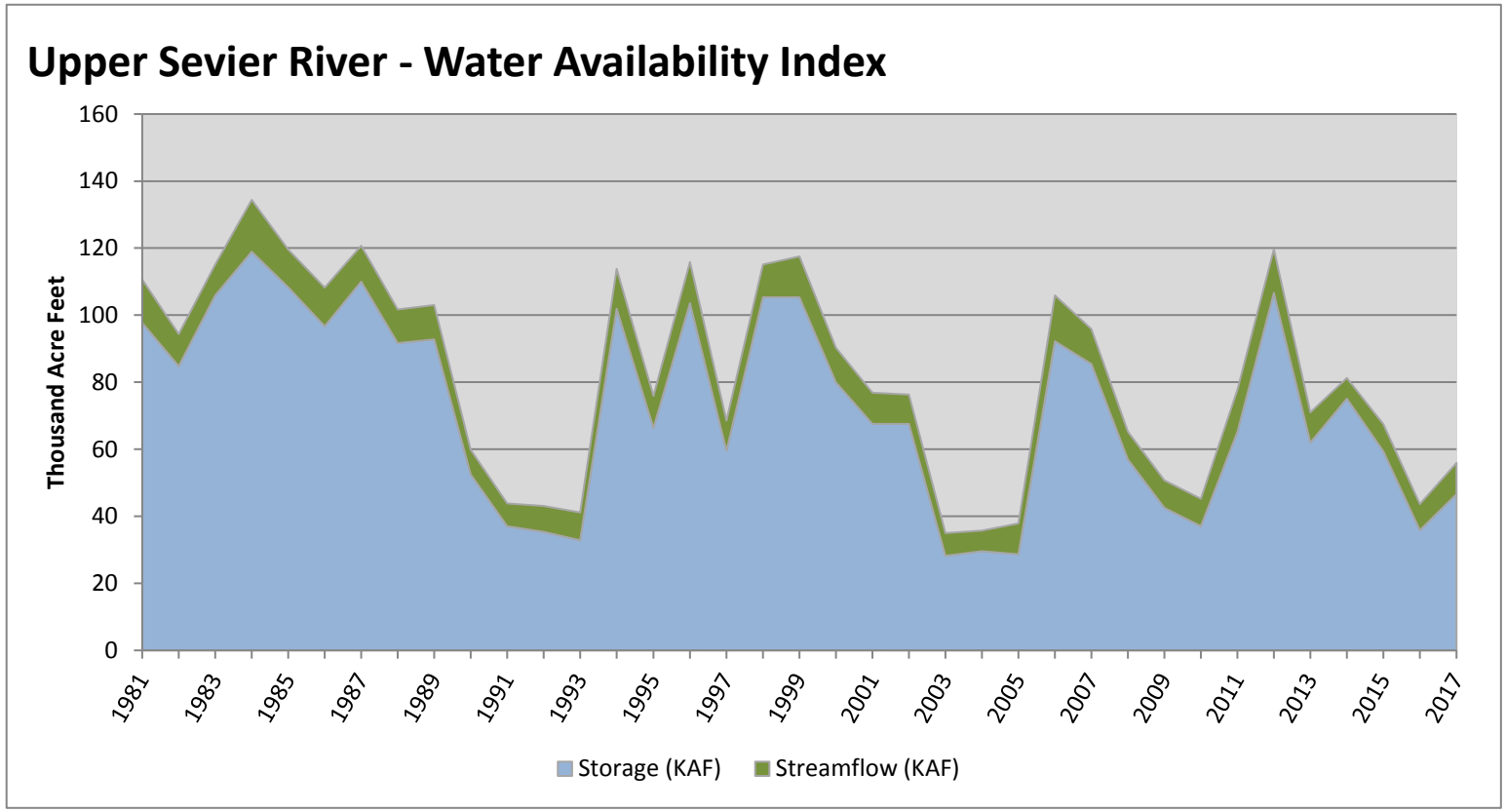
SNOTEL Data

January 1, 2017

Water Availability Index

Basin or Region	Dec EOM* Storage	December Flow	Storage + Flow	Percentile	WAI#	Years with similiar WAI
	KAF^	KAF^	KAF^	%		
Upper Sevier River	**46.58**	**9.32**	**55.90**	**26**	**-1.97**	**10, 09, 90, 08**

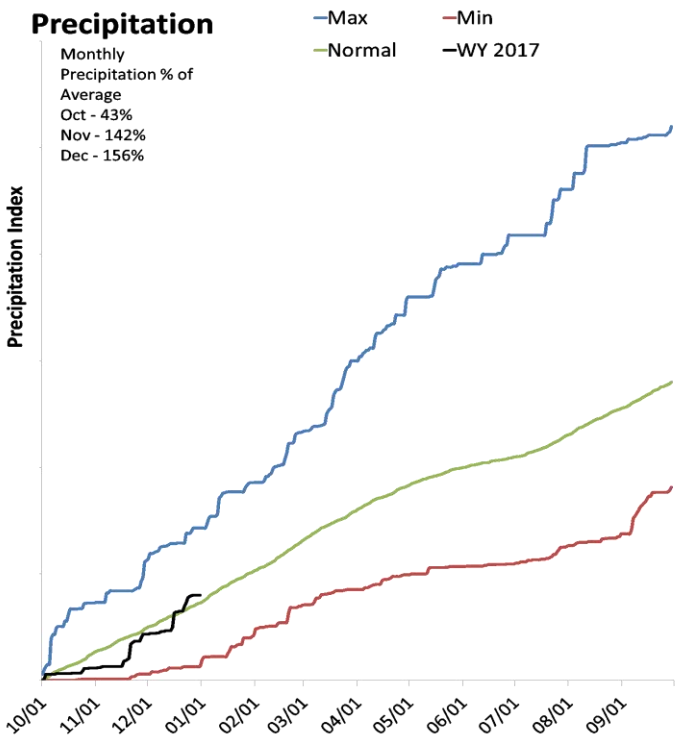
*EOM, end of month; #WAI, Water Availability Index; ^KAF, thousand acre-feet.

