



Utah Climate and Water Report

October 1, 2017



Beaver Dams SNOTEL, Sanpete County

Recently remodeled after 37 years in service

Photo by Randy Julander

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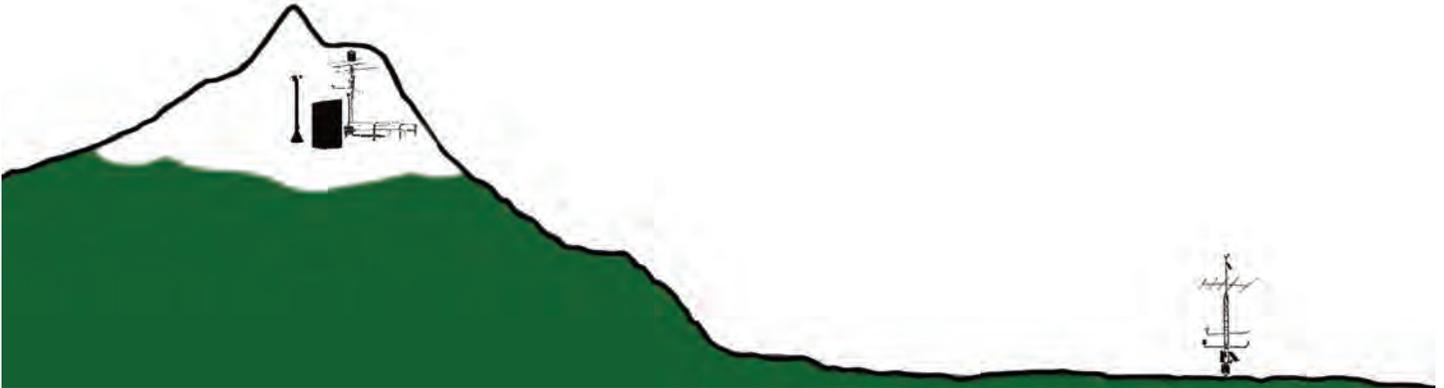
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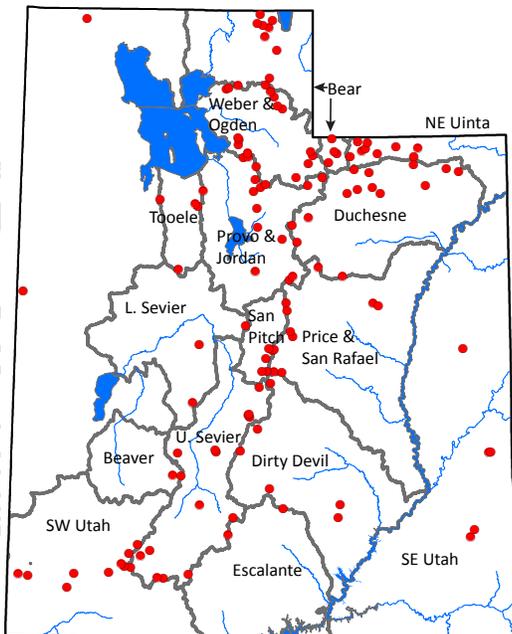
Utah Climate and Water Report

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.



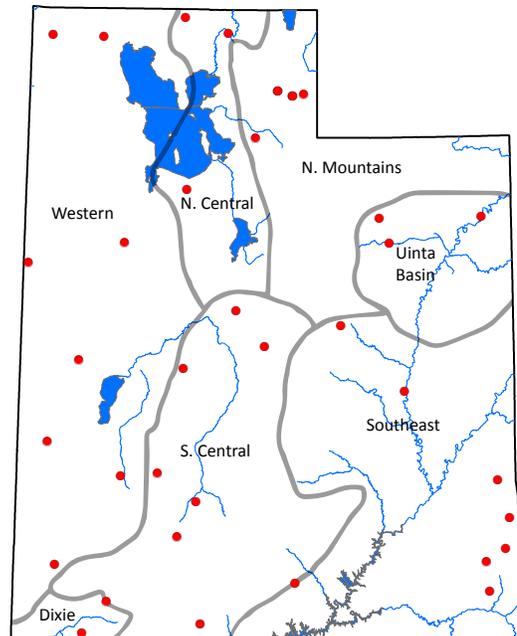
SNOTEL

- 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 October 1, 2017

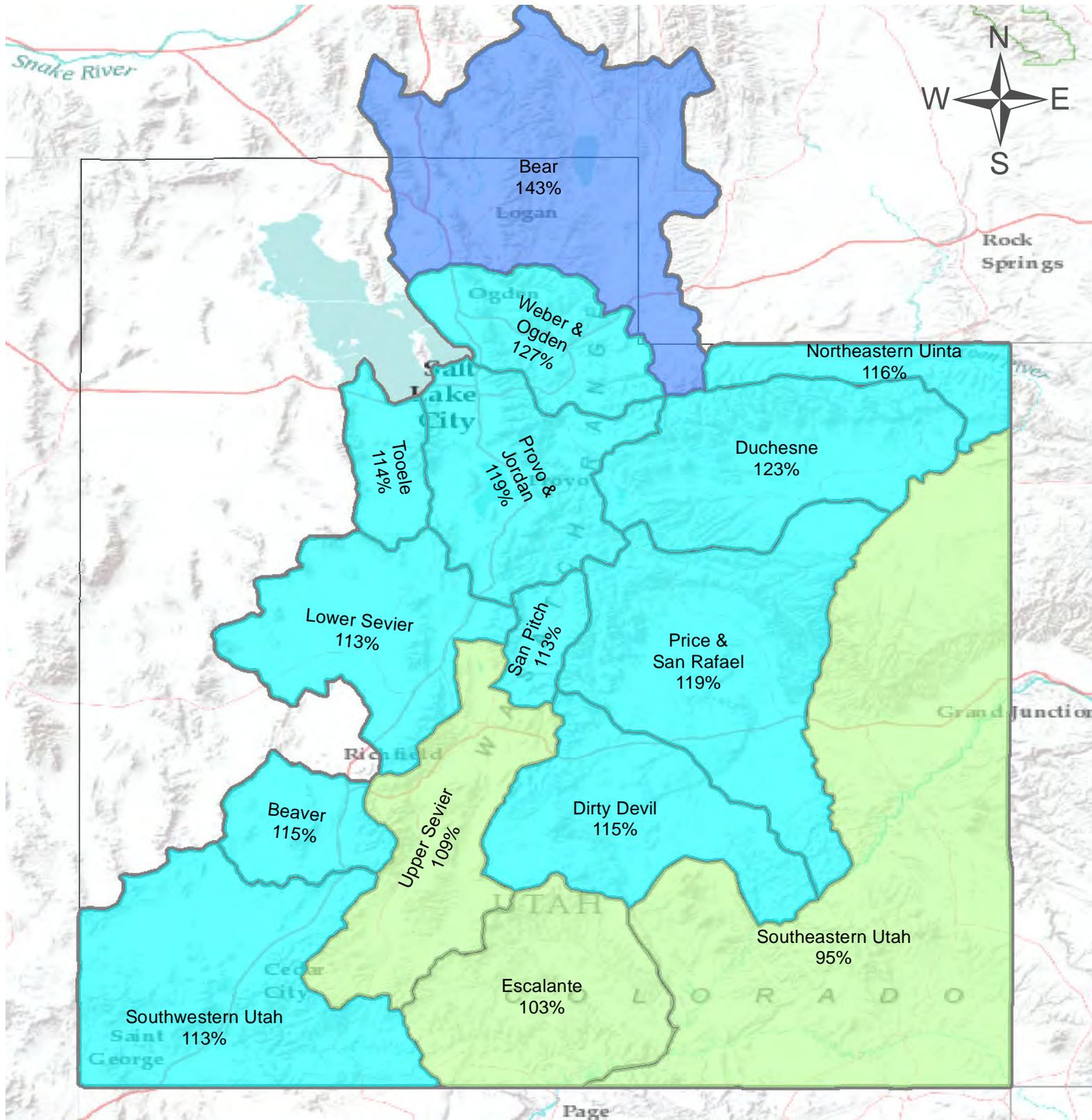
This report has been reorganized to better reflect two distinct geographic areas being monitored – the low elevation valley sites (Soil Climate Analysis Network) that are critical for agricultural production and operations, and the high elevation mountainous areas where water supply is generated (SNOWTElemetry). 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 at the lower elevation SCAN sites was 1.4 inches during September which brings the seasonal total to 12.6 inches for the water year. Soil moisture is about the same as last year at 36% of saturation. Both air and soil temperatures have dropped significantly this past month from exceptionally hot to exceptionally cold. Air temperature may fluctuate substantially over the next few weeks but the soils are likely to remain on the cool side.

Current Mountain Conditions (SNOTEL)

Well, what we have here is a brand new water year, 2018 and hopefully it will be much like the old one of 2017 – which by the way, for much of Utah was entirely splendid! Yes, we know it was an exceptionally hot summer and there was some downsides like fires and the like, but man o' man what a runoff year for most of the north and pretty decent everywhere else! If you have the water, a long hot summer makes for great alfalfa yields and for most hay in general as well as the conditions to cut, dry, bale and store said crops. It also looks like we have gone from summer to late fall pretty fast with early season snowfall in down to the 7000 foot levels and exceptionally cool temperatures of late. Time will tell what the remainder of fall will bring. September precipitation was well above average at 160% of normal with many sites in the 200% to 300% range. Statewide for the water year, we ended up at 122% of average. Southern Utah water year totals were near average whereas northern Utah was 115% to 145% of average. Soil moisture statewide is well above average in response to recent rains and snow, at 55% of saturation and similar to last year. Current streamflow across the state remains near normal. Reservoir storage is at 70% of capacity compared to 45% last year – and that will bring big smiles on many water managers across the state. There are a few reservoirs that are of concern, Gunnison and Sevier Bridge are both exceptionally low. For the most part this is an outstanding finish to a really good year with high hopes that water year 2018 will bring equally good fortune.



Statewide Precipitation

As of October 1, 2017:

122% of Normal Precipitation

160% of Normal Precipitation Last Month

% of Normal

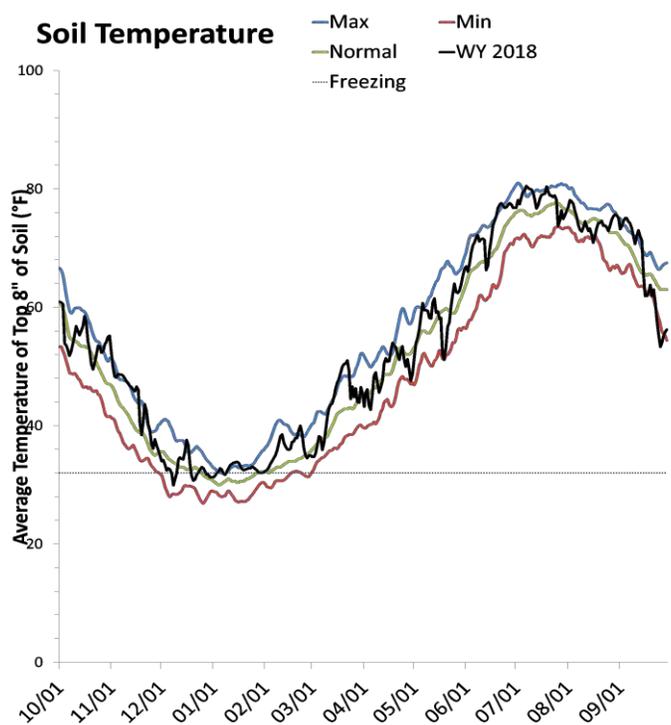
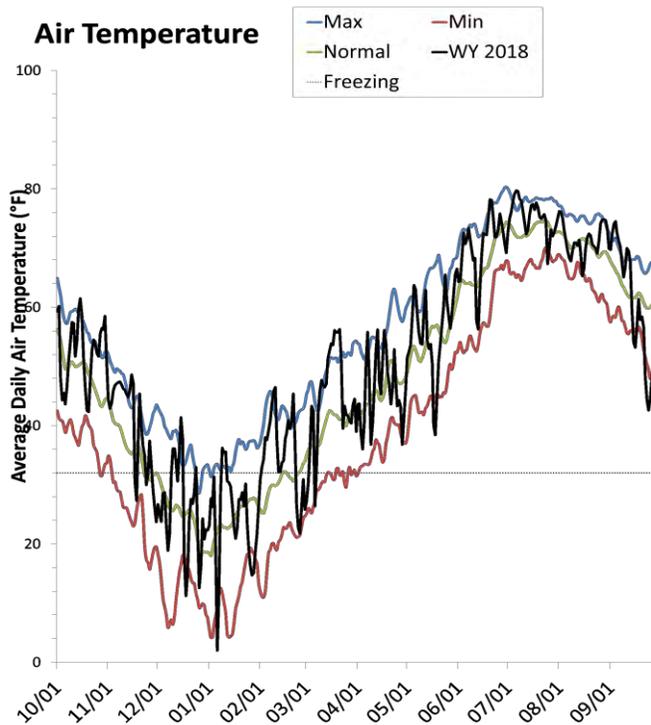
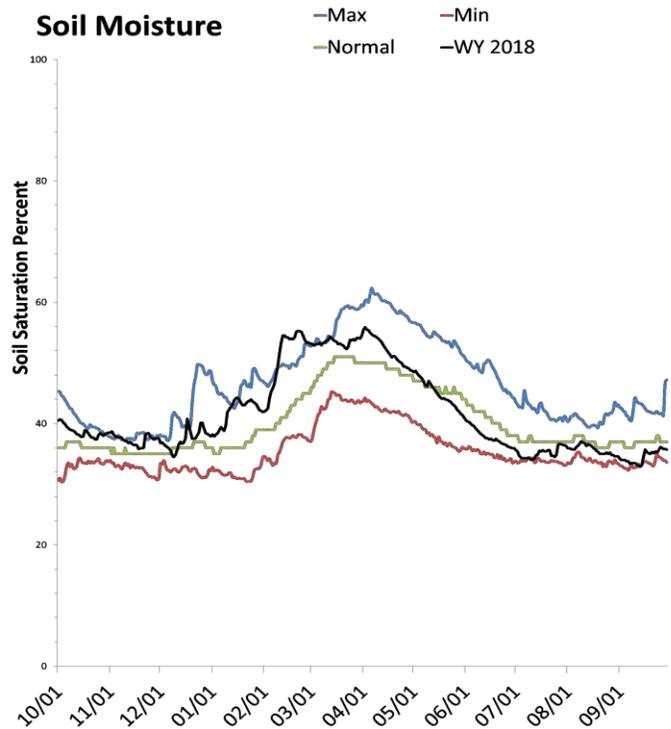
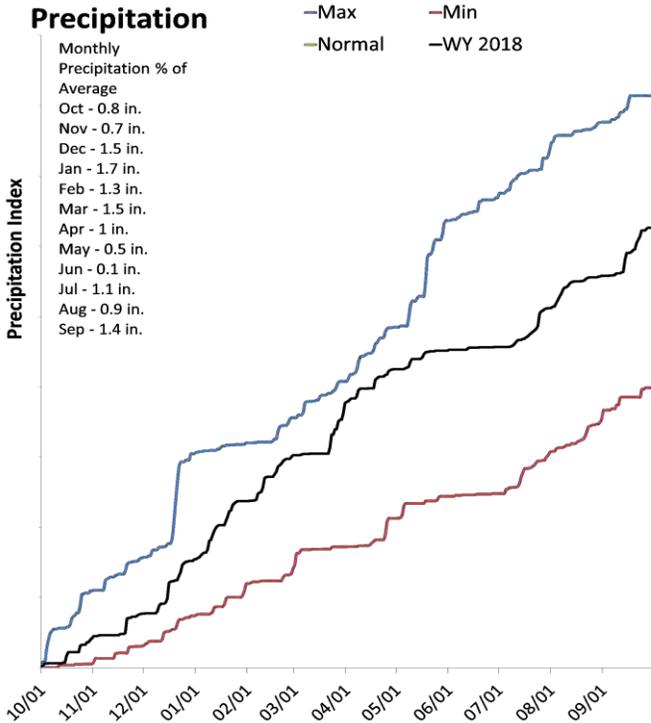
- < 50%
- 50 - 69%
- 70 - 89%
- 90 - 109%
- 110 - 129%
- 130 - 149%
- > 150%

0 10 20 40 60 80 100 Miles

Statewide SCAN

October 1, 2017

The average precipitation at SCAN sites within Utah was 1.4 inches in September, which brings the seasonal accumulation (Oct-Sep) to 12.6 inches. Soil moisture is at 36% compared to 40% last year.



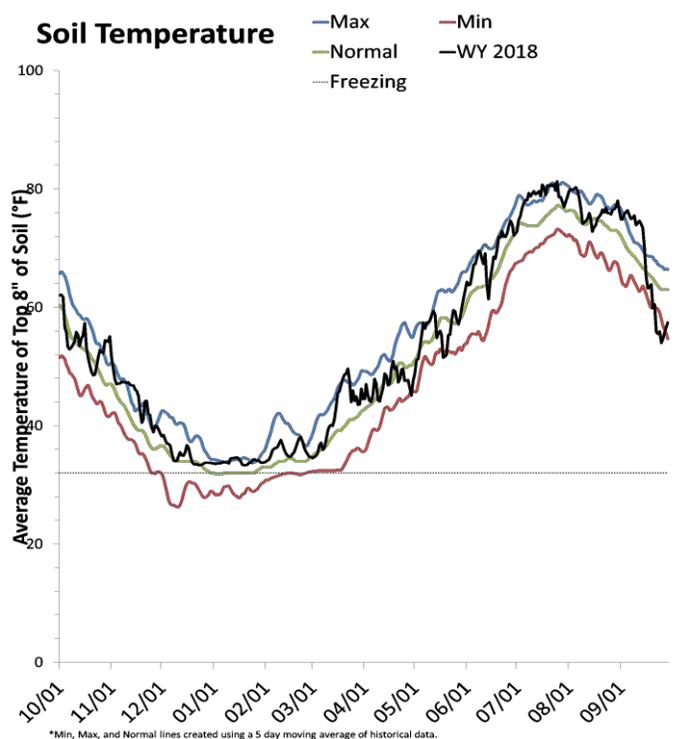
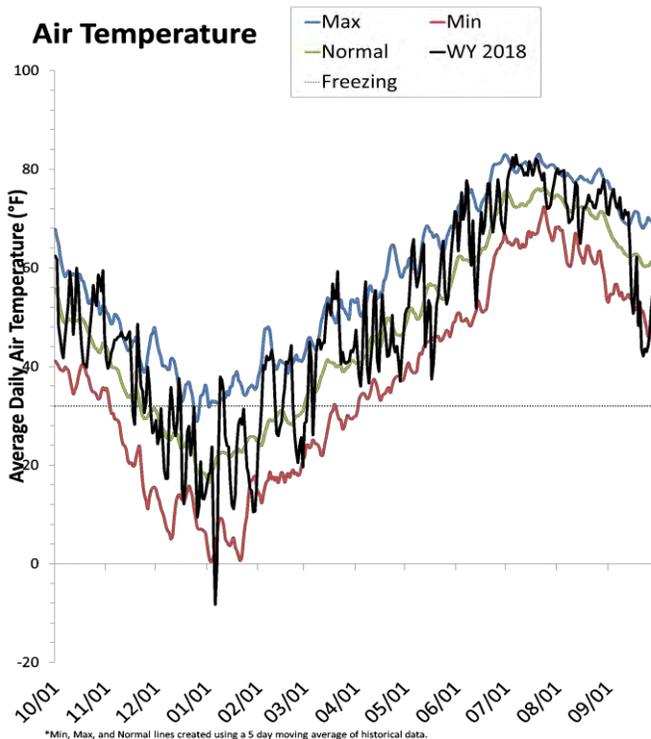
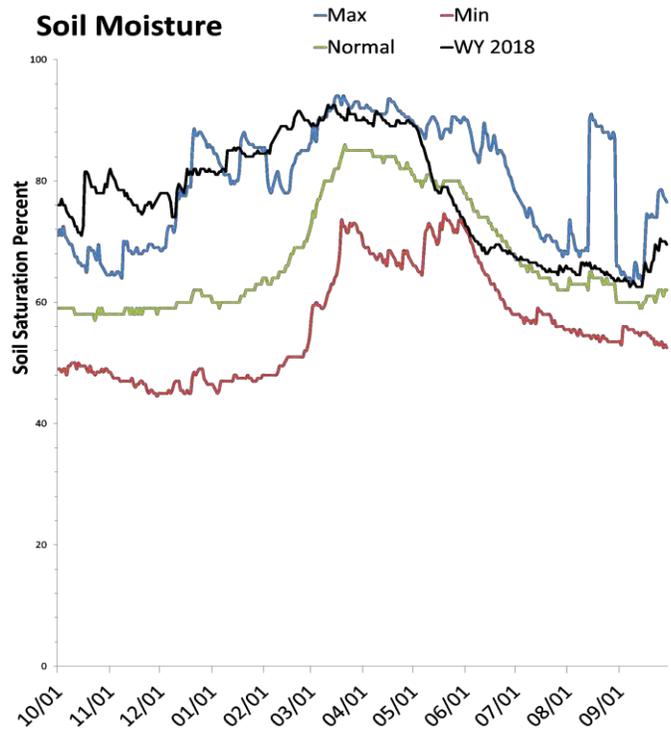
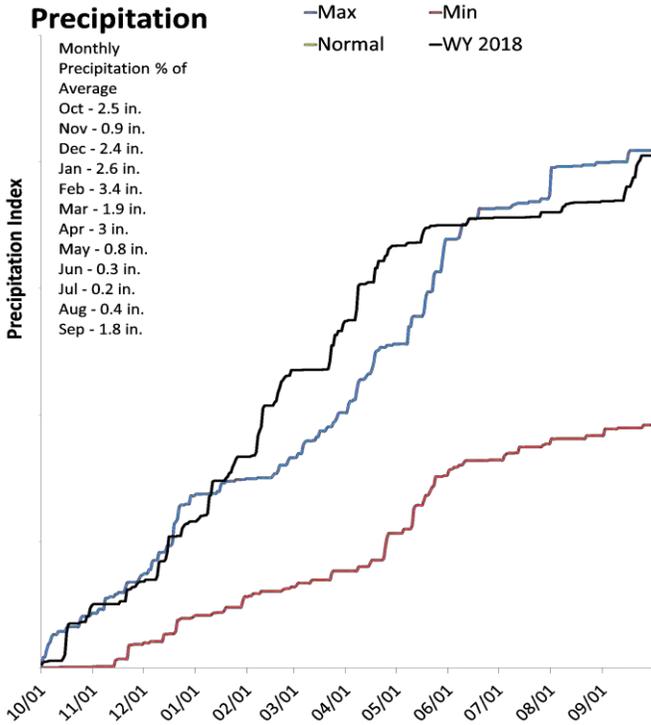
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

*Min, Max, and Normal lines created using a 5 day moving average of historical data.

North Central

October 1, 2017

The average precipitation in September at SCAN sites within the basin was 2 inches, which brings the seasonal accumulation (Oct-Sep) to 20.4 inches. Soil moisture is at 70% compared to 76% last year.



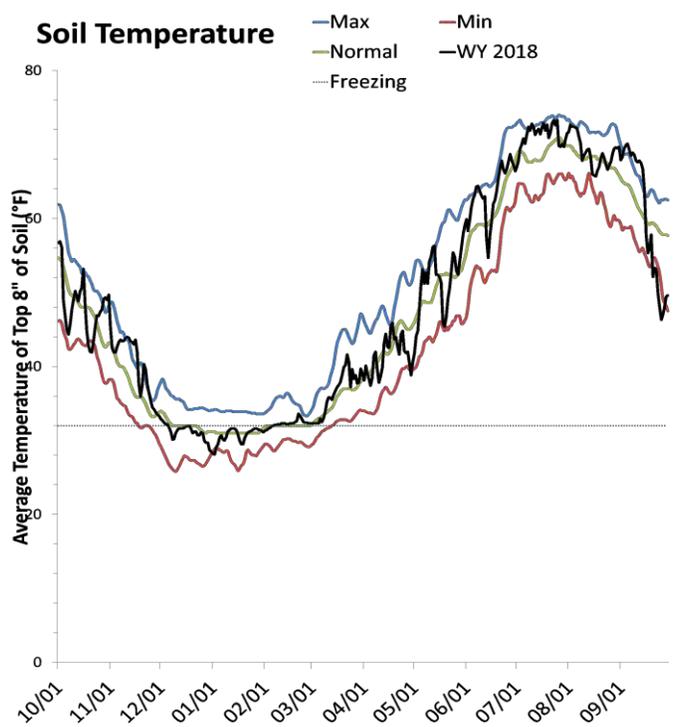
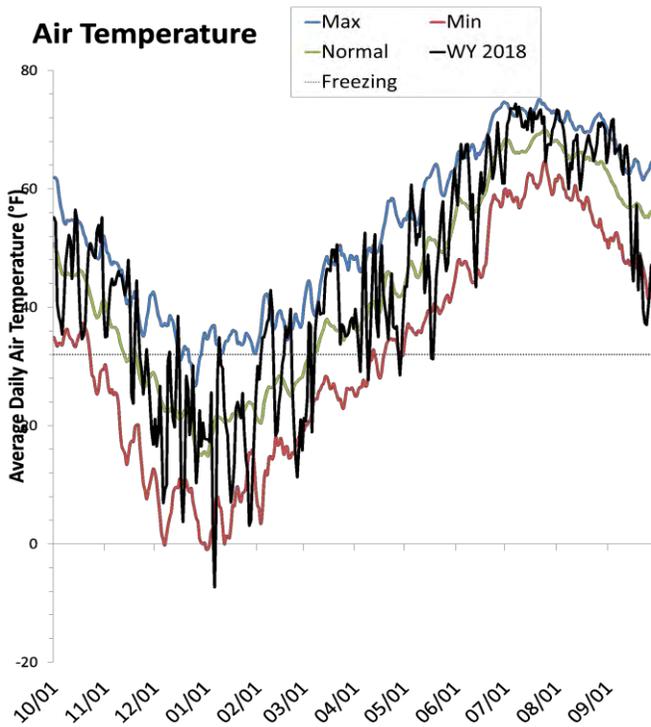
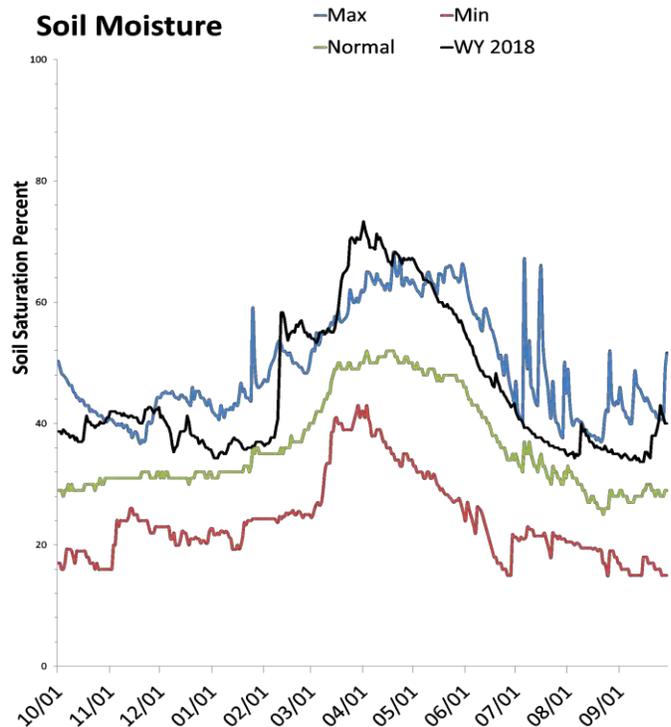
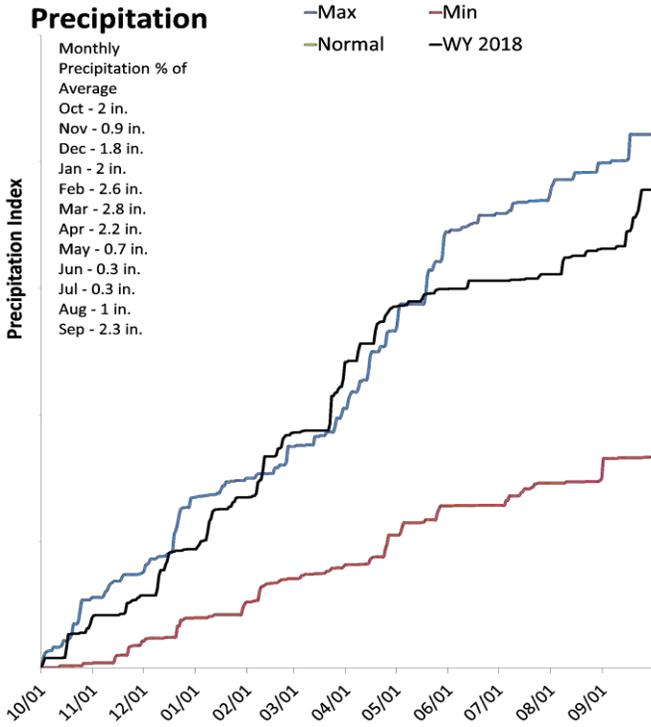
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

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Northern Mountains

October 1, 2017

The average precipitation in September at SCAN sites within the basin was 2.5 inches, which brings the seasonal accumulation (Oct-Sep) to 19.1 inches. Soil moisture is at 40% compared to 39% last year.



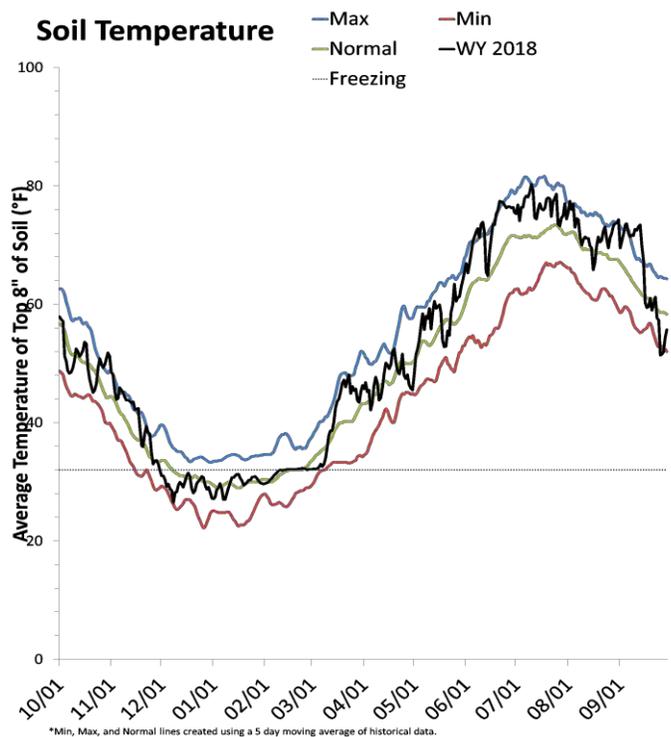
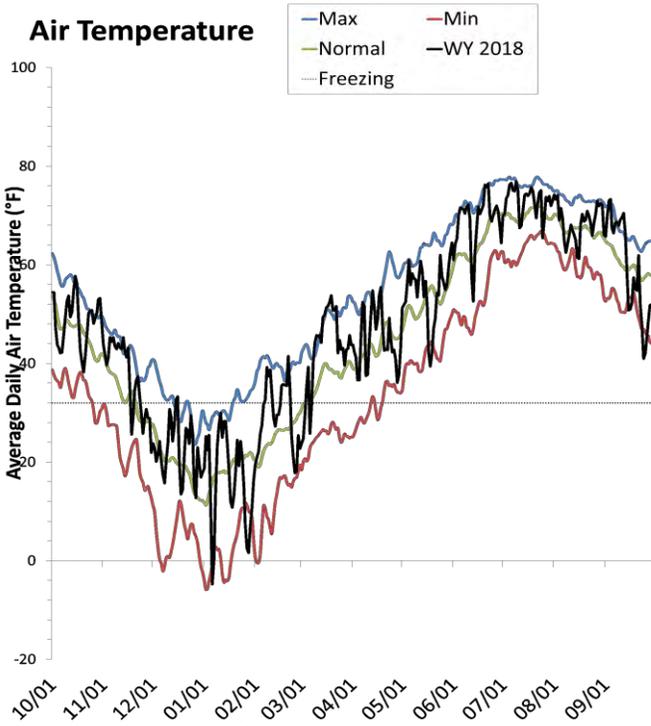
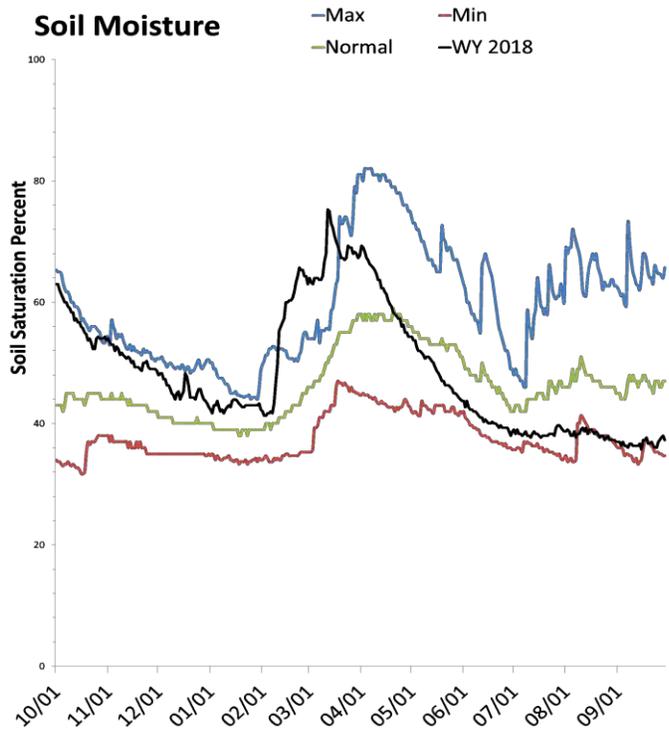
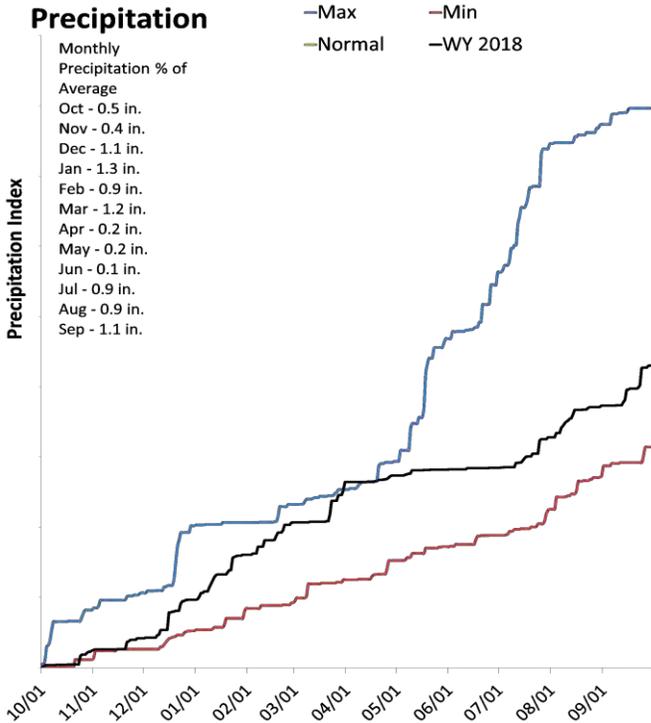
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