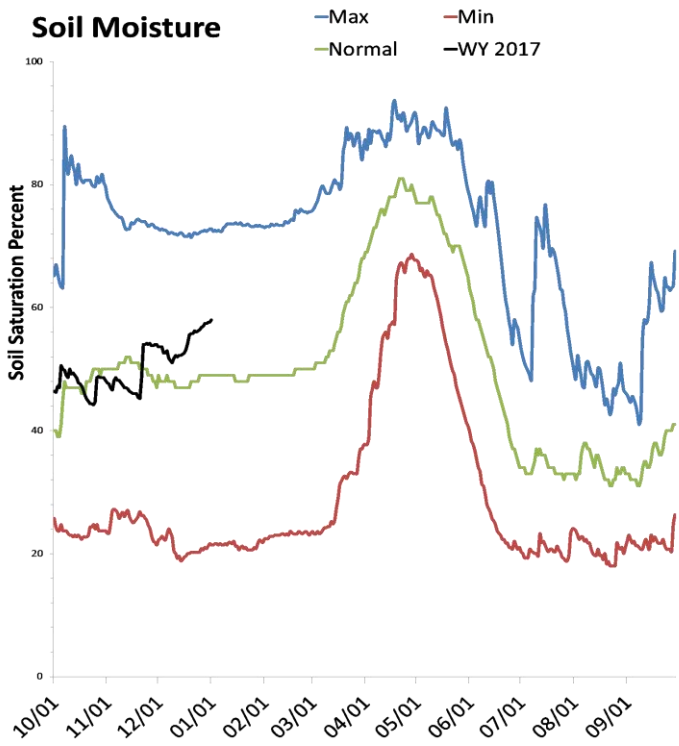


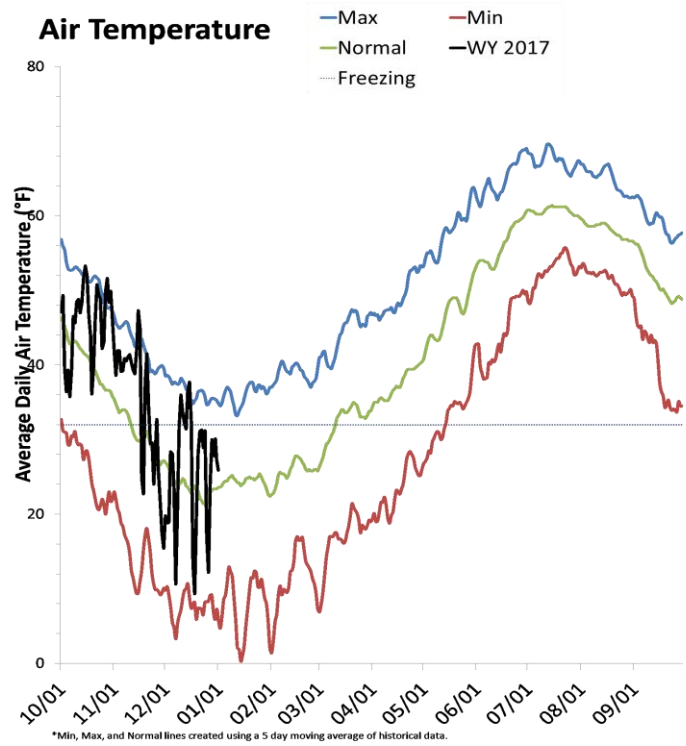
Southeastern Utah

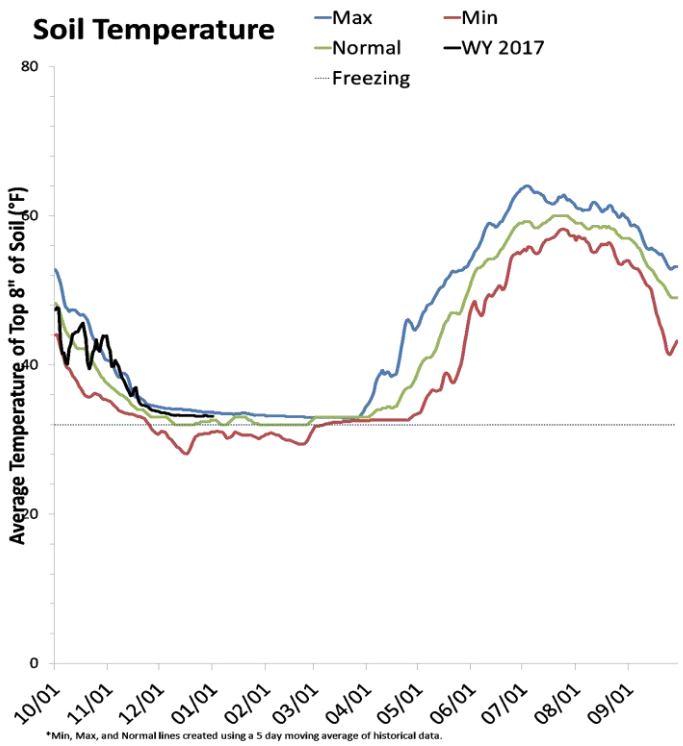
January 1, 2017

Precipitation in December was much above average at 155%, which brings the seasonal accumulation (Oct-Dec) to 110% of average. Soil moisture is at 58% compared to 72% last year. Reservoir storage is at 76% of capacity, compared to 61% last year. The water availability index for Moab is 87%.









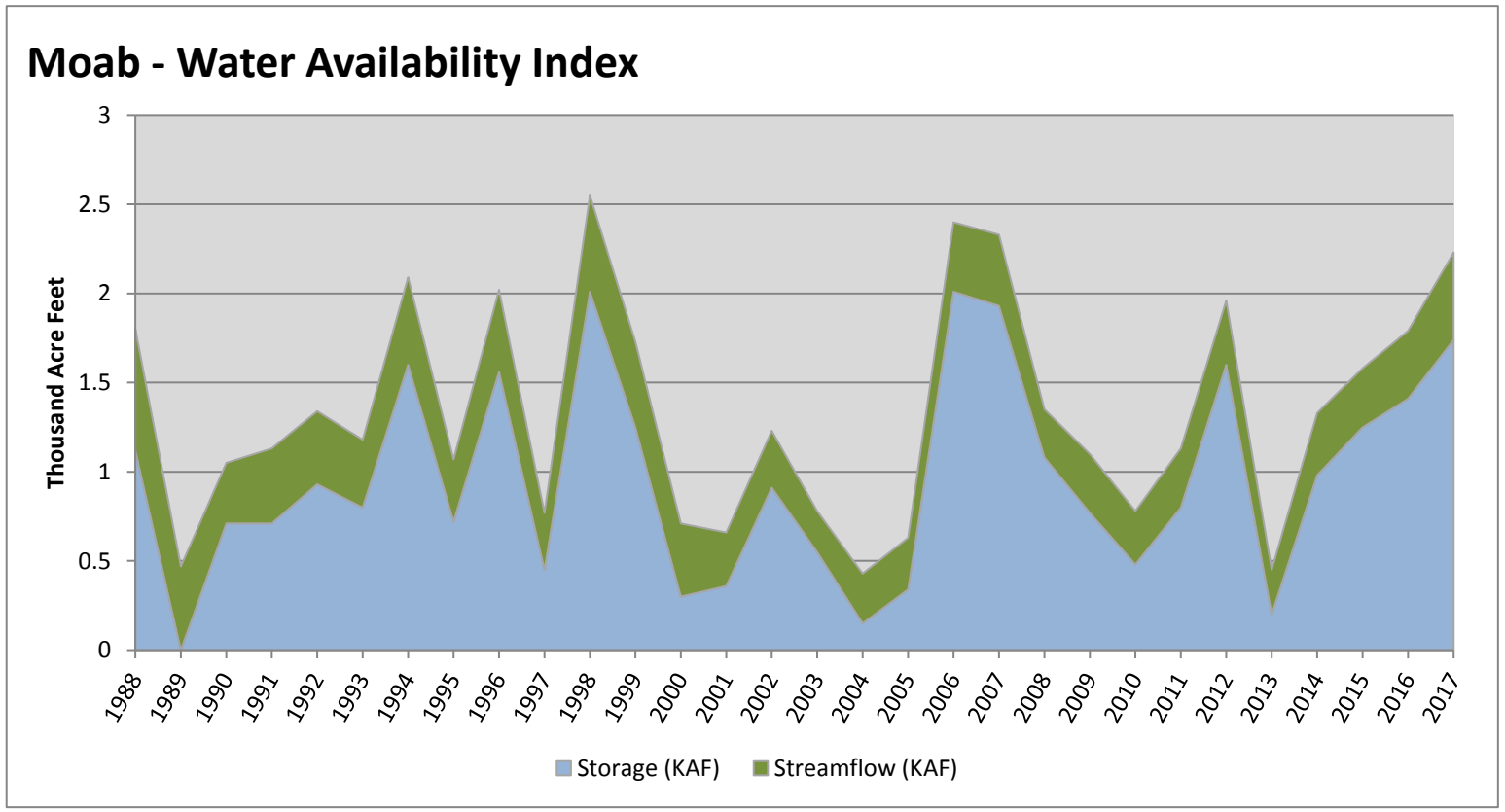
SNOTEL Data

January 1, 2017

Water Availability Index

Basin or Region	Dec EOM* Storage	December Flow	Storage + Flow	Percentile	WAI#	Years with similiar WAI
	KAF^	KAF^	KAF^	%		
Moab	**1.74**	**0.49**	**2.23**	**87**	**3.09**	**96, 94, 07, 06**

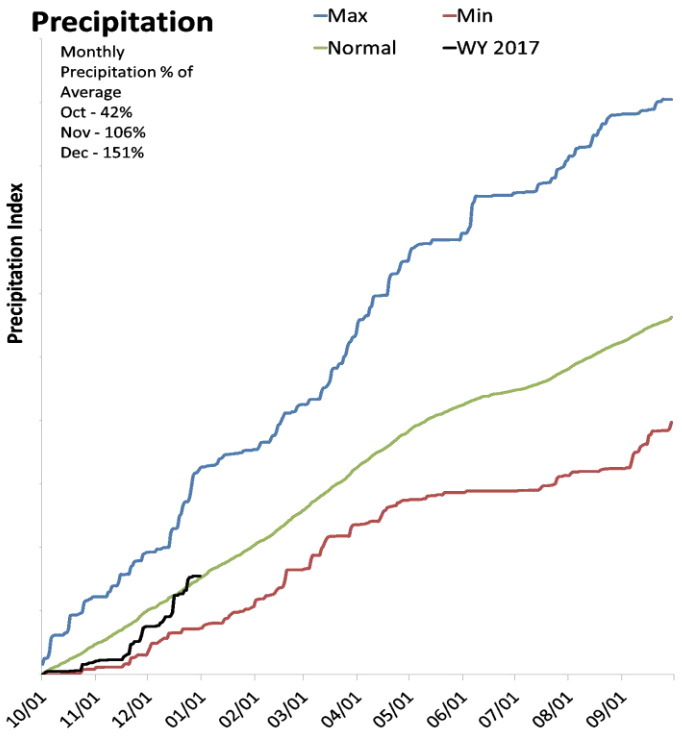
*EOM, end of month; #WAI, Water Availability Index; ^KAF, thousand acre-feet.

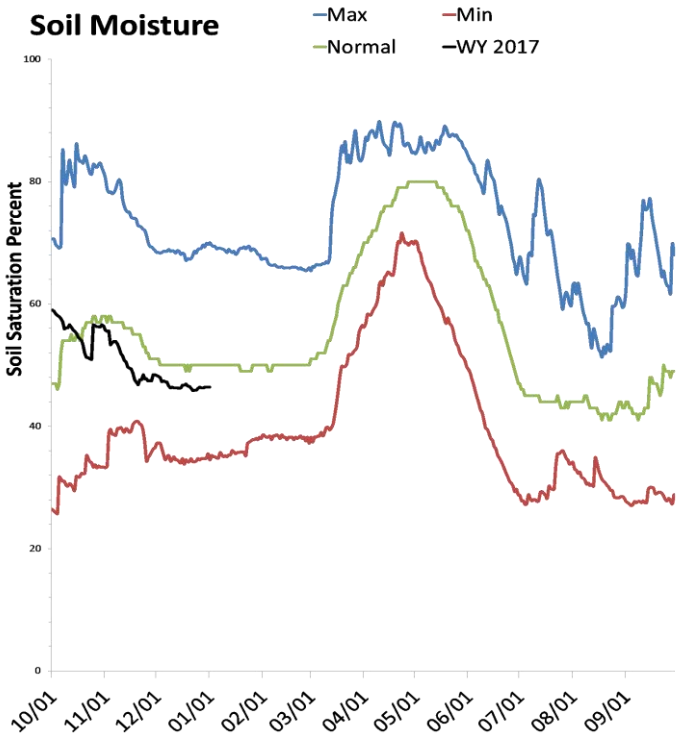


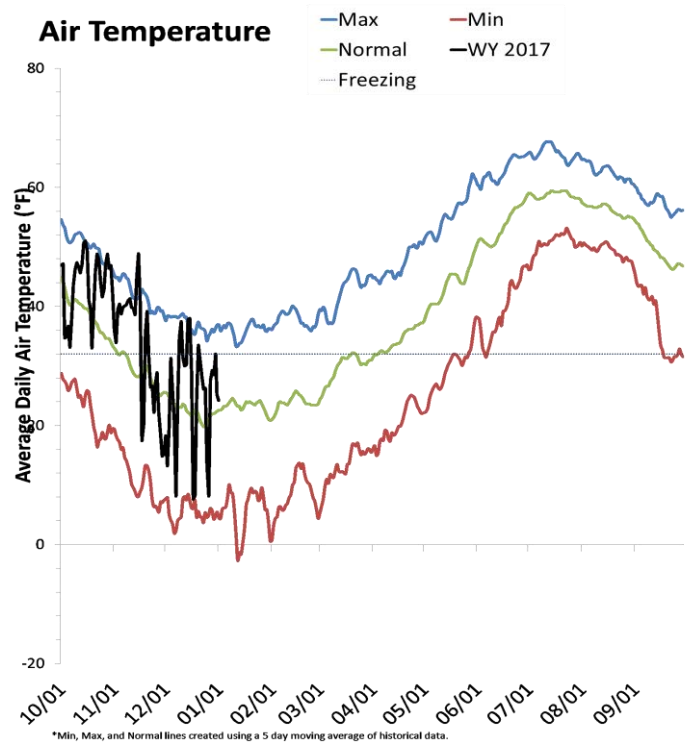
Dirty Devil Basin

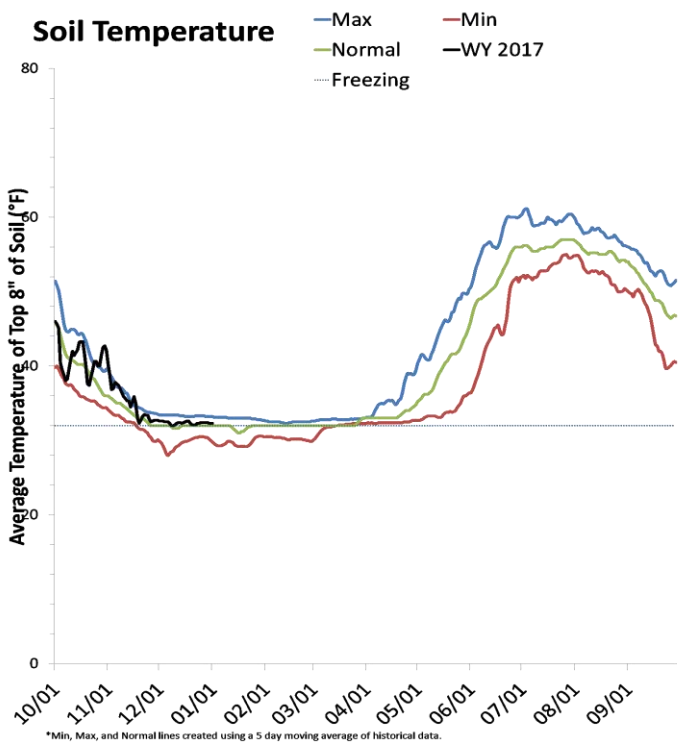
January 1, 2017

Precipitation in December was much above average at 162%, which brings the seasonal accumulation (Oct-Dec) to 108% of average. Soil moisture is at 46% compared to 52% last year.