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Uinta Basin

October 1, 2017

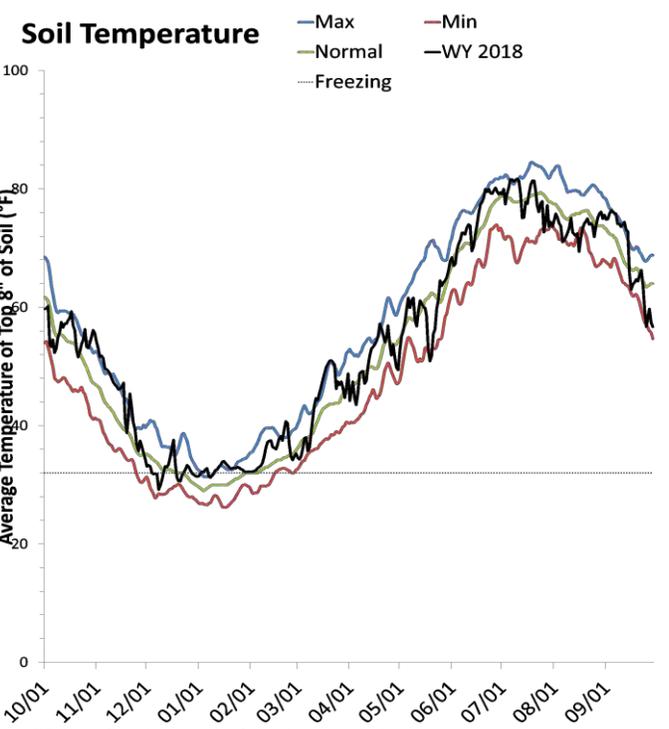
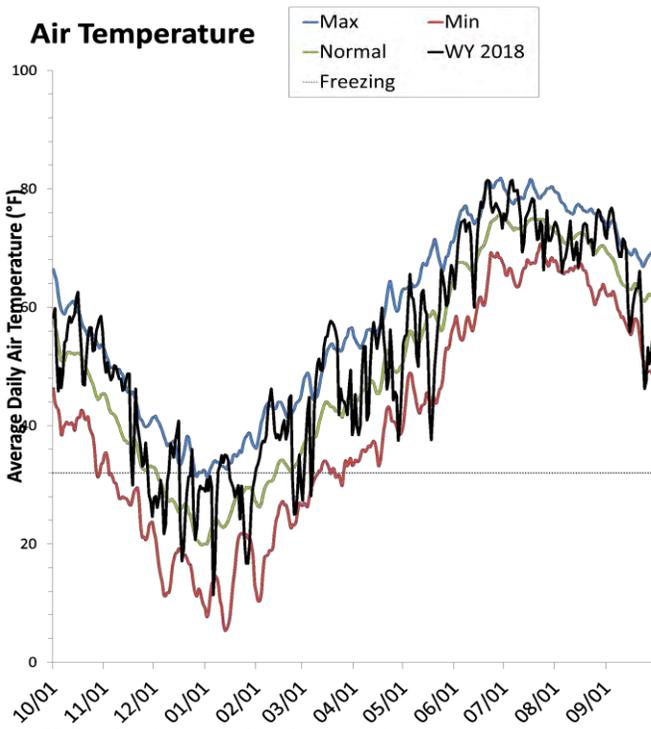
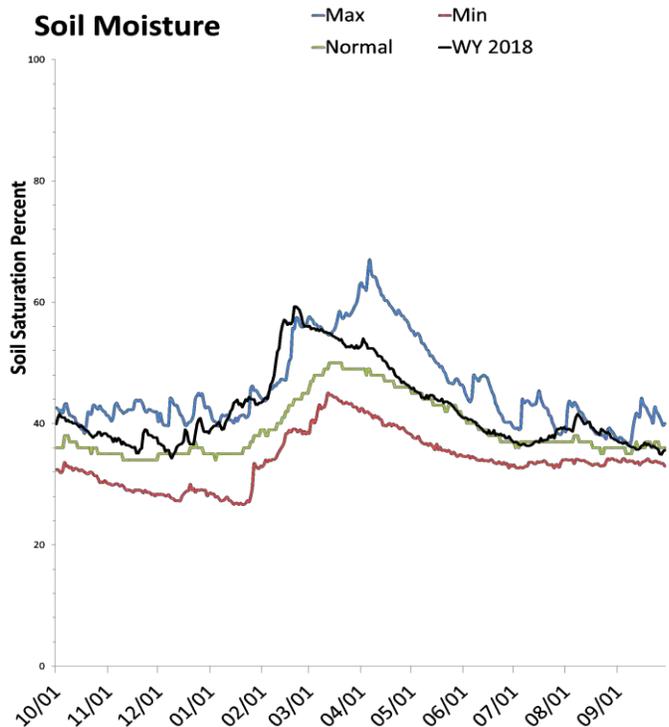
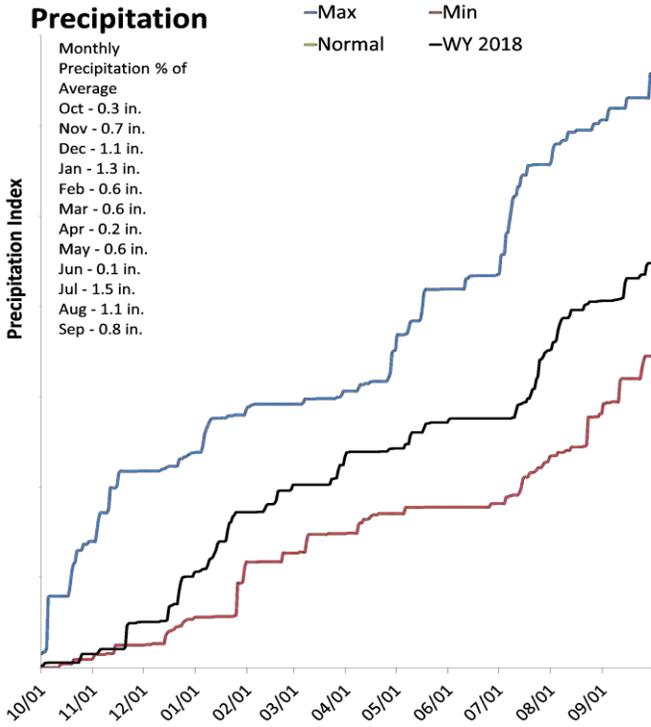
The average precipitation in September at SCAN sites within the basin was 1.2 inches, which brings the seasonal accumulation (Oct-Sep) to 8.7 inches. Soil moisture is at 38% compared to 63% last year.



Southeast

October 1, 2017

The average precipitation in September at SCAN sites within the basin was 0.8 inches, which brings the seasonal accumulation (Oct-Sep) to 9 inches. Soil moisture is at 35% compared to 40% last year.



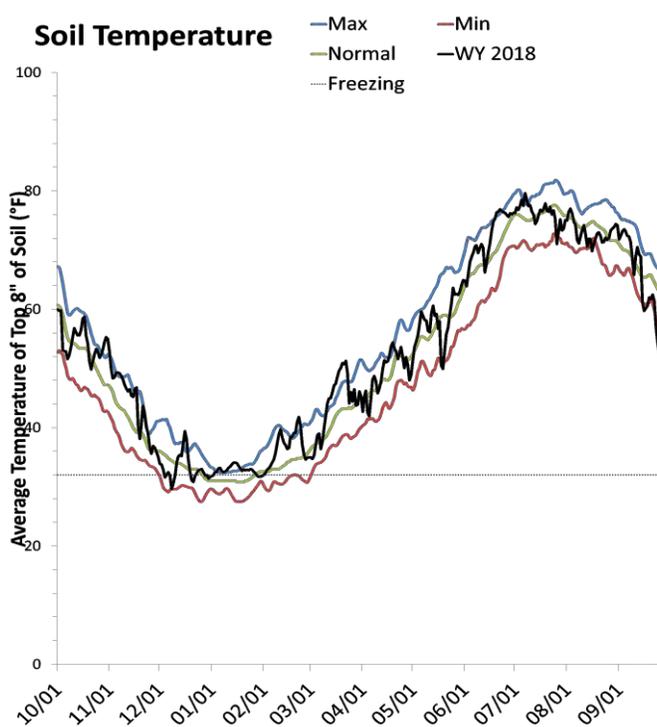
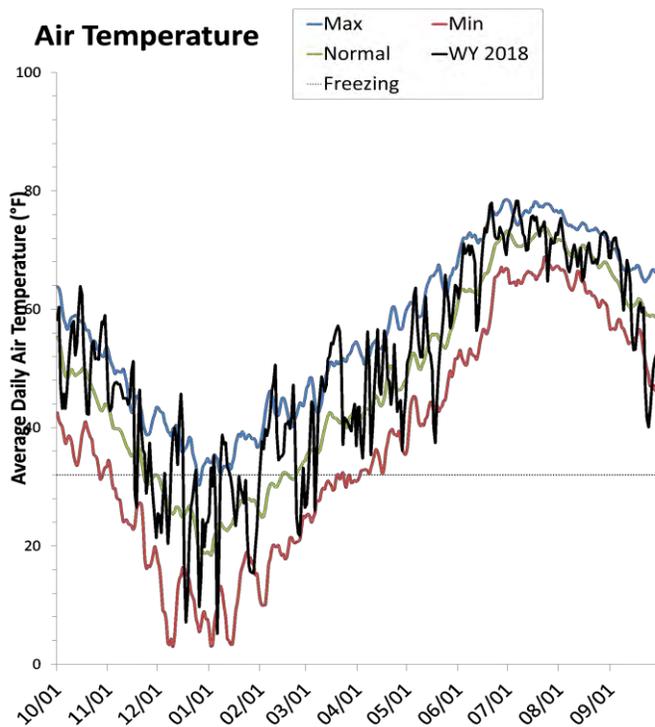
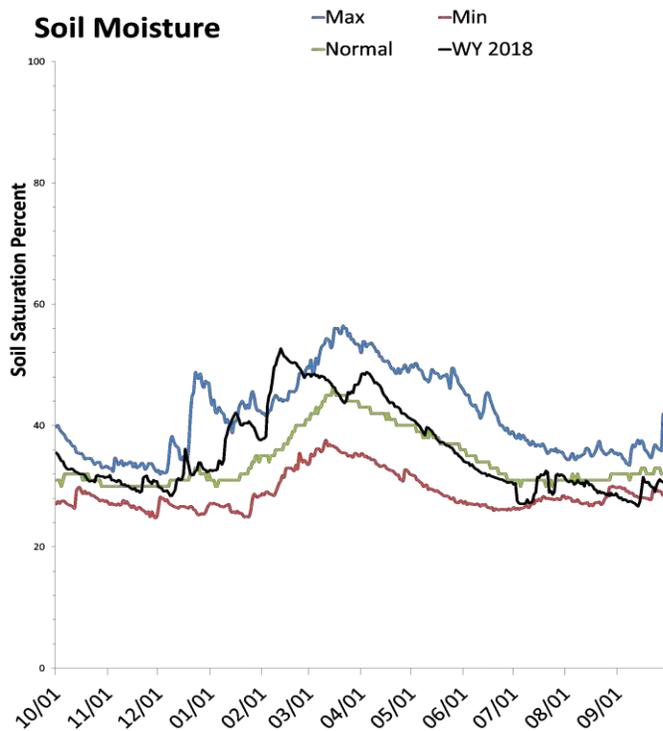
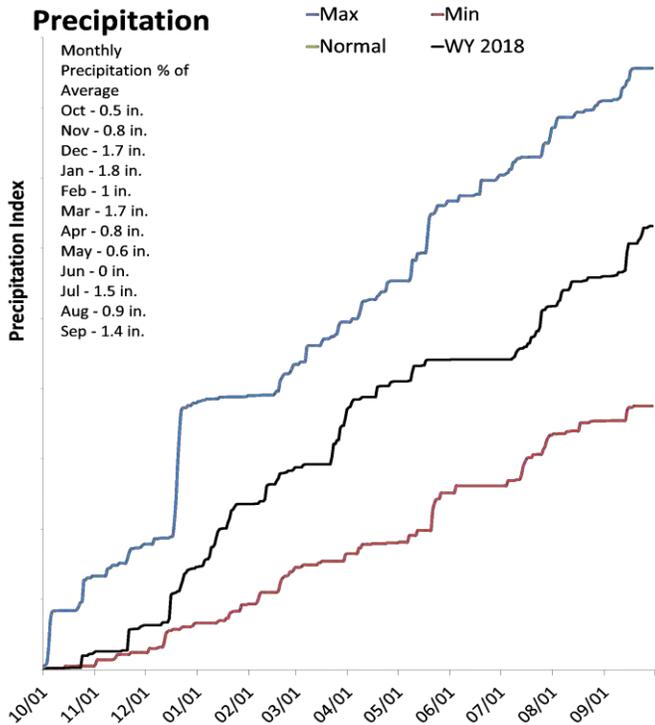
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

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South Central

October 1, 2017

The average precipitation in September at SCAN sites within the basin was 1.4 inches, which brings the seasonal accumulation (Oct-Sep) to 12.6 inches. Soil moisture is at 30% compared to 35% last year.



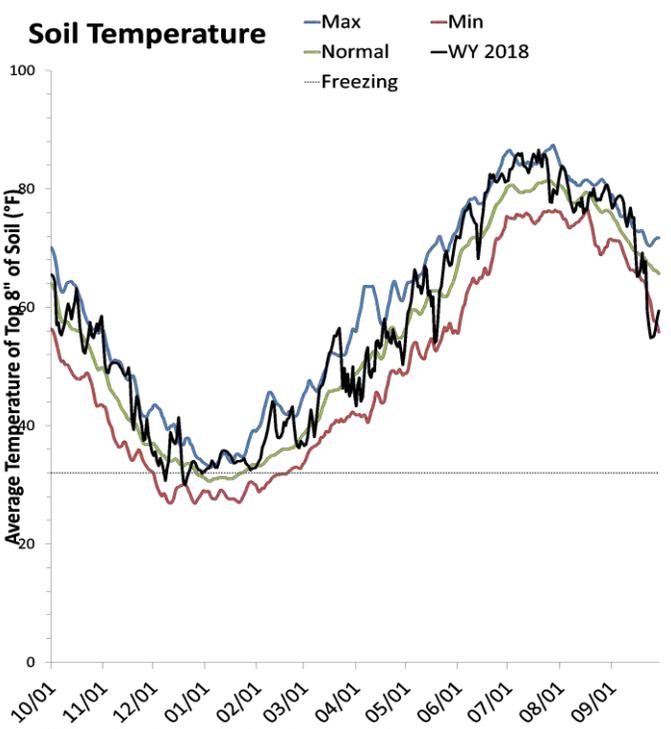
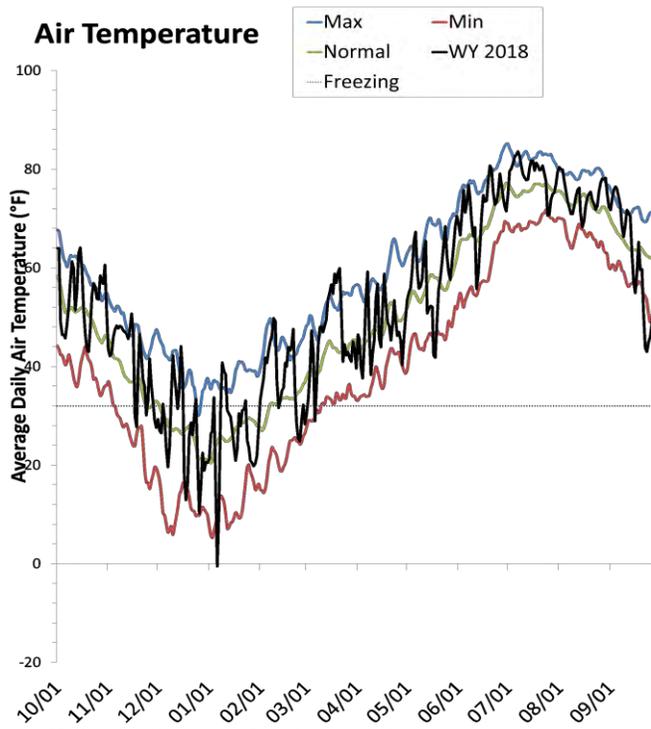
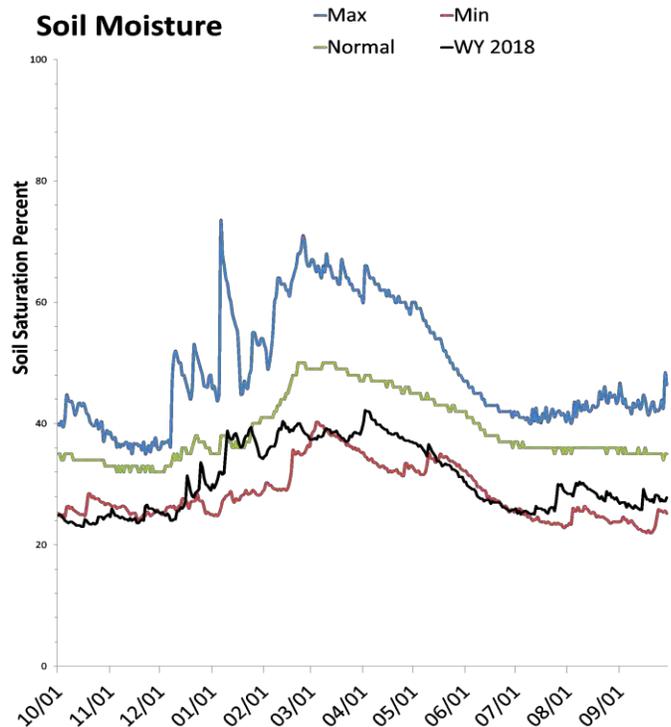
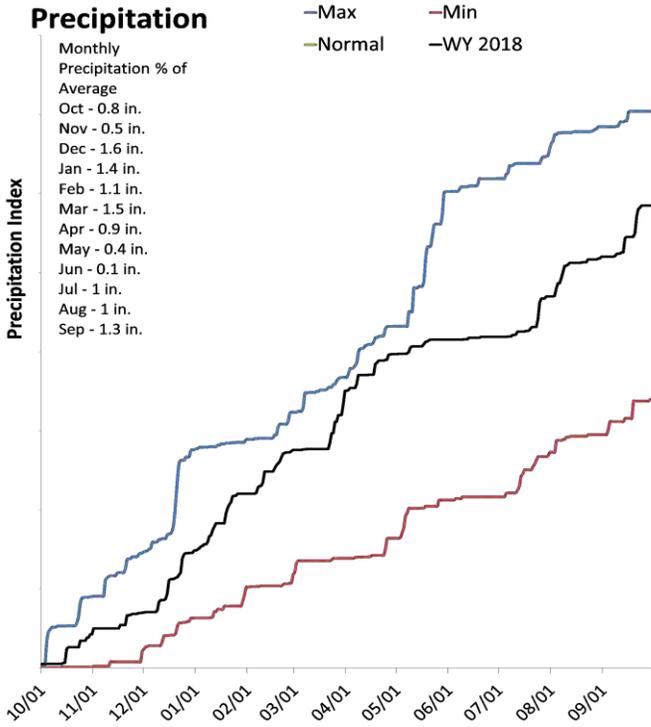
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

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Western and Dixie

October 1, 2017

The average precipitation in September at SCAN sites within the basin was 1.4 inches, which brings the seasonal accumulation (Oct-Sep) to 11.8 inches. Soil moisture is at 28% compared to 25% last year.