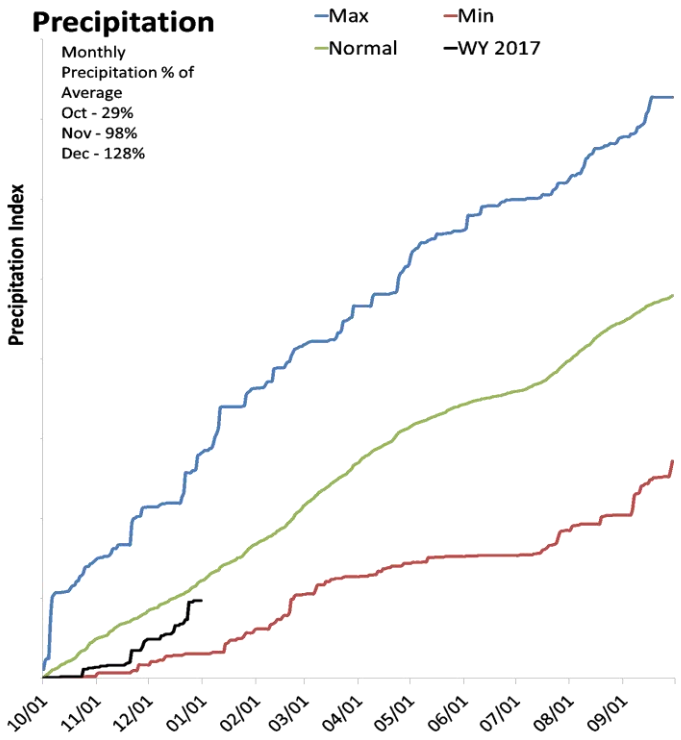


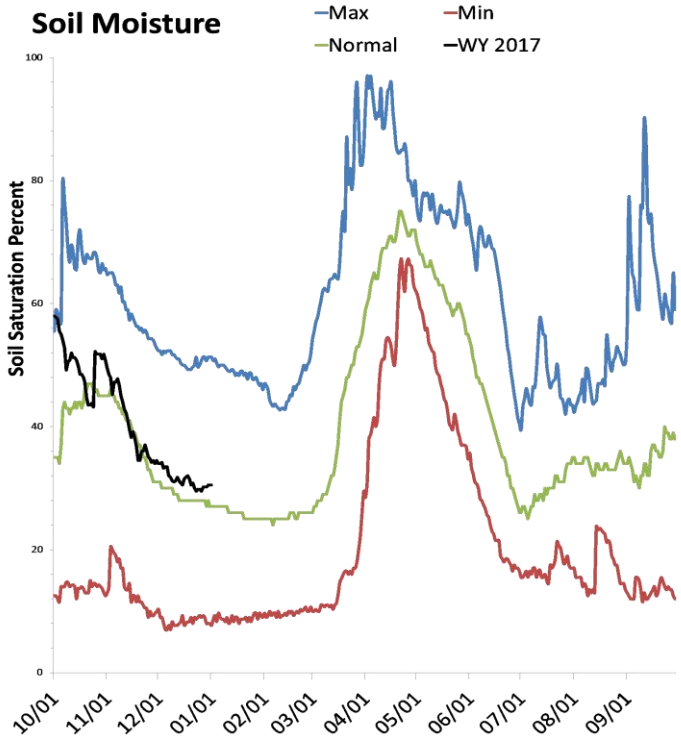
SNOTEL Data

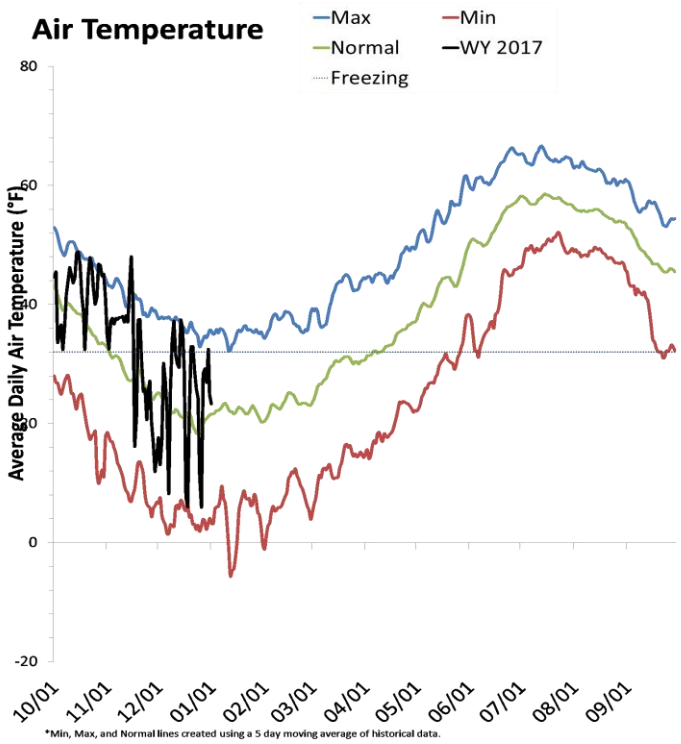
Escalante River Basin

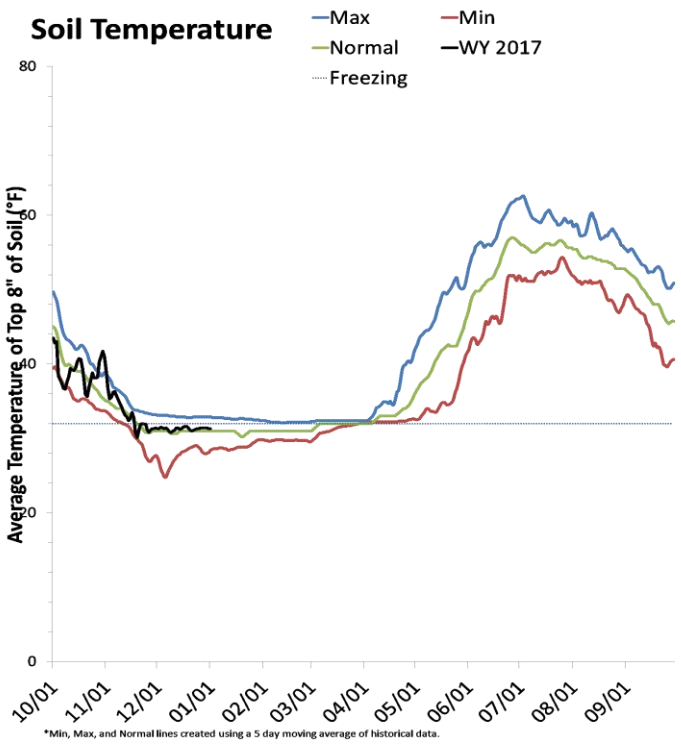
January 1, 2017

Precipitation in December was above average at 128%, which brings the seasonal accumulation (Oct-Dec) to 80% of average. Soil moisture is at 31% compared to 42% last year.





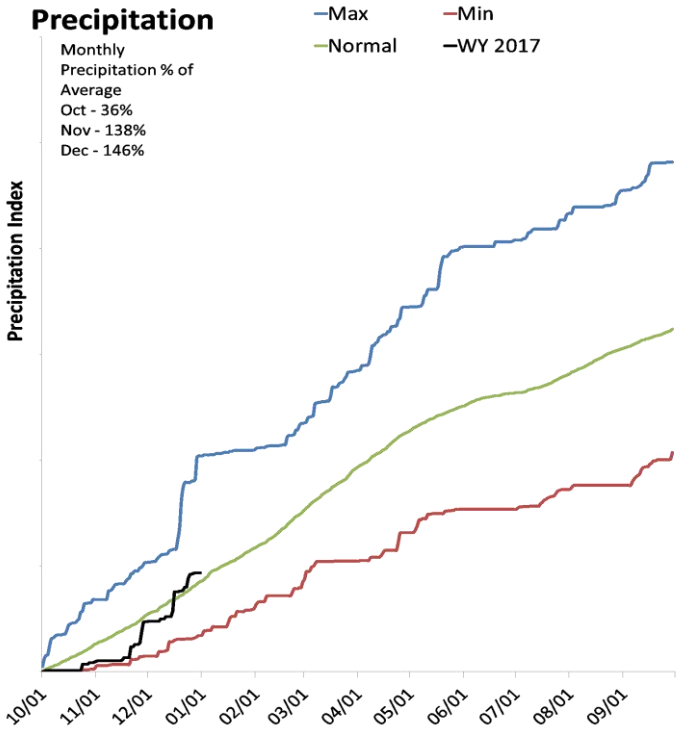


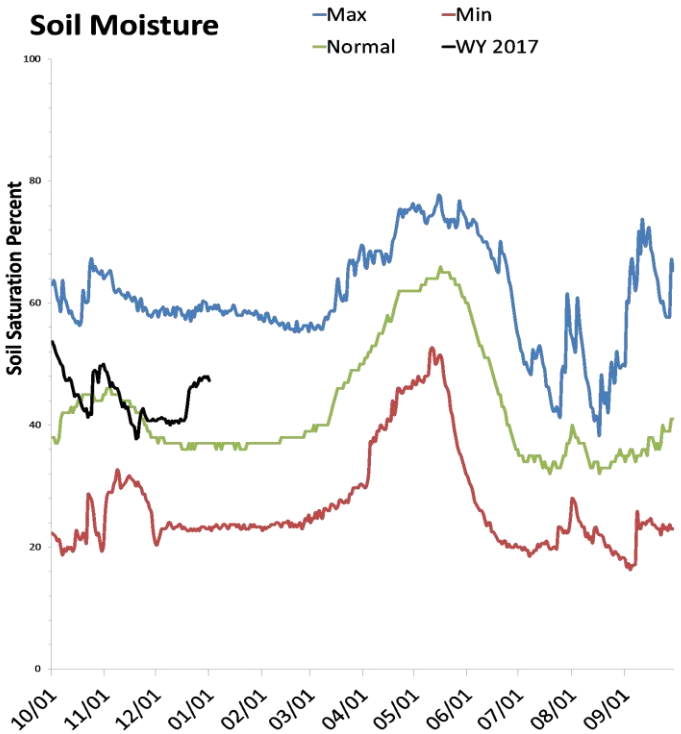


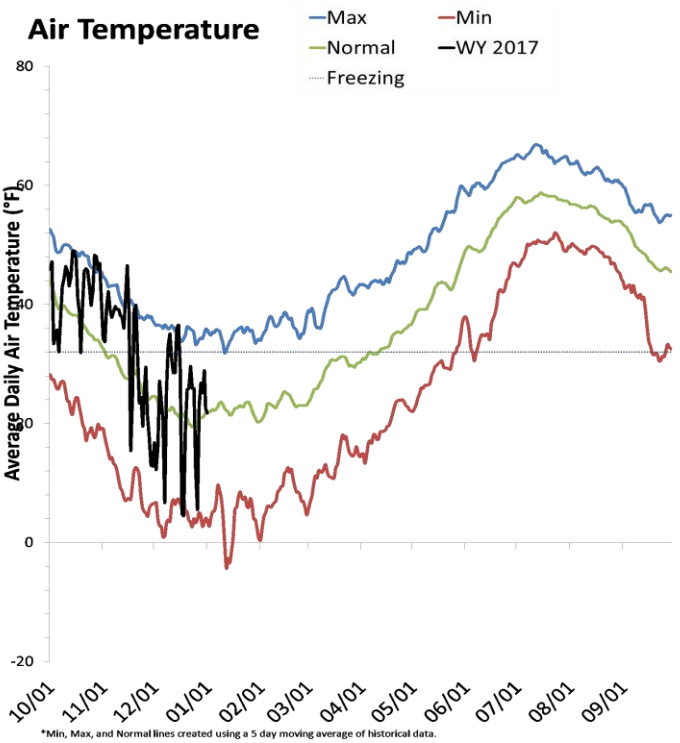
Beaver River Basin

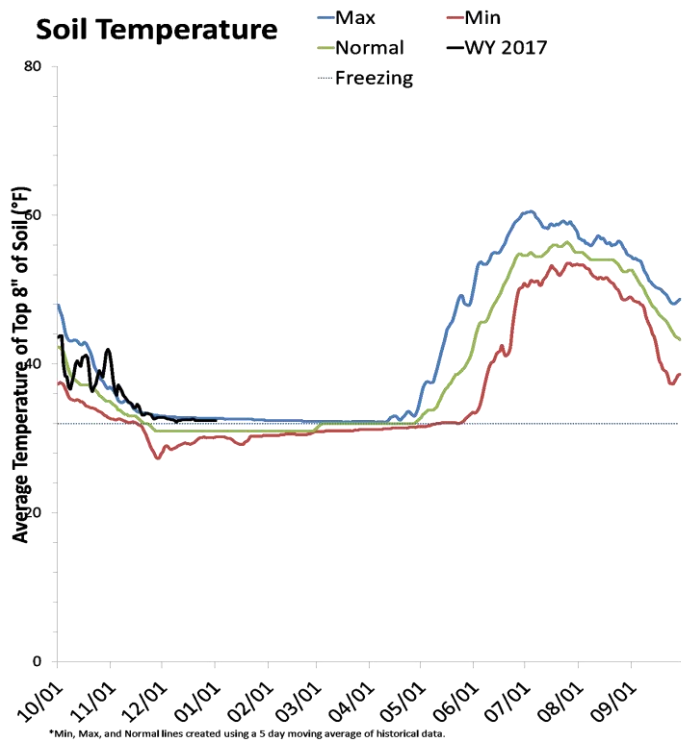
January 1, 2017

Precipitation in December was much above average at 144%, which brings the seasonal accumulation (Oct-Dec) to 109% of average. Soil moisture is at 48% compared to 33% last year. Reservoir storage is at 19% of capacity, compared to 26% last year. The water availability index for the Beaver River is 34%.







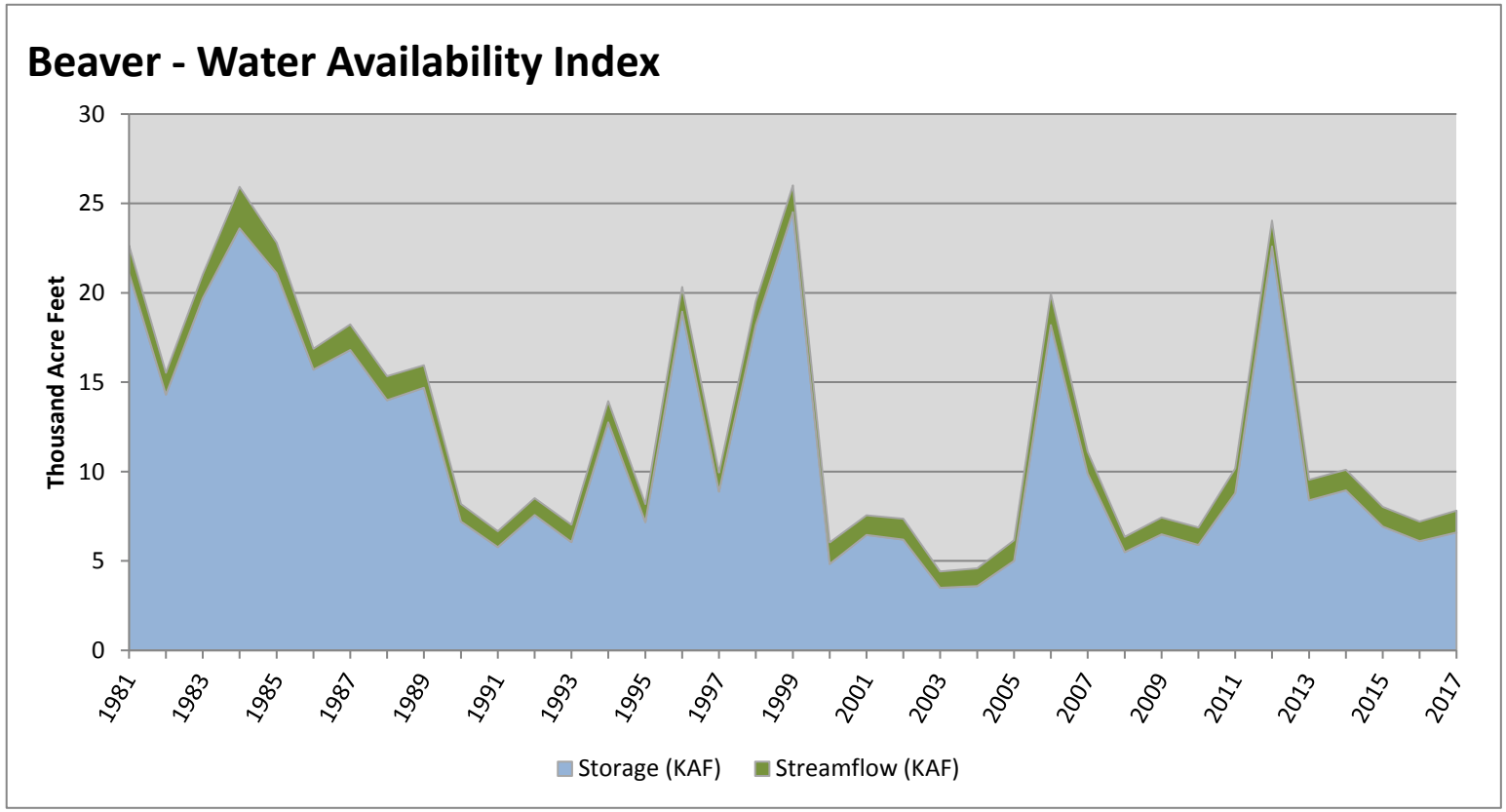


January 1, 2017

Water Availability Index

Basin or Region	Dec EOM* Storage	December Flow	Storage + Flow	Percentile	WAI#	Years with similiar WAI
	KAF^	KAF^	KAF^	%		
Beaver	**6.60**	**1.21**	**7.81**	**34**	**-1.32**	**09, 01, 15, 90**