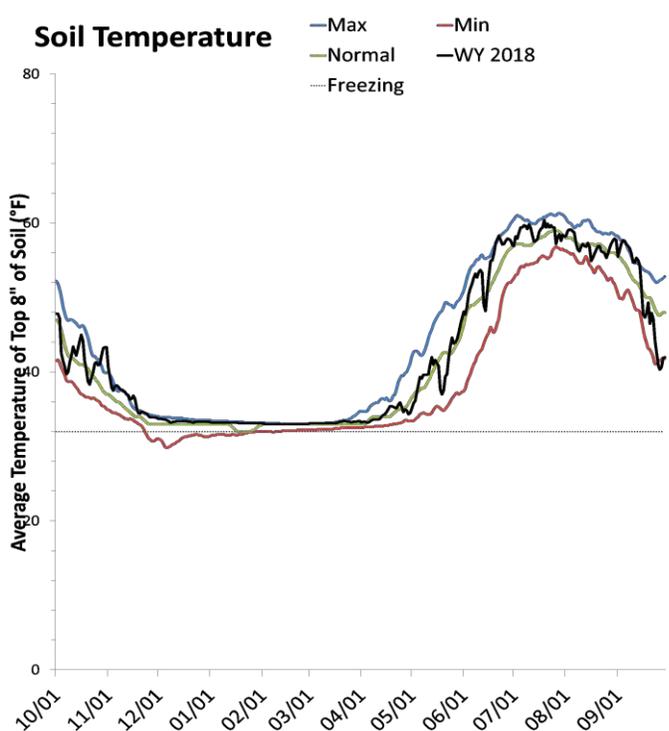
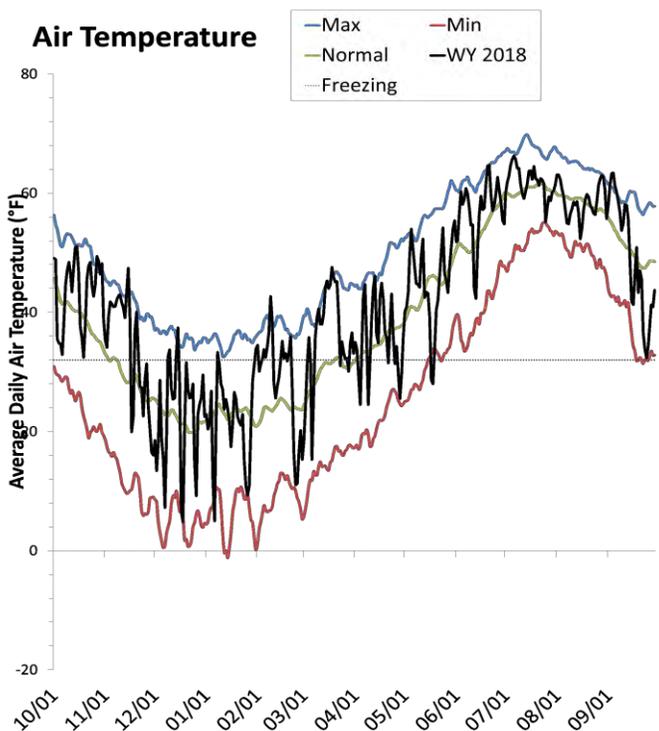
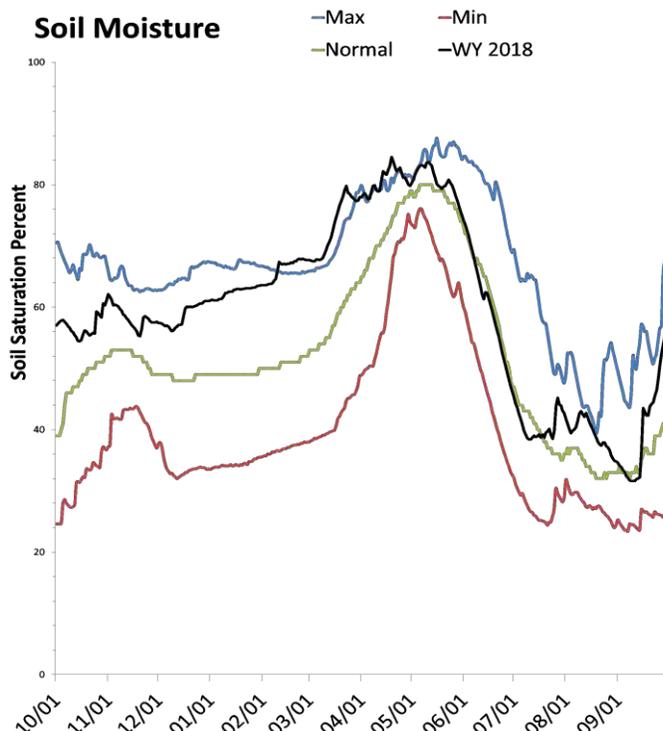
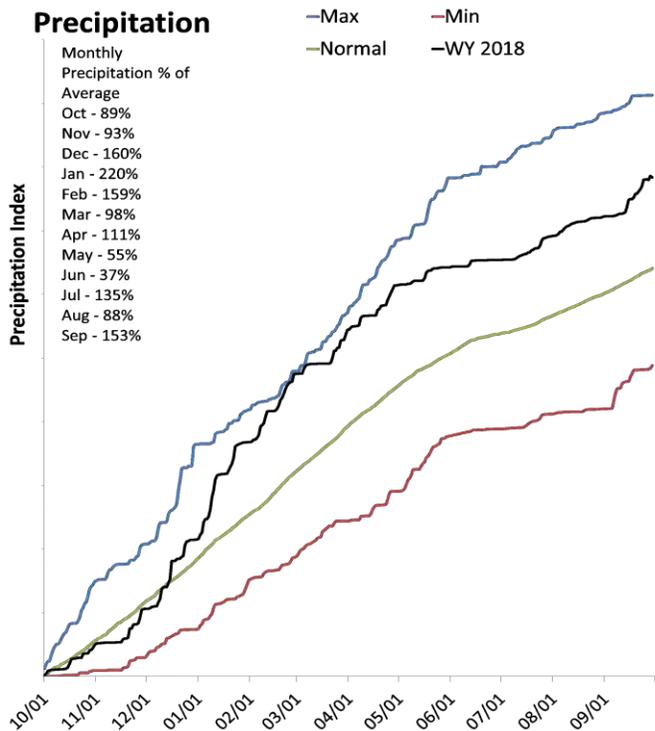
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Statewide SNOTEL

October 1, 2017

Precipitation at SNOTEL sites during September was much above average at 160%, which brings the seasonal accumulation (Oct-Sep) to 122% of average. Soil moisture is at 55% compared to 54% last year. Reservoir storage is at 70% of capacity, compared to 45% last year.



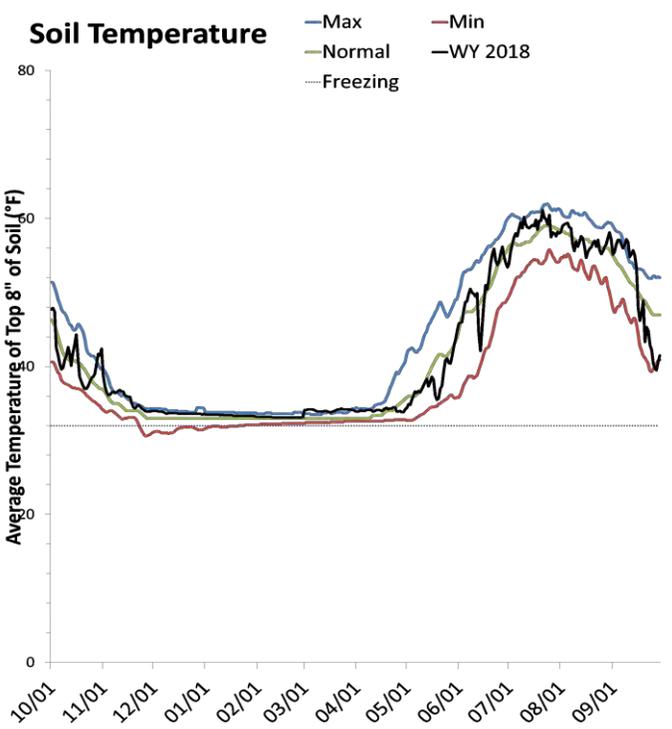
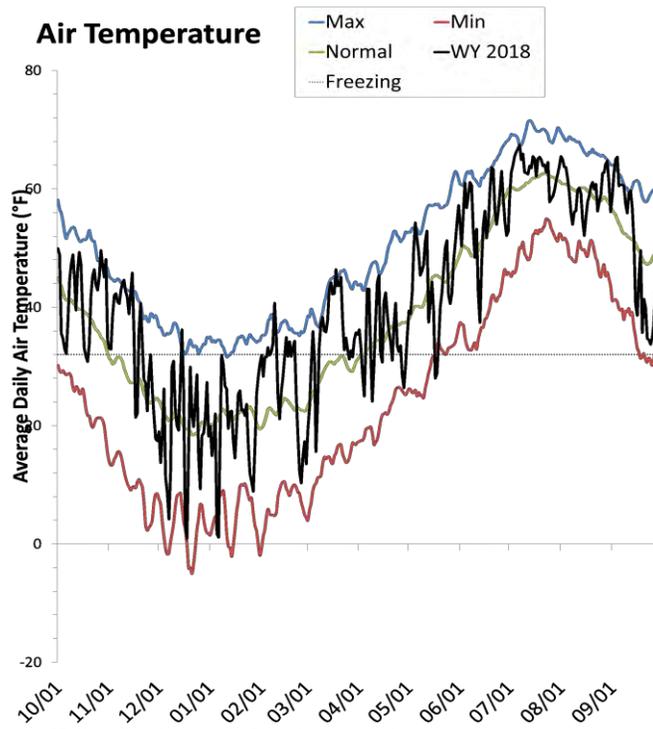
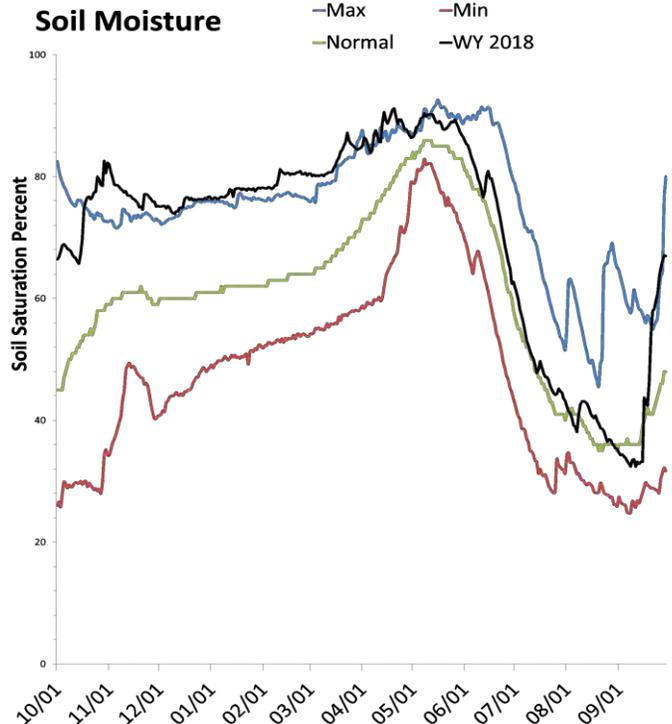
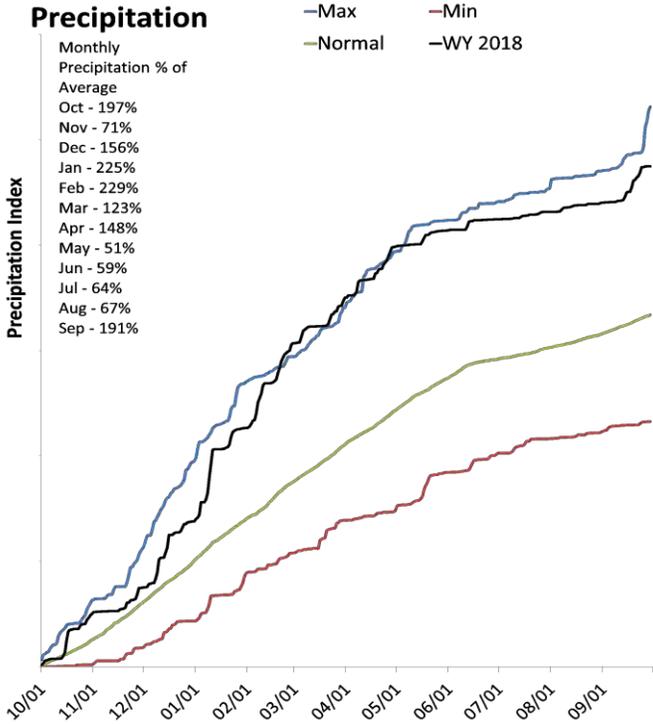
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

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Bear River Basin

October 1, 2017

Precipitation in September was much above average at 212%, which brings the seasonal accumulation (Oct-Sep) to 143% of average. Soil moisture is at 67% compared to 61% last year. Reservoir storage is at 84% of capacity, compared to 34% last year. The water availability index for the Bear River is 79%, 74% for Woodruff Narrows and 85% for the Little Bear.



*Min, Max, and Normal lines created using a 5 day moving average of historical data.

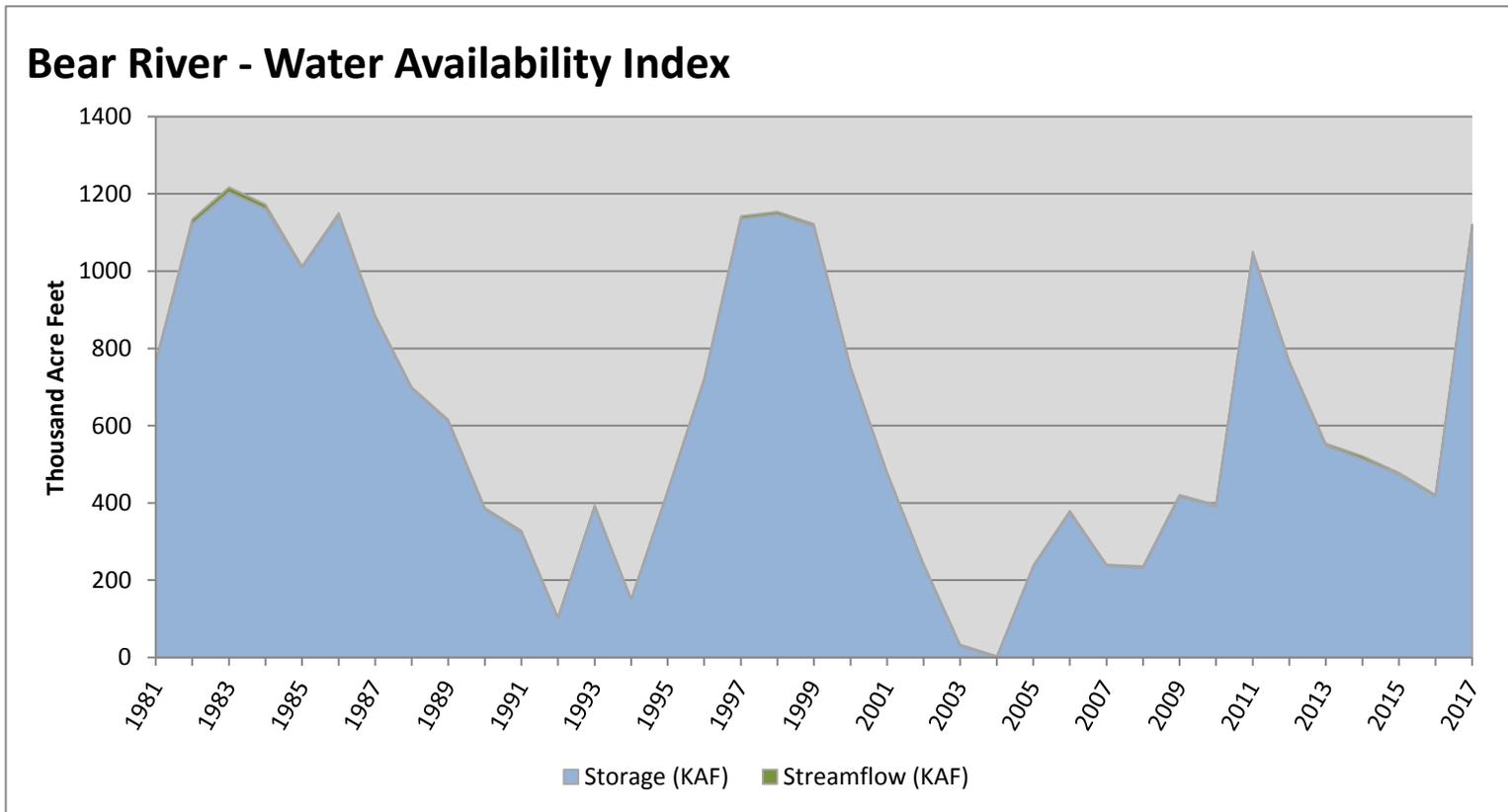
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October 1, 2017

Water Availability Index

Basin or Region	Sep EOM [^] Storage	September Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Bear River	1114.46	6.91	1121.37	79	2.41	85, 11, 99, 82

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

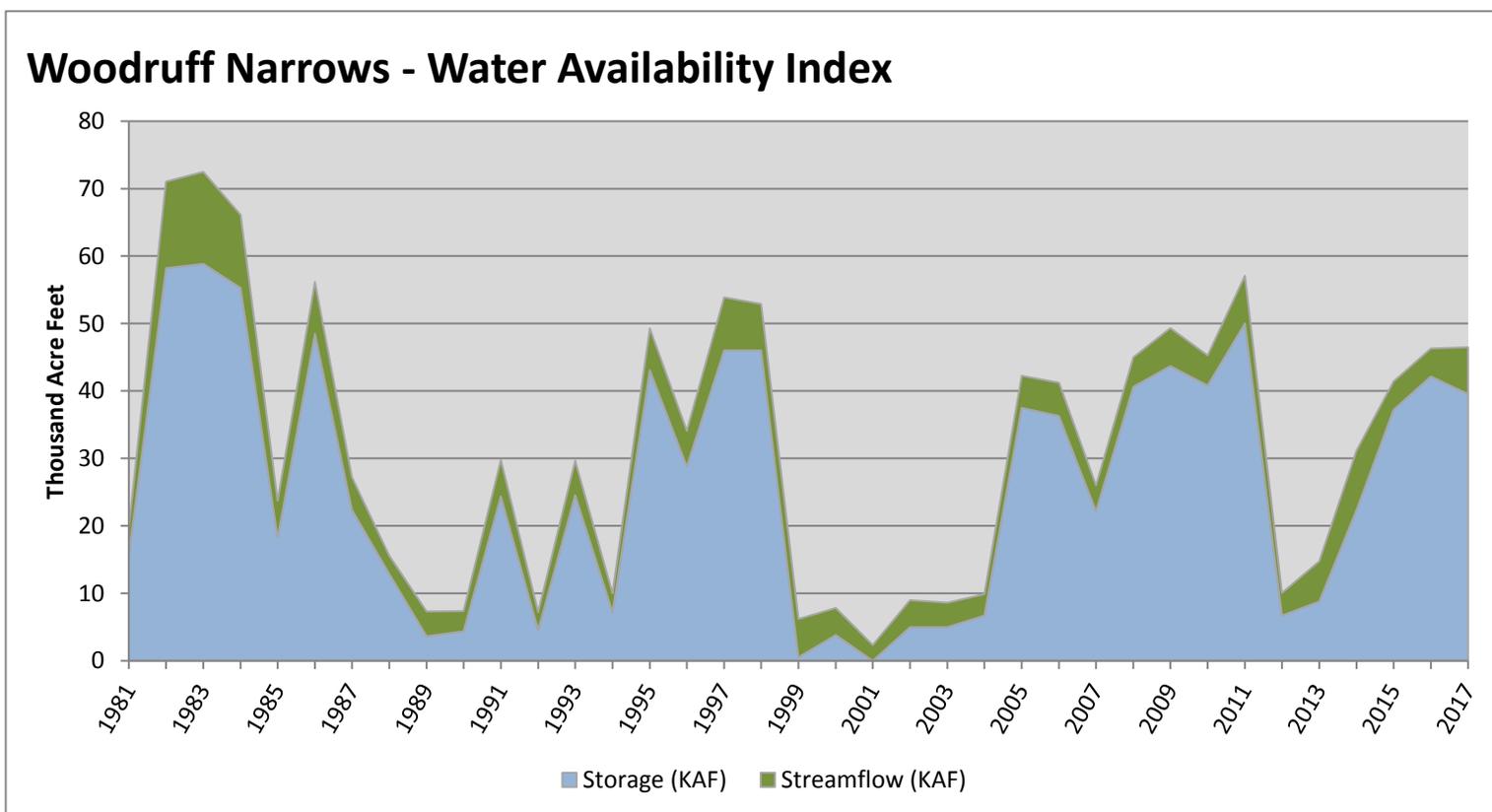


October 1, 2017

Water Availability Index

Basin or Region	Sep EOM [^] Storage	September Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Woodruff Narrows	39.56	6.91	46.47	74	1.97	10, 16, 95, 09

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

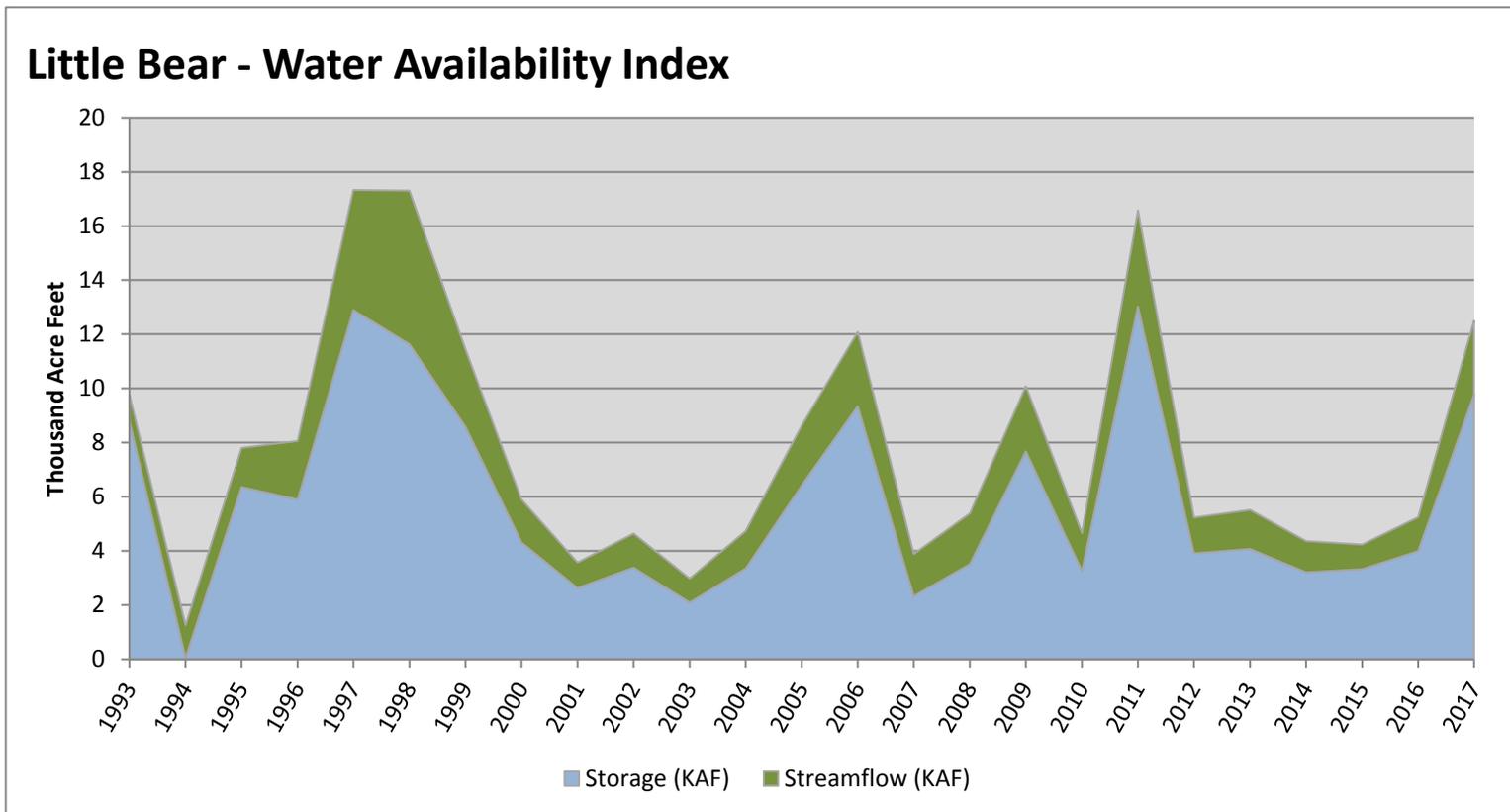


October 1, 2017

Water Availability Index

Basin or Region	Sep EOM [^] Storage	September Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Little Bear	9.77	2.73	12.50	85	2.88	99, 06, 11, 98

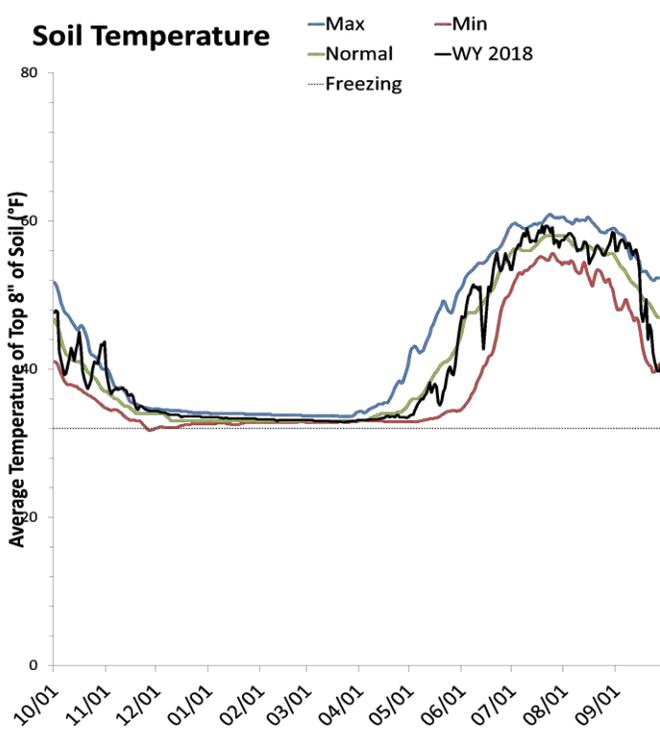
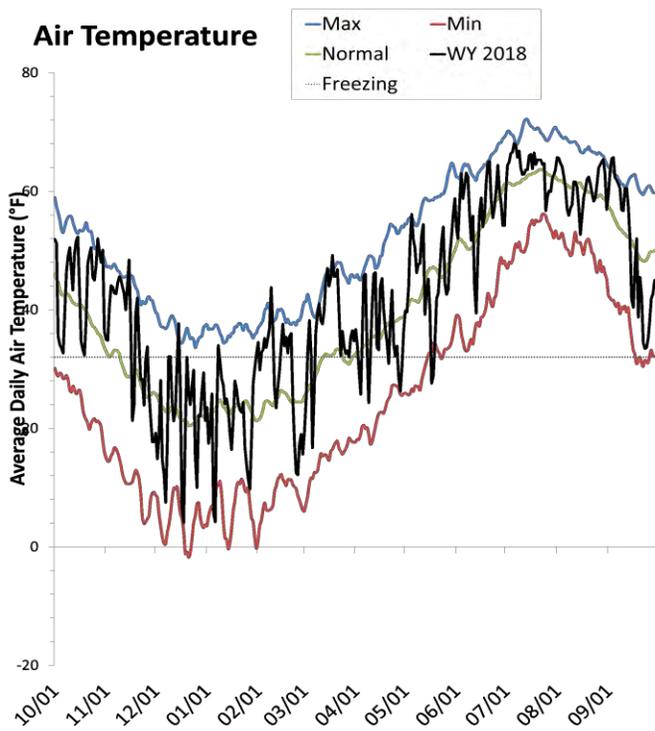
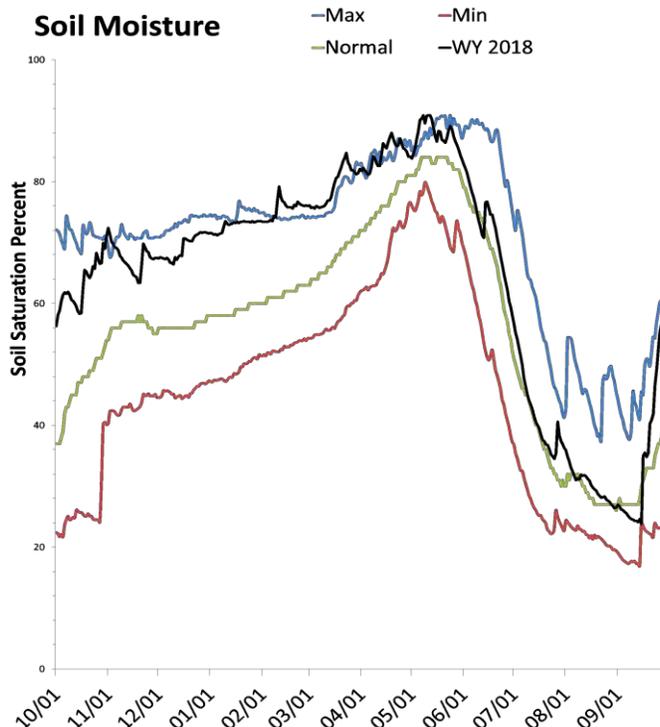
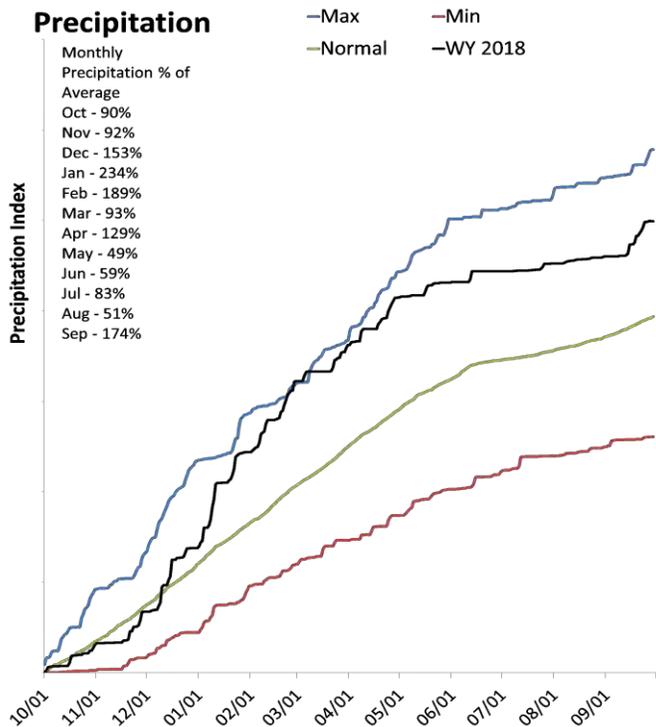
[^]EOM, end of month; [#]WAI, Water Availability Index; [^]KAF, thousand acre-feet.



Weber & Ogden River Basins

October 1, 2017

Precipitation in September was much above average at 183%, which brings the seasonal accumulation (Oct-Sep) to 127% of average. Soil moisture is at 58% compared to 52% last year. Reservoir storage is at 71% of capacity, compared to 50% last year. The water availability index for the Ogden River is 84% and 75% for the Weber River.



*Min, Max, and Normal lines created using a 5 day moving average of historical data.

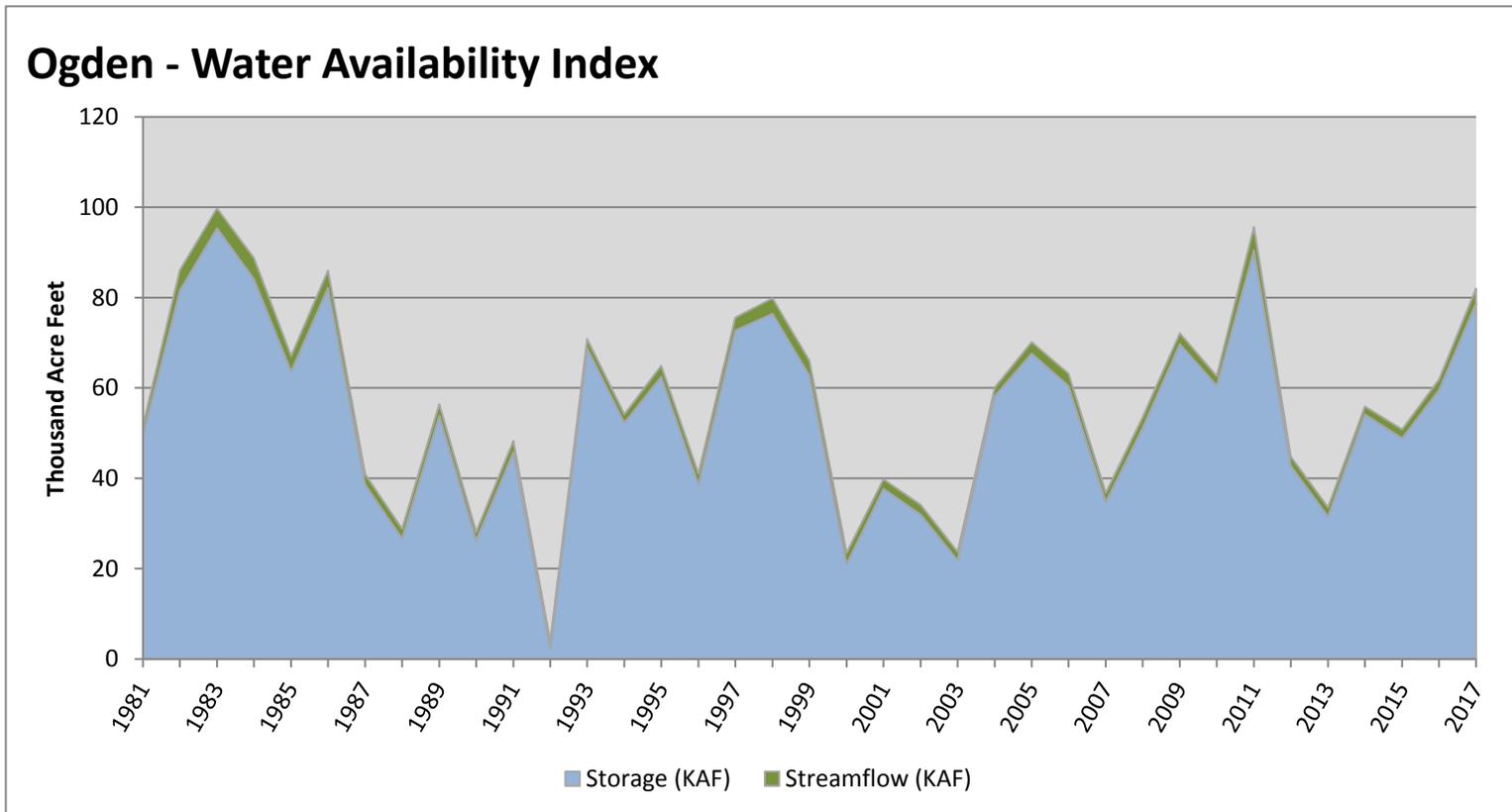
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

October 1, 2017

Water Availability Index

Basin or Region	Sep EOM [^] Storage	September Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Ogden	78.72	3.27	81.99	84	2.85	97, 98, 86, 82

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

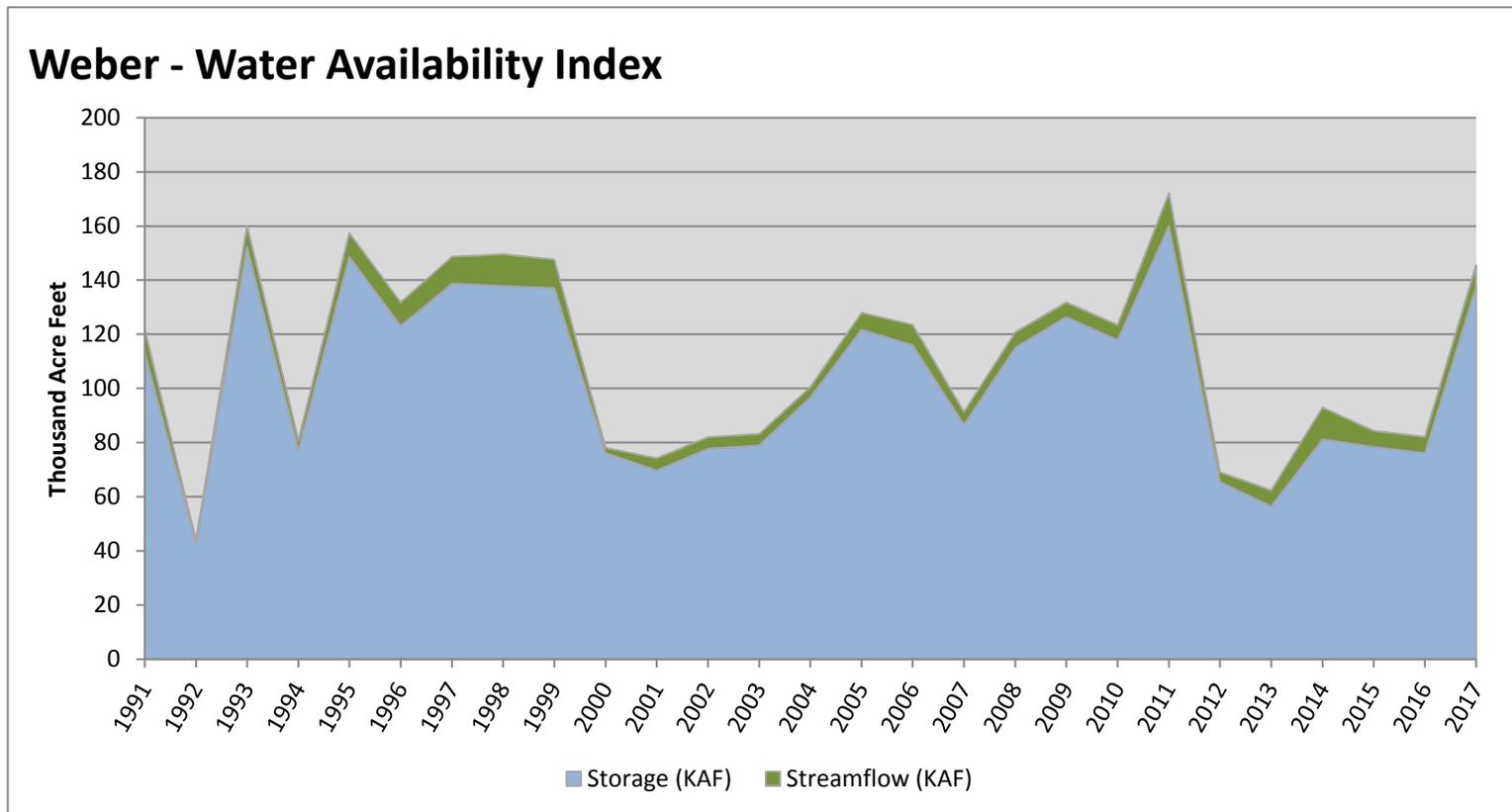


October 1, 2017

Water Availability Index

Basin or Region	Sep EOM [^] Storage	September Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Weber	137.47	8.07	145.54	75	2.08	96, 09, 99, 97

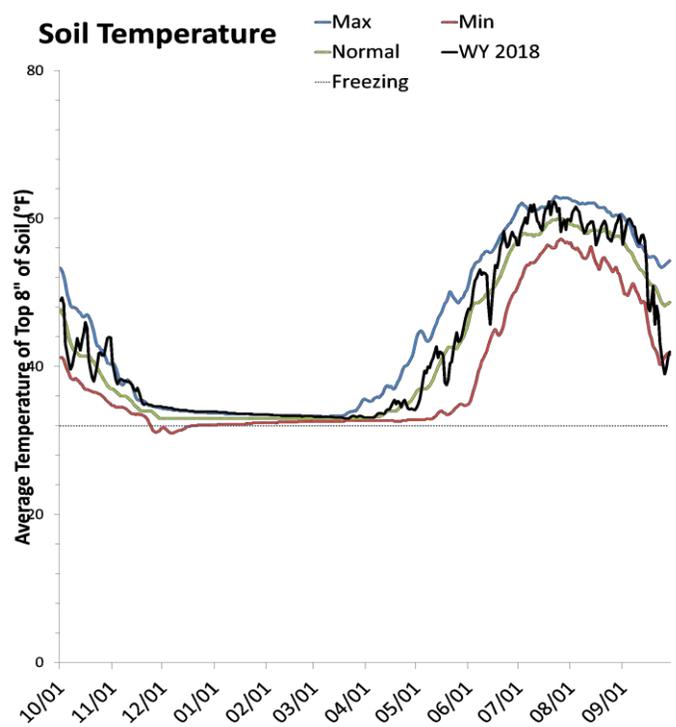
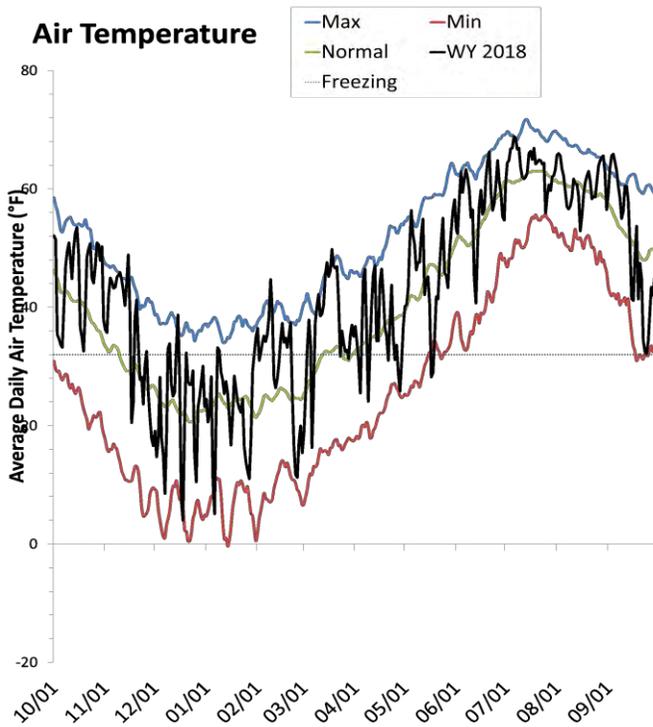
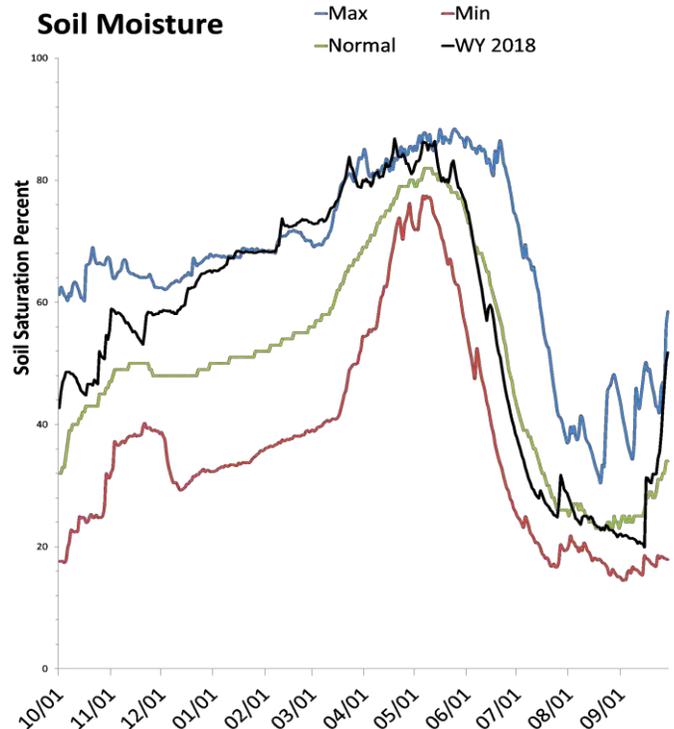
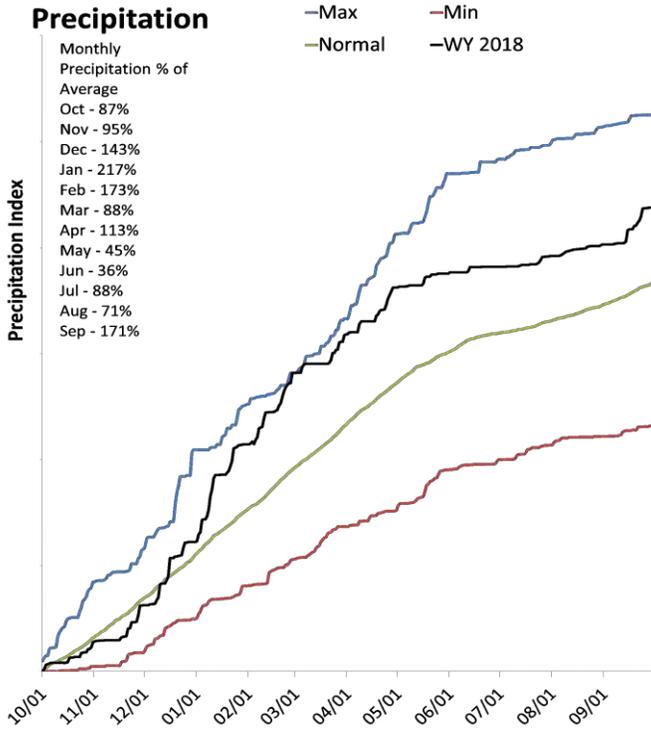
[^]EOM, end of month; [#]WAI, Water Availability Index; [^]KAF, thousand acre-feet.



Provo & Jordan River Basins

October 1, 2017

Precipitation in September was much above average at 167%, which brings the seasonal accumulation (Oct-Sep) to 119% of average. Soil moisture is at 50% compared to 42% last year. Reservoir storage is at 73% of capacity, compared to 55% last year. The water availability index for the Provo River is 78%.



*Min, Max, and Normal lines created using a 5 day moving average of historical data.

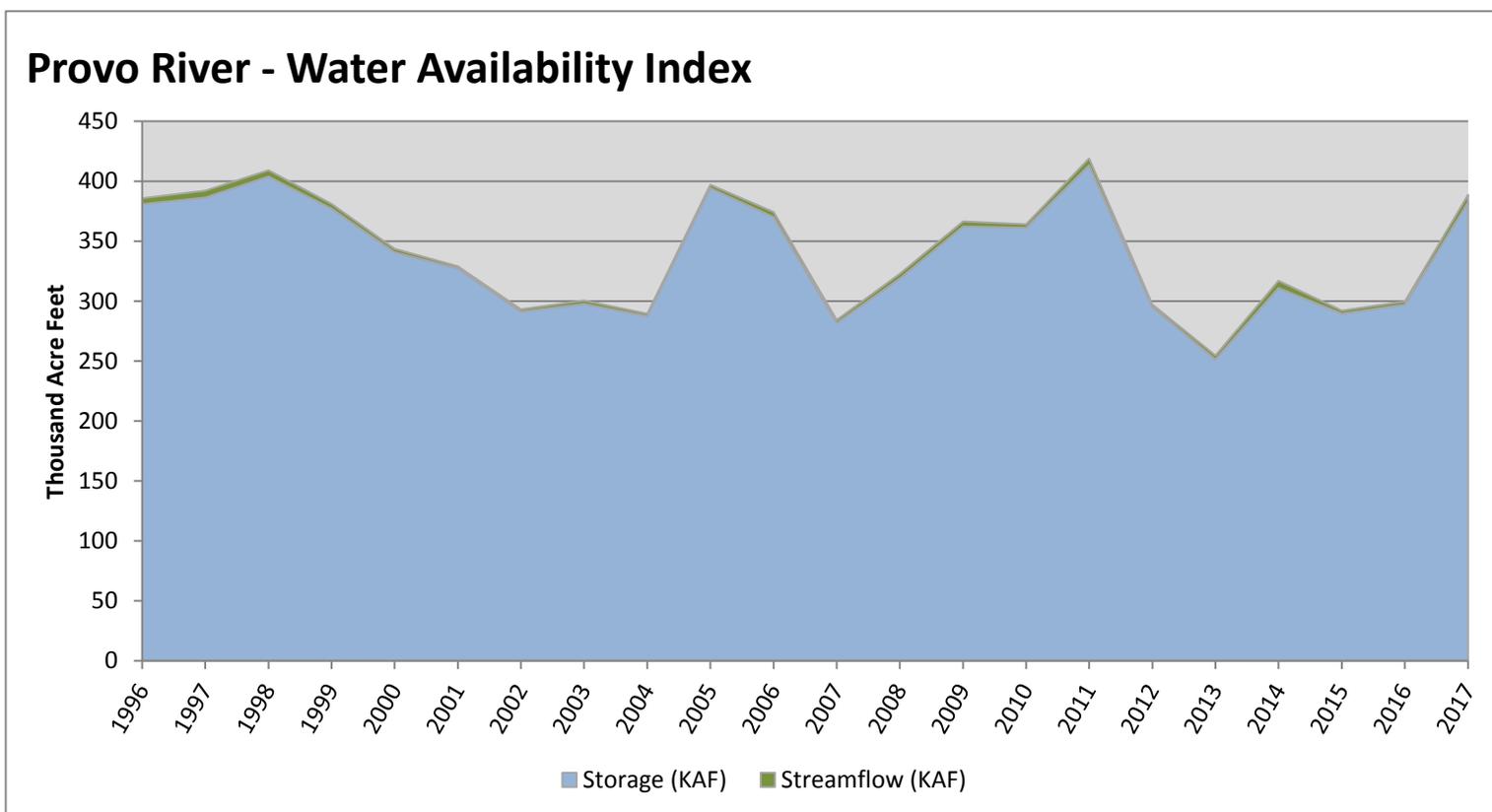
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

October 1, 2017

Water Availability Index

Basin or Region	Sep EOM [^] Storage	September Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Provo River	382.37	6.38	388.75	78	2.36	99, 96, 97, 05

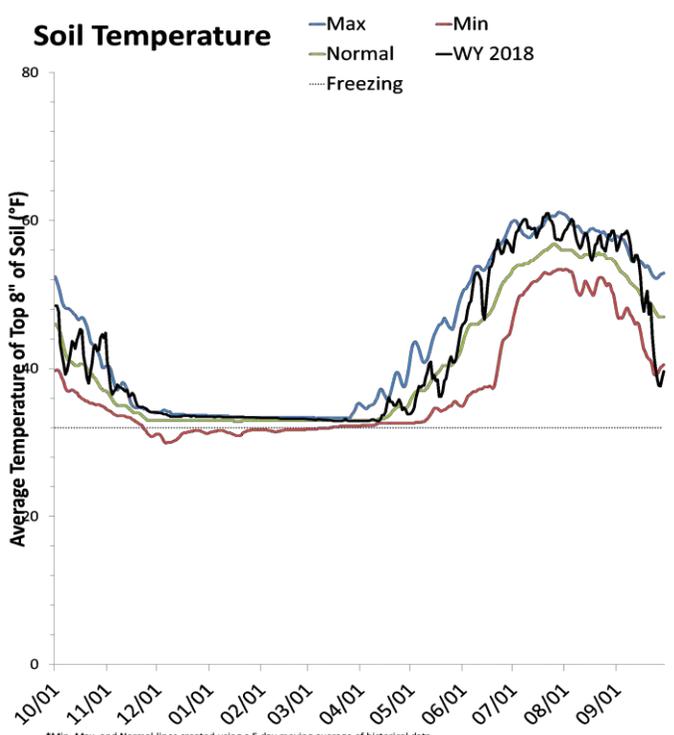
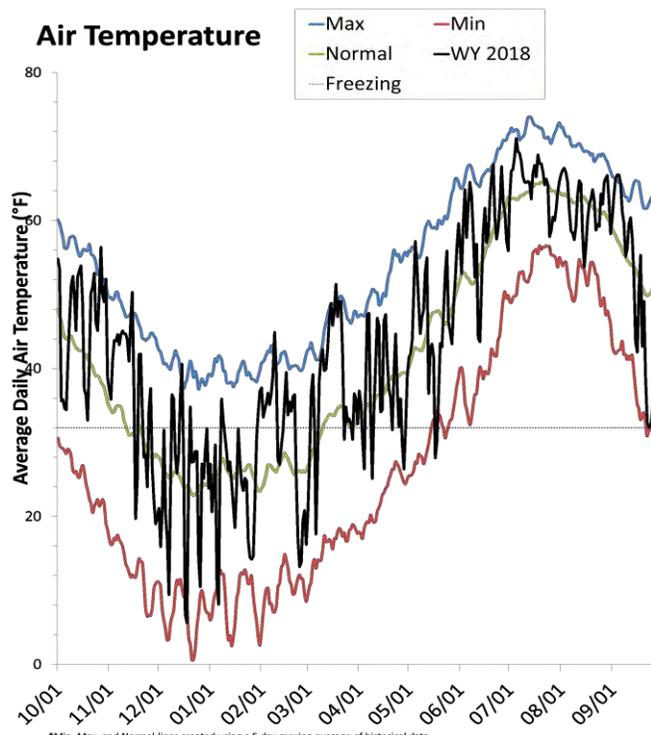
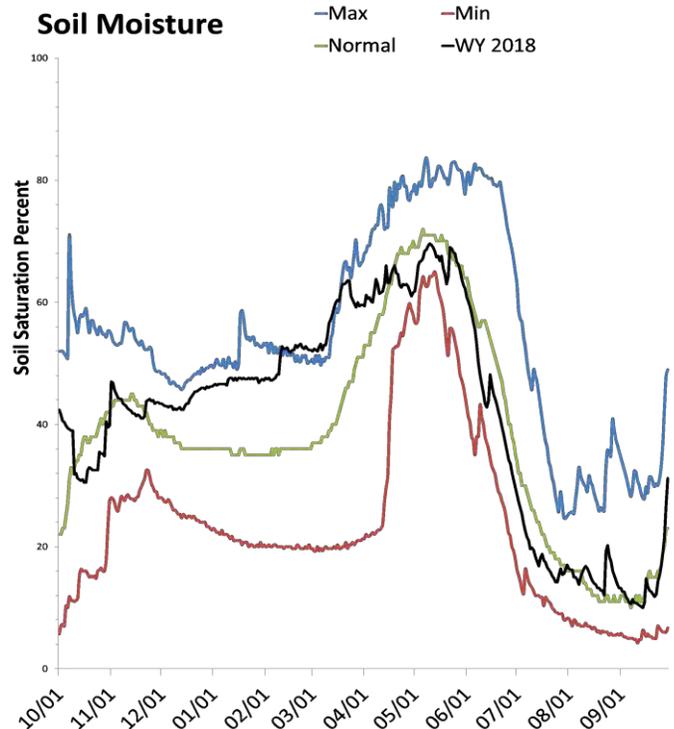
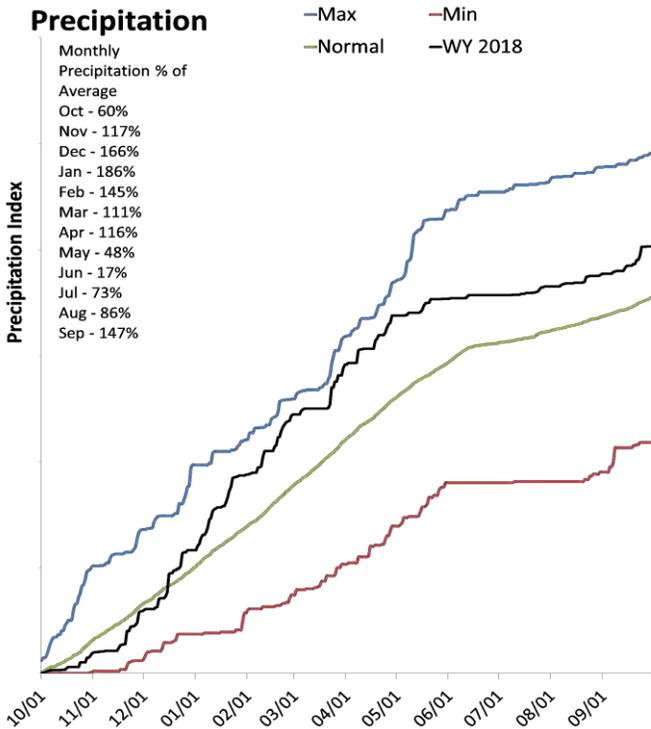
[^]EOM, end of month; [#]WAI, Water Availability Index; [^]KAF, thousand acre-feet.



Tooele Valley & West Desert Basins

October 1, 2017

Precipitation in September was much above average at 166%, which brings the seasonal accumulation (Oct-Sep) to 114% of average. Soil moisture is at 36% compared to 30% last year.



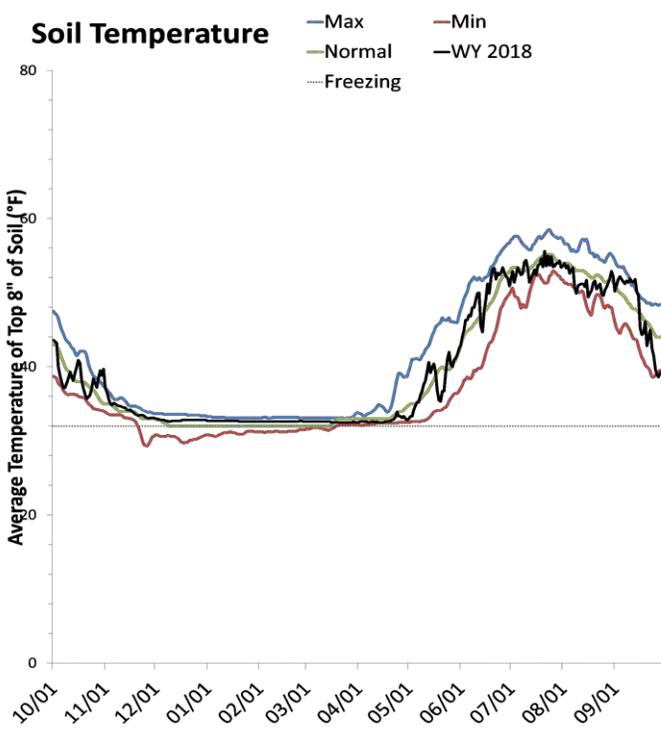
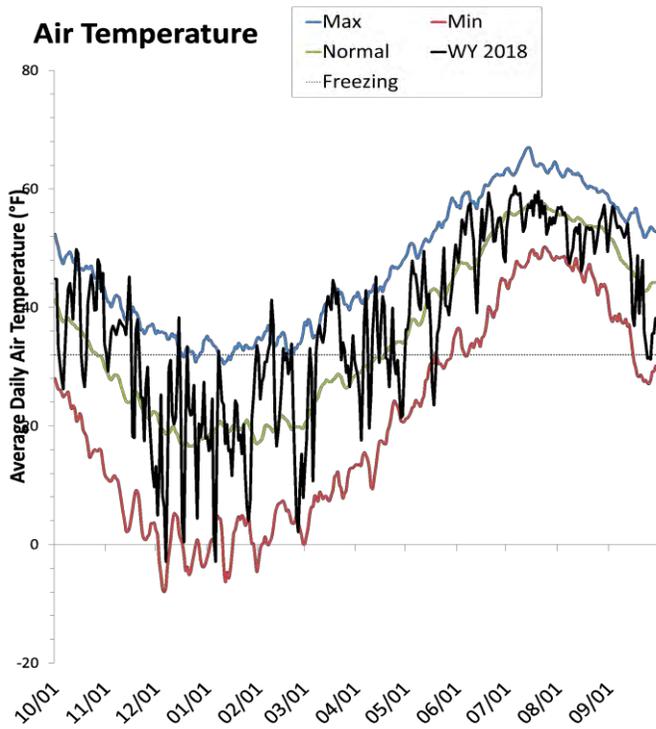
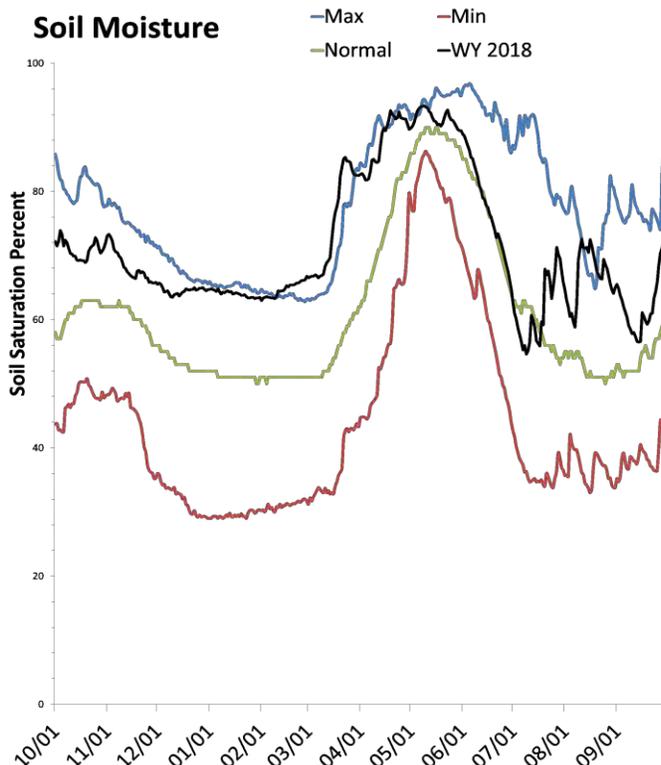
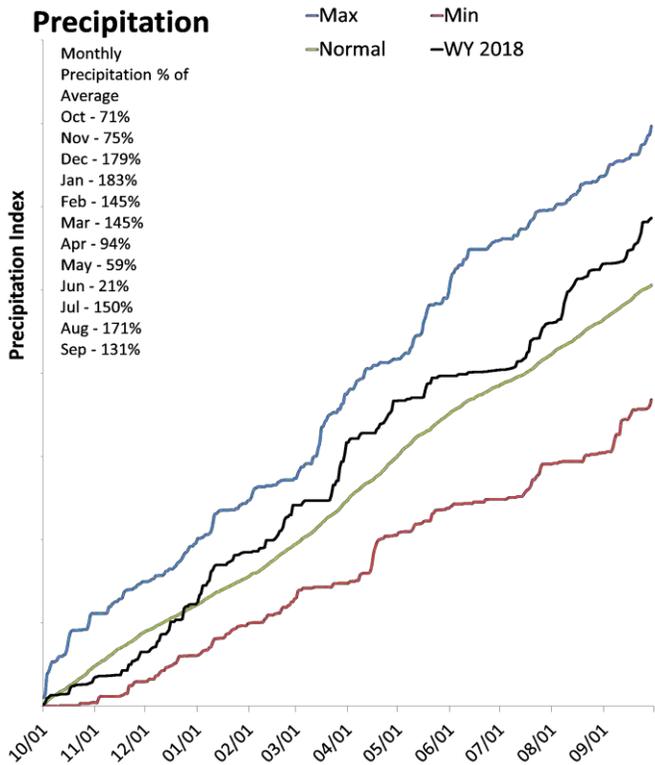
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

*Min, Max, and Normal lines created using a 5 day moving average of historical data.

Northeastern Uinta Basin

October 1, 2017

Precipitation in September was much above average at 135%, which brings the seasonal accumulation (Oct-Sep) to 116% of average. Soil moisture is at 73% compared to 72% last year. Reservoir storage is at 92% of capacity, compared to 85% last year. The water availability index for Blacks Fork is 49% and 53% for Smiths Creek.



*Min, Max, and Normal lines created using a 5 day moving average of historical data.

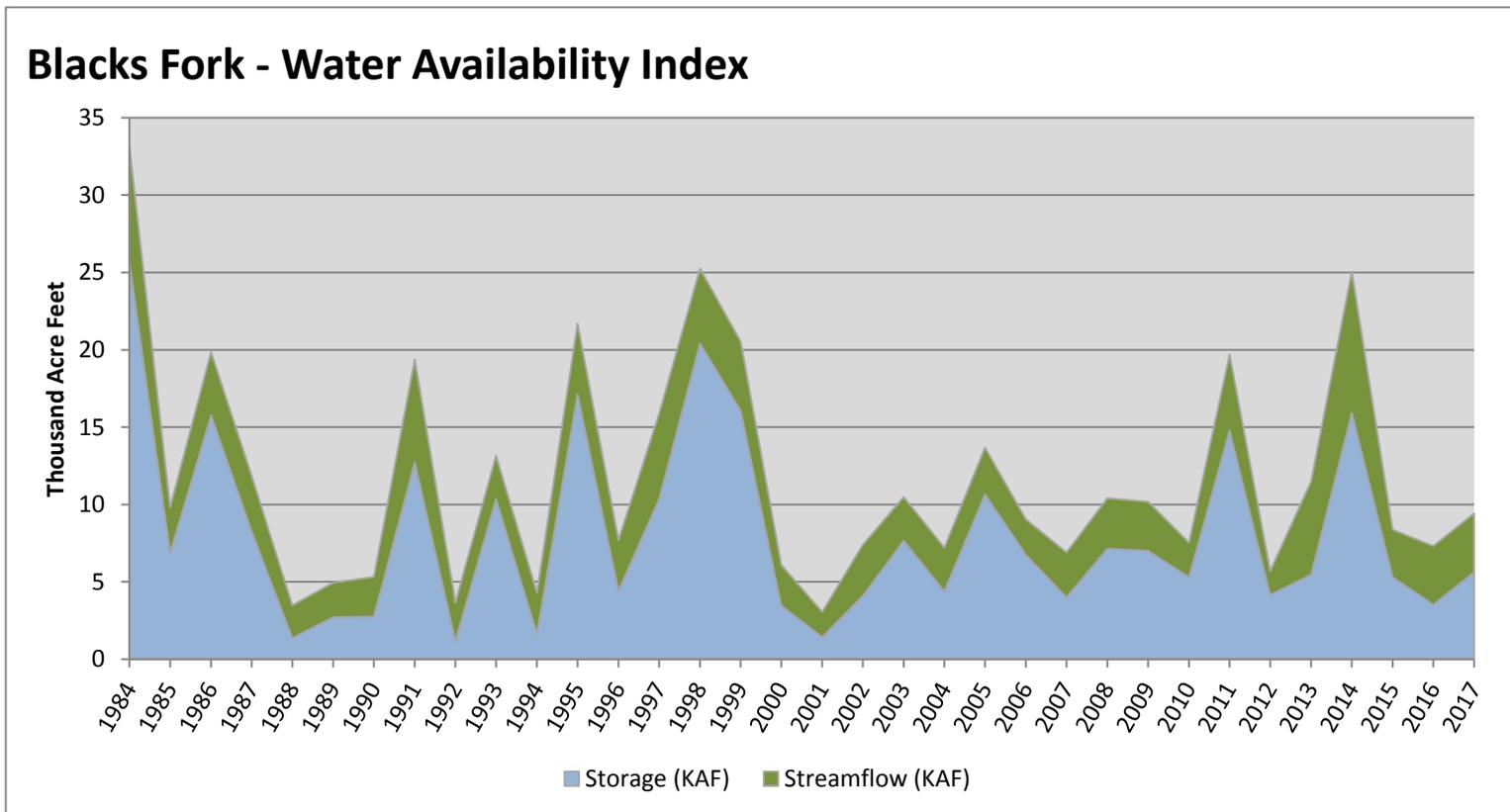
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

October 1, 2017

Water Availability Index

Basin or Region	Sep EOM [^] Storage	September Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Blacks Fork	5.61	3.82	9.43	49	-0.12	15, 06, 85, 09

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

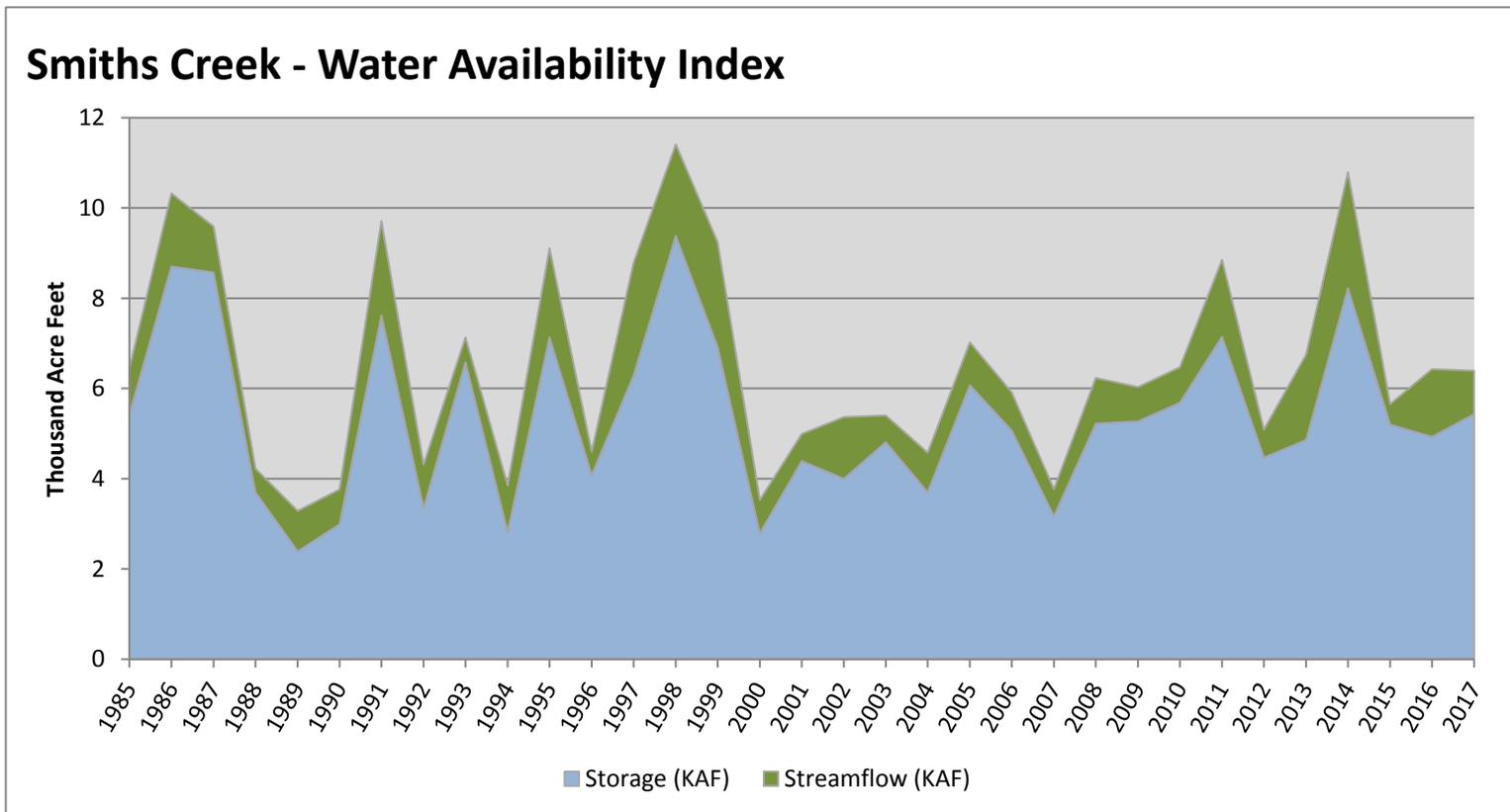


October 1, 2017

Water Availability Index

Basin or Region	Sep EOM [^] Storage	September Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Smiths Creek	5.43	0.96	6.39	53	0.25	09, 08, 16, 85

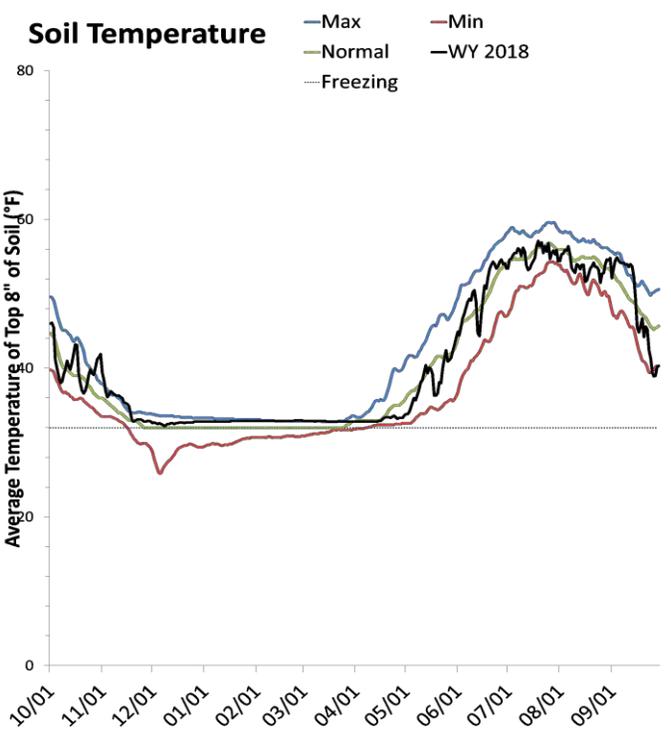
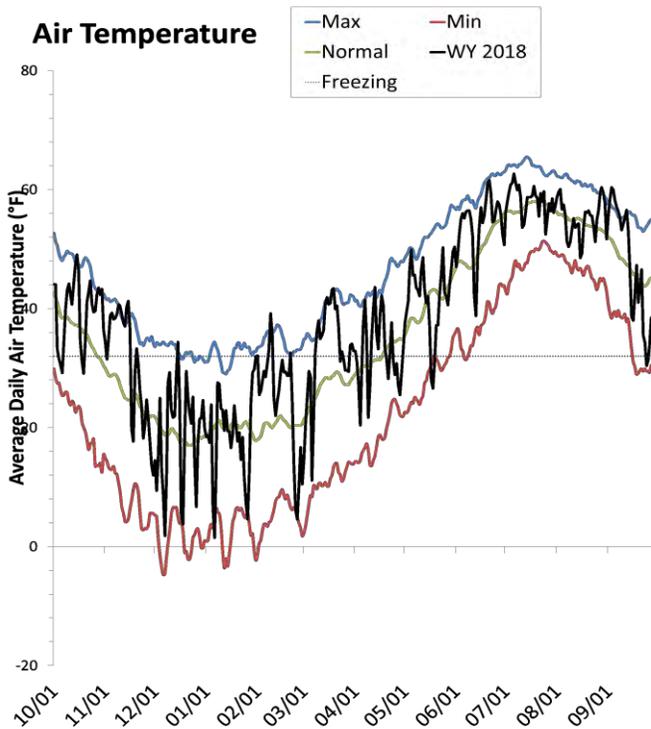
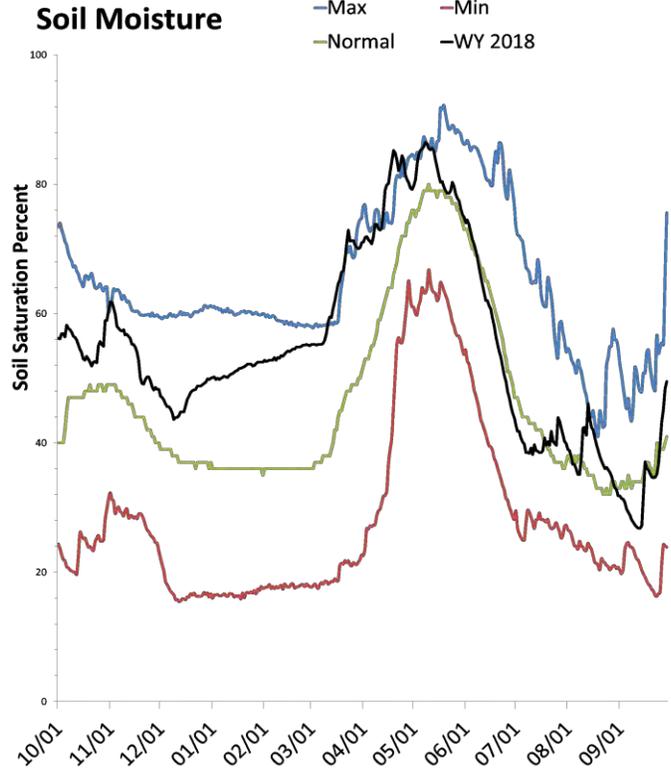
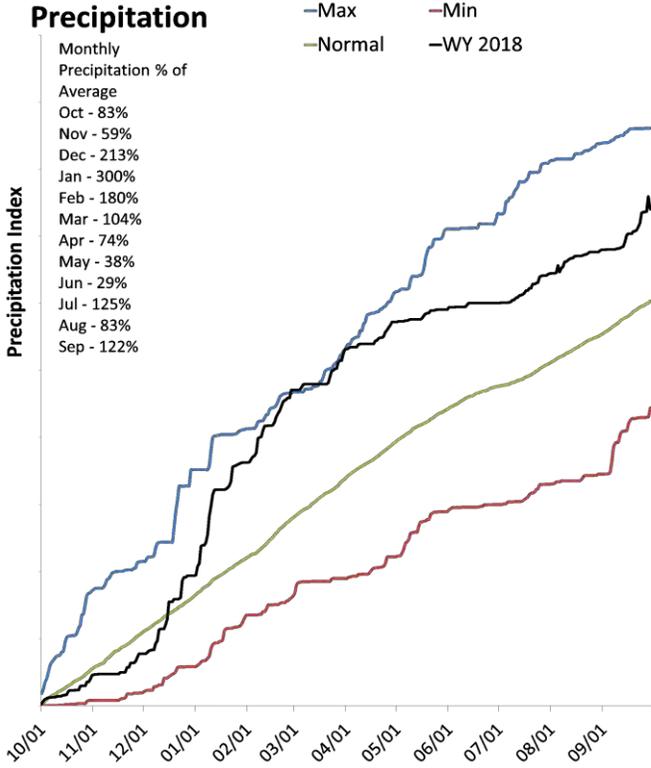
[^]EOM, end of month; [#]WAI, Water Availability Index; [^]KAF, thousand acre-feet.



Duchesne River Basin

October 1, 2017

Precipitation in September was above average at 127%, which brings the seasonal accumulation (Oct-Sep) to 123% of average. Soil moisture is at 50% compared to 57% last year. Reservoir storage is at 80% of capacity, compared to 68% last year. The water availability index for the Western Uintas is 77% and 29% for the Eastern Uintas.



*Min, Max, and Normal lines created using a 5 day moving average of historical data.

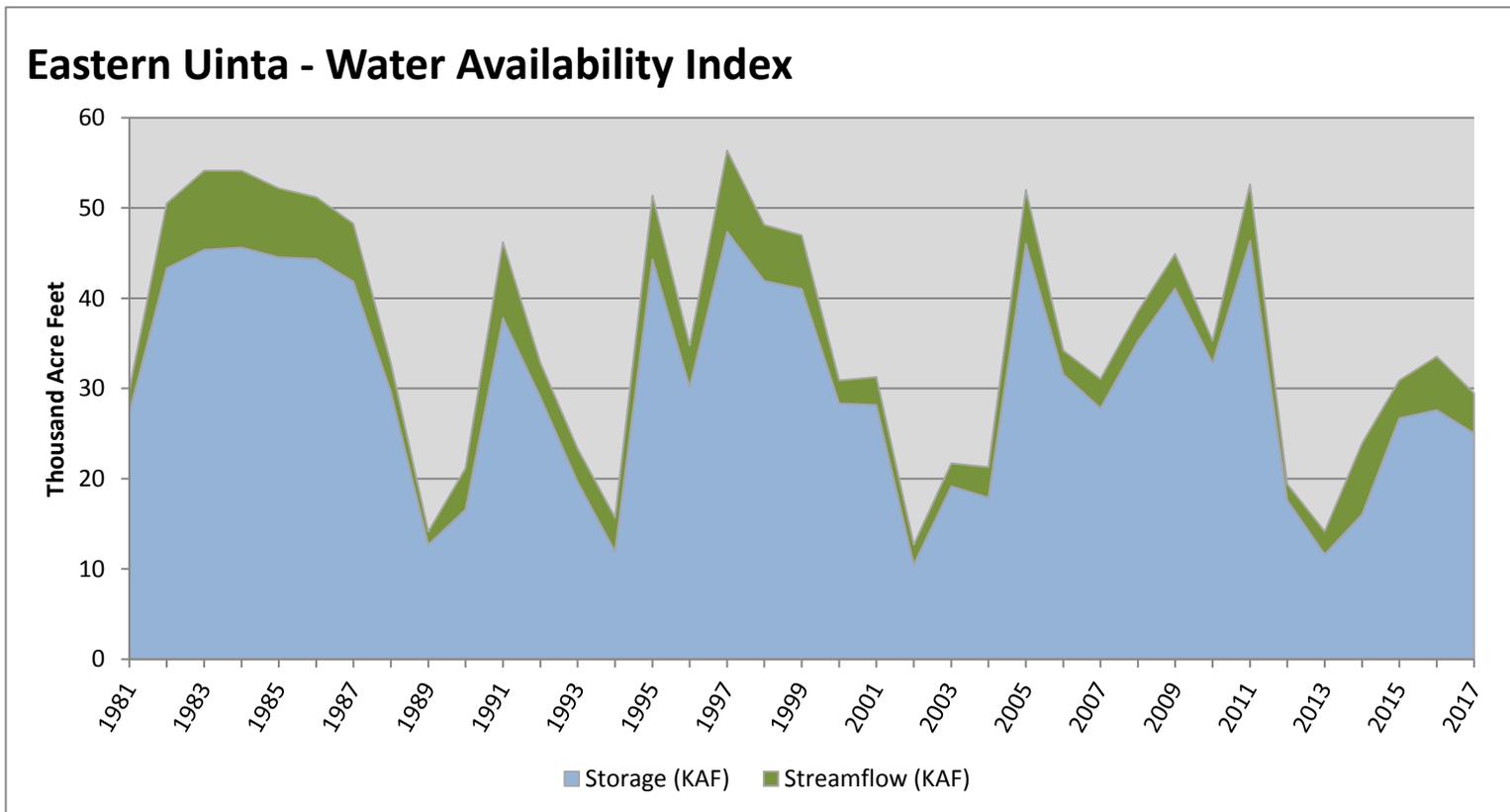
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

October 1, 2017

Water Availability Index

Basin or Region	Sep EOM [^] Storage	September Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Eastern Uinta	25.02	4.44	29.46	29	-1.75	93, 14, 81, 00

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

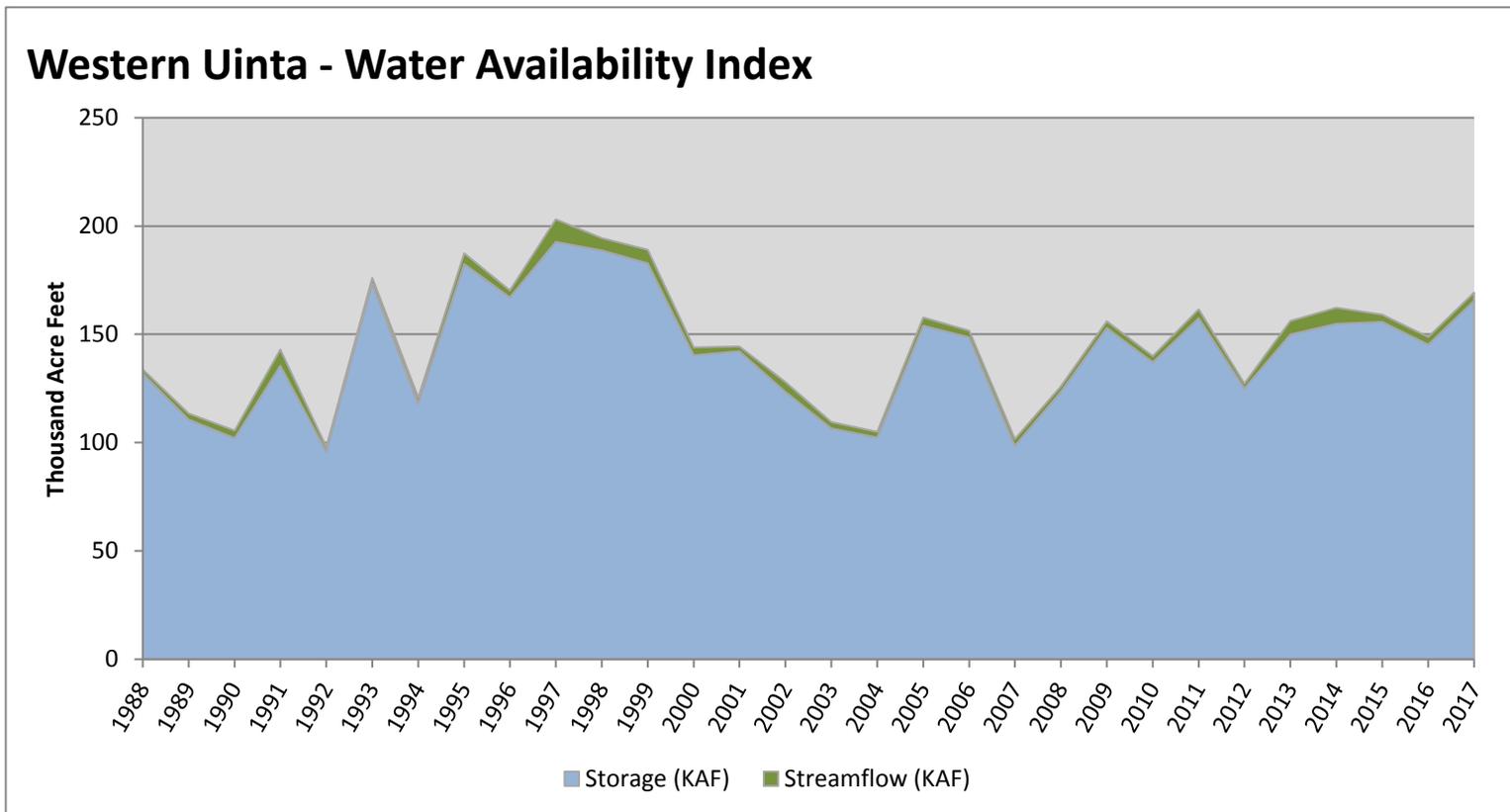


October 1, 2017

Water Availability Index

Basin or Region	Sep EOM [^] Storage	September Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Western Uinta	165.42	3.78	169.20	77	2.28	11, 14, 96, 93

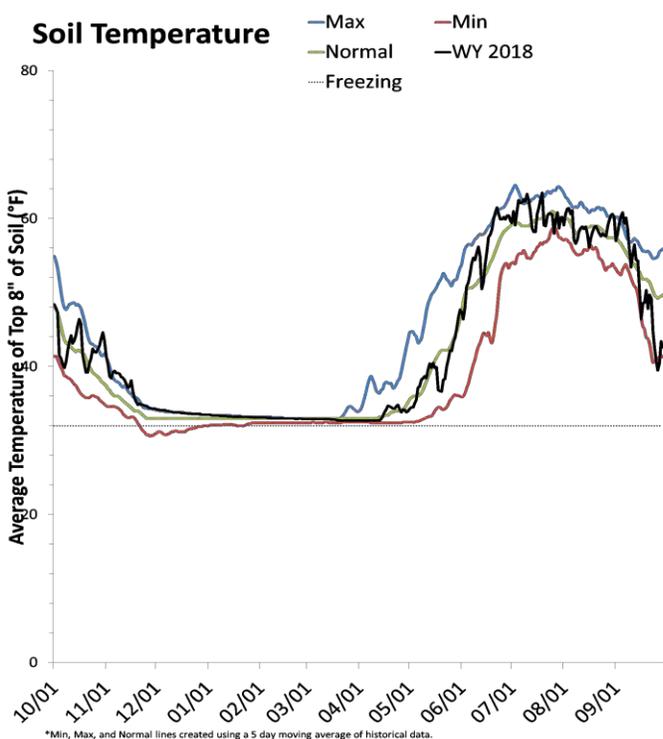