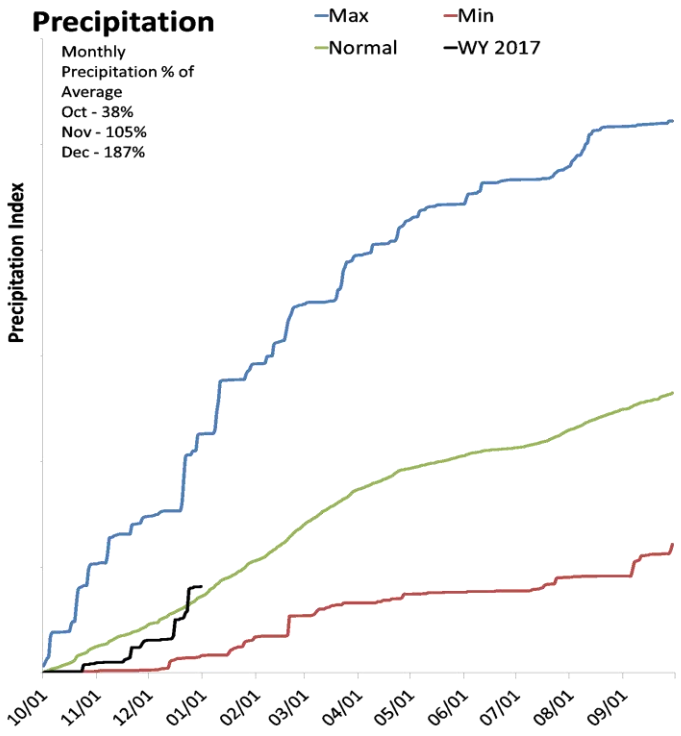
*EOM, end of month; #WAI, Water Availability Index; ^KAF, thousand acre-feet.

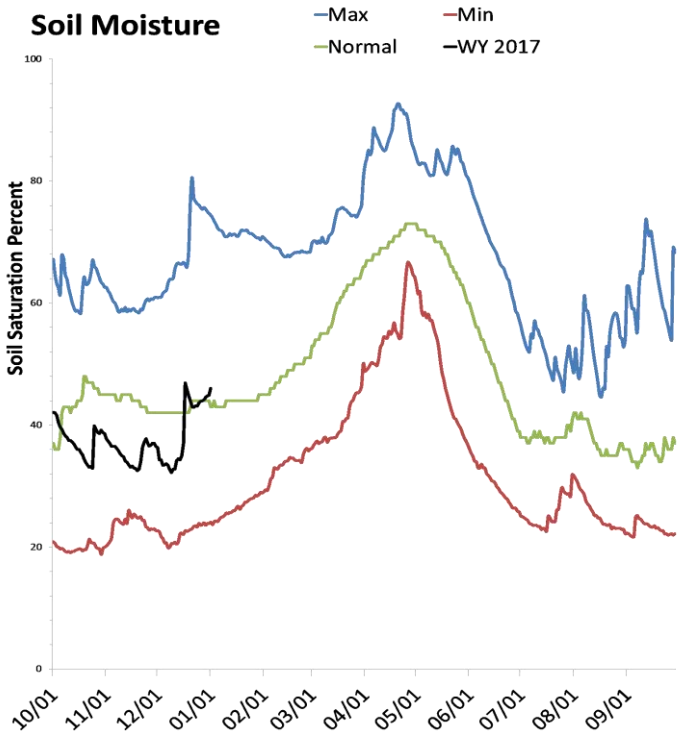


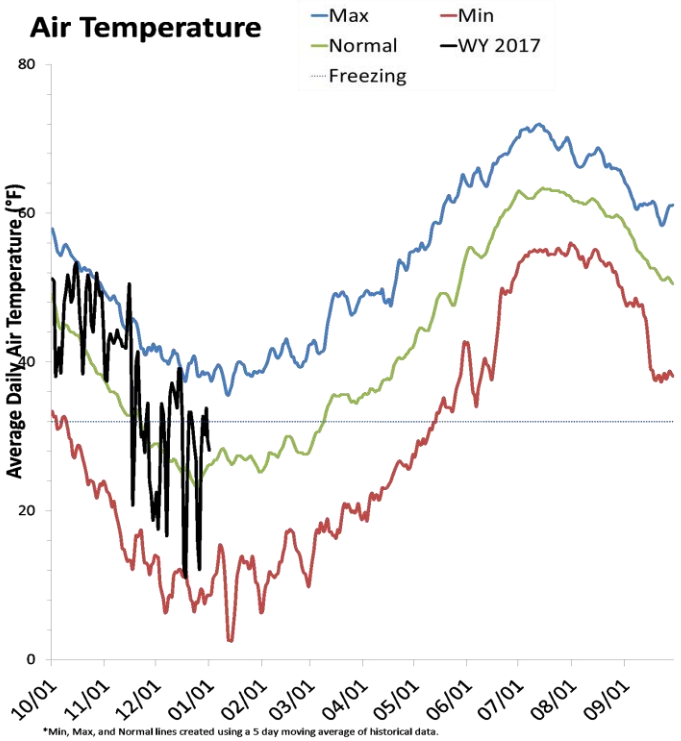
Southwestern Utah

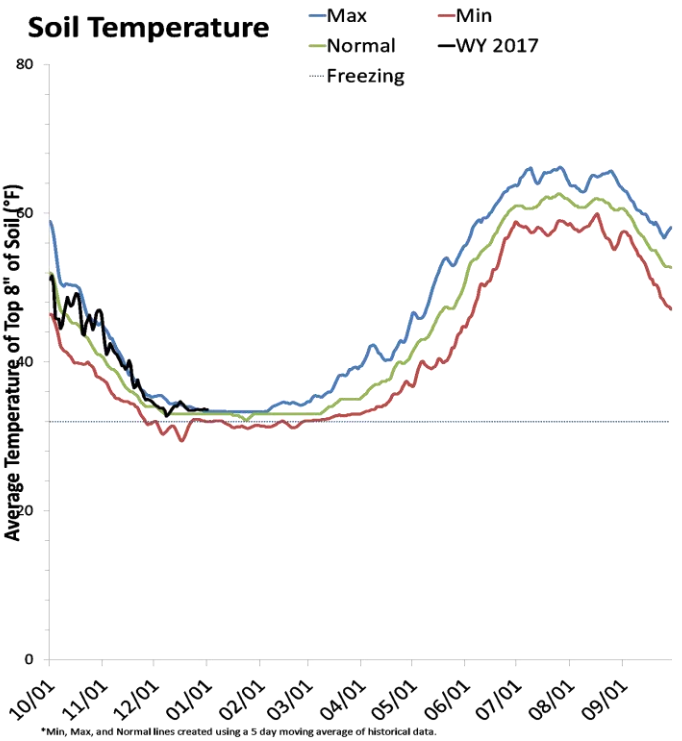
January 1, 2017

Precipitation in December was much above average at 187%, which brings the seasonal accumulation (Oct-Dec) to 113% of average. Soil moisture is at 45% compared to 51% last year. Reservoir storage is at 48% of capacity, compared to 48% last year. The water availability index for the Virgin River is 76%.







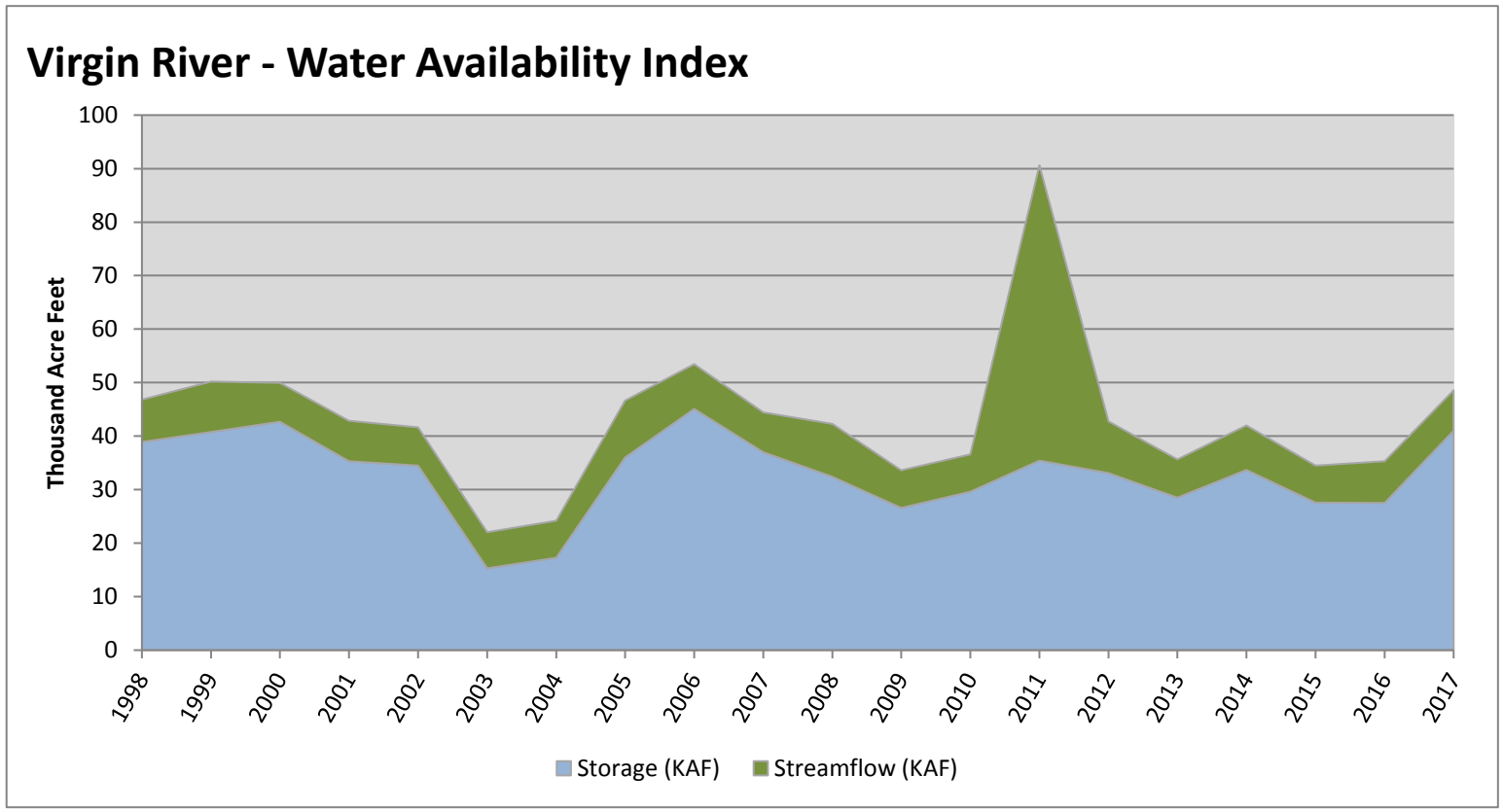


January 1, 2017

Water Availability Index

Basin or Region	Dec EOM* Storage	December Flow	Storage + Flow	Percentile	WAI#	Years with similiar WAI
	KAF^	KAF^	KAF^	%		
Virgin River	**40.98**	**7.61**	**48.59**	**76**	**2.18**	**05, 98, 00, 99**

*EOM, end of month; #WAI, Water Availability Index; ^KAF, thousand acre-feet.



January 1, 2017

Water Availability Index

Basin or Region	Dec EOM* Storage	December Flow	Storage + Flow	Percentile	WAI#	Years with similiar WAI
	*KAF^*	*KAF^*	*KAF^*	*%*		
Bear River	**459**	**3.6**	**463**	**47**	**-0.2**	**96, 16, 15, 14**
Woodruff Narrows	**46.4**	**3.6**	**50.0**	**87**	**3.1**	**12, 07, 98, 84**
Little Bear	**9.6**	**2.5**	**12.1**	**42**	**-0.6**	**03, 08, 12, 05**
Ogden	**74.0**	**2.3**	**76.3**	**79**	**2.4**	**86, 96, 87, 10**
Weber	**97.9**	**10.4**	**108.3**	**36**	**-1.2**	**16, 03, 08, 95**
Provo River	**308.4**	**3.3**	**311.6**	**35**	**-1.3**	**13, 05, 15, 96**
Western Uinta	**177.1**	**2.8**	**179.9**	**81**	**2.6**	**16, 00, 88, 99**
Eastern Uinta	**39.8**	**3.4**	**43.2**	**63**	**1.1**	**07, 92, 00, 10**
Blacks Fork	**9.8**	**5.2**	**15.1**	**69**	**1.6**	**07, 14, 98, 92**
Price	**12.4**	**0.4**	**12.7**	**24**	**-2.2**	**15, 04, 95, 03**
Smiths Creek	**6.1**	**1.4**	**7.5**	**76**	**2.2**	**14, 96, 98, 92**
Joes Valley	**29.8**	**1.1**	**31.0**	**11**	**-3.3**	**91, 93, 14, 95**
Moab	**1.7**	**0.5**	**2.2**	**87**	**3.1**	**96, 94, 07, 06**
Upper Sevier River	**46.6**	**9.3**	**55.9**	**26**	**-2.0**	**10, 09, 90, 08**
San Pitch	**0.2**	**0.4**	**0.6**	**13**	**-3.1**	**04, 16, 02, 14**
Lower Sevier	**8.3**	**14.1**	**22.4**	**3**	**-4.0**	**04, 05, 92, 03**
Beaver	**6.6**	**1.2**	**7.8**	**34**	**-1.3**	**09, 01, 15, 90**
Virgin River	**41.0**	**7.6**	**48.6**	**76**	**2.2**	**05, 98, 00, 99**

**EOM, end of month; # WAI, water availibilty index; ^KAF, thousand acre-feet.*

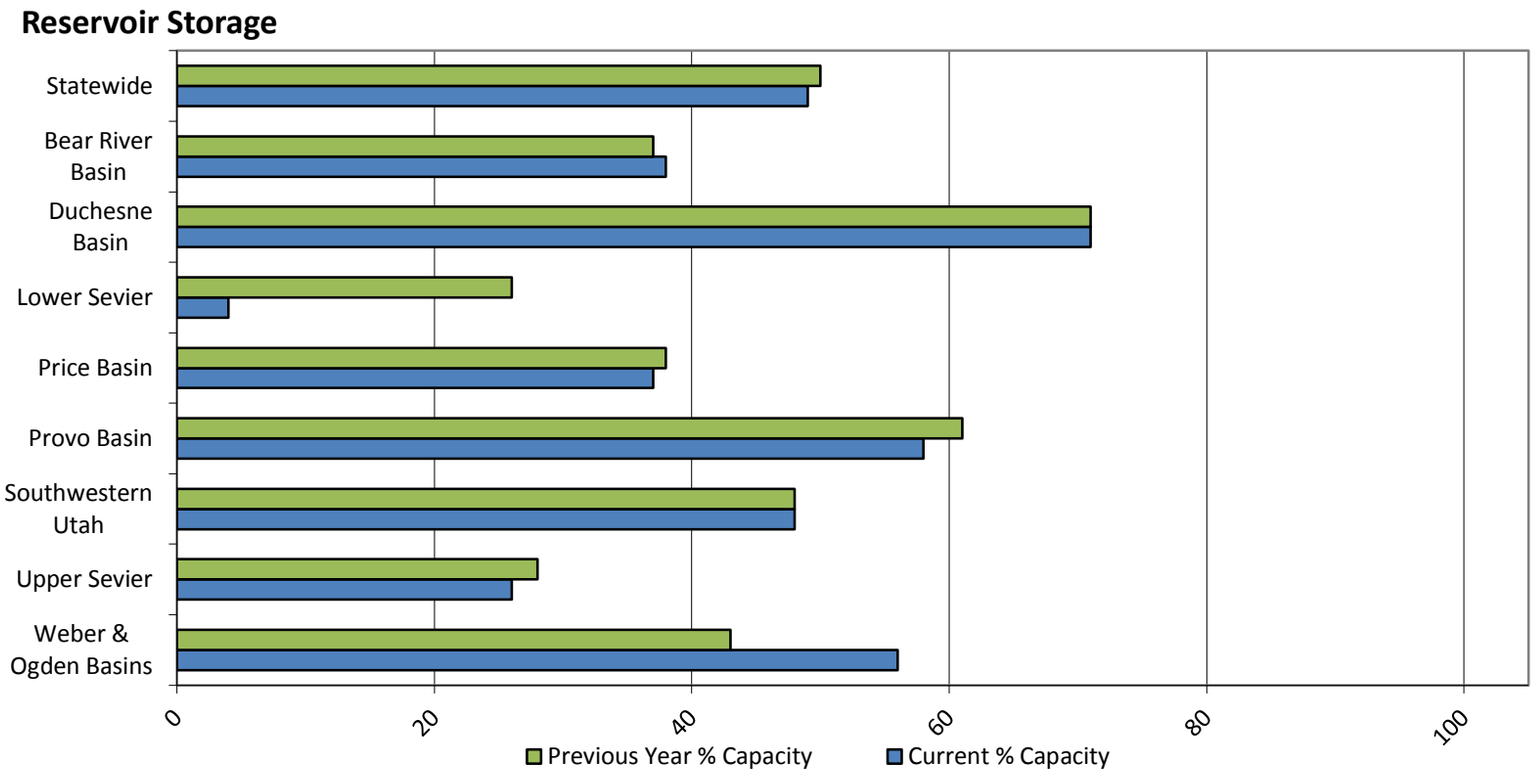
What is a Water Availability Index?

The Water Availability Index (WAI) is an observed hydrologic indicator of current surface water availability within a watershed. The index is calculated by combining current reservoir storage with the previous months streamflow. WAI values are scaled from +4.1 (abundant supply) to -4.1 (extremely dry) with a value of zero (0) indicating median water supply as compared to historical analysis. WAI's are calculated in this fashion to be consistent with other hydroclimatic indicators such as the Palmer Drought Index and the Precipitation index.

Utah Snow Surveys has also chosen to display the WAI value as well as a PERCENT CHANCE OF NON-EXCEEDANCE. While this is a cumbersome name, it has the simplest application. It can be best thought of as a scale of 1 to 99 with 1 being the drought of record (driest possible conditions) and 99 being the flood of record (wettest possible conditions) and a value of 50 representing average conditions. This rating scale is a percentile rating as well, for example a WAI of 75% means that this years water supply is greater than 75% of all historical events and that only 25% of the time has it been exceeded. Conversely a WAI of 10% means that 90% of historical events have been greater than this one and that only 10% have had less total water supply. This scale is comparable between basins: a SWSI of 50% means the same relative ranking on watershed A as it does on watershed B, which may not be strictly true of the +4 to -4 scale.

For more information on the WAI go to: www.ut.nrcs.usda.gov/snow/ on the water supply page. The entire period of historical record for reservoir storage and streamflow is available.

Reservoir Storage Summary for the end of December 2017	Current (KAF)	Last Year (KAF)	Average (KAF)	Capacity (KAF)	Current % Capacity	Last Year % Capacity	Average % Capacity	Current % Average	Last Year % Average
Big Sand Wash Reservoir	23.0	20.3		25.7	89%	79%			
Causey Reservoir	4.3	4.0	3.1	7.1	60%	57%	44%	138%	130%
Cleveland Lake	1.4	1.8		5.4	26%	33%			
Currant Creek Reservoir	14.1	14.5	14.9	15.5	91%	93%	96%	95%	97%
Deer Creek Reservoir	123.2	113.6	103.1	149.7	82%	76%	69%	119%	110%
East Canyon Reservoir	23.5	22.1	34.1	49.5	48%	45%	69%	69%	65%
Echo Reservoir	25.9	26.6	44.3	73.9	35%	36%	60%	58%	60%
Grantsville Reservoir	0.6	1.2	1.5	3.3	17%	35%	45%	38%	78%
Gunlock	4.6	2.0	6.2	10.4	44%	19%	60%	74%	32%
Gunnison Reservoir	0.2	0.2	9.3	20.3	1%	1%	46%	2%	2%
Huntington North Reservoir	2.3	2.5	2.3	4.2	54%	58%	55%	98%	107%
Hyrum Reservoir	9.6	8.7	10.1	15.3	63%	57%	66%	95%	86%
Joes Valley Reservoir	29.8	37.0	39.7	61.6	48%	60%	64%	75%	93%
Jordanelle Reservoir	185.2	175.4	244.5	320.0	58%	55%	76%	76%	72%
Ken's Lake	1.7	1.4	1.0	2.3	76%	61%	41%	183%	148%
Kolob Reservoir	5.4	3.3		5.6	97%	59%			
Lost Creek Reservoir	14.6	10.9	12.4	22.5	65%	48%	55%	117%	88%
Lower Enterprise	0.4	0.8	0.5	2.6	13%	31%	20%	66%	151%
Miller Flat Reservoir	1.8	1.6		5.2	35%	31%			
Millsite	10.0	7.8	10.0	16.7	60%	46%	60%	100%	78%
Minersville Reservoir	4.5	6.1	11.8	23.3	19%	26%	51%	38%	52%
Moon Lake Reservoir	22.4	20.2	22.4	35.8	63%	56%	63%	100%	90%
Otter Creek Reservoir	28.4	23.0	32.1	52.5	54%	44%	61%	88%	72%
Panguitch Lake	9.9	5.8	11.6	22.3	44%	26%	52%	85%	50%
Pineview Reservoir	69.7	51.9	52.4	110.1	63%	47%	48%	133%	99%
Piute Reservoir	0.0	12.8	42.0	71.8	0%	18%	58%	0%	31%
Porcupine Reservoir	5.4	6.0	6.5	11.3	48%	53%	58%	83%	92%
Quail Creek	36.4	25.6	25.3	40.0	91%	64%	63%	144%	101%
Red Fleet Reservoir	20.8	15.6	17.5	25.7	81%	61%	68%	119%	89%
Rockport Reservoir	28.3	33.0	34.8	60.9	46%	54%	57%	81%	95%
Sand Hollow Reservoir	45.5	33.8		50.0	91%	68%			
Scofield Reservoir	12.4	9.8	28.5	65.8	19%	15%	43%	43%	34%
Settlement Canyon Reservoir	0.3	0.3	0.6	1.0	30%	25%	63%	48%	40%
Sevier Bridge Reservoir	8.3	61.0	143.2	236.0	4%	26%	61%	6%	43%
Smith And Morehouse Reservoir	5.6	3.5	3.8	8.1	69%	43%	47%	148%	91%
Starvation Reservoir	140.8	143.9	134.1	165.3	85%	87%	81%	105%	107%
Stateline Reservoir	6.0	5.7	5.7	12.0	50%	48%	48%	106%	100%
Steinaker Reservoir	19.0	15.2	20.0	33.4	57%	46%	60%	95%	76%
Strawberry Reservoir	766.8	791.5	657.4	1105.9	69%	72%	59%	117%	120%
Upper Enterprise	0.4	0.7	2.8	10.0	4%	7%	28%	14%	25%
Upper Stillwater Reservoir	13.9	10.2	10.0	32.5	43%	31%	31%	139%	102%
Utah Lake	335.1	404.2	726.5	870.9	38%	46%	83%	46%	56%
Vernon Creek Reservoir	0.1	0.2	0.4	0.6	22%	33%	65%	33%	51%
Willard Bay	137.0	84.1	129.6	215.0	64%	39%	60%	106%	65%
Woodruff Creek	1.8	2.2	2.1	4.0	46%	55%	53%	88%	105%
Woodruff Narrows Reservoir	46.4	39.2	27.3	57.3	81%	68%	48%	170%	144%
Meeks Cabin Reservoir	9.8	5.7	9.9	32.5	30%	18%	30%	99%	58%
Bear Lake	459.1	460.4	580.6	1302.0	35%	35%	45%	79%	79%
Basin-wide Total	2638.4	2666.6	3275.9	5380.9	49%	50%	61%	81%	81%
# of reservoirs	43	43	43	43	43	43	43	43	43



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Utah Climate and Water Report

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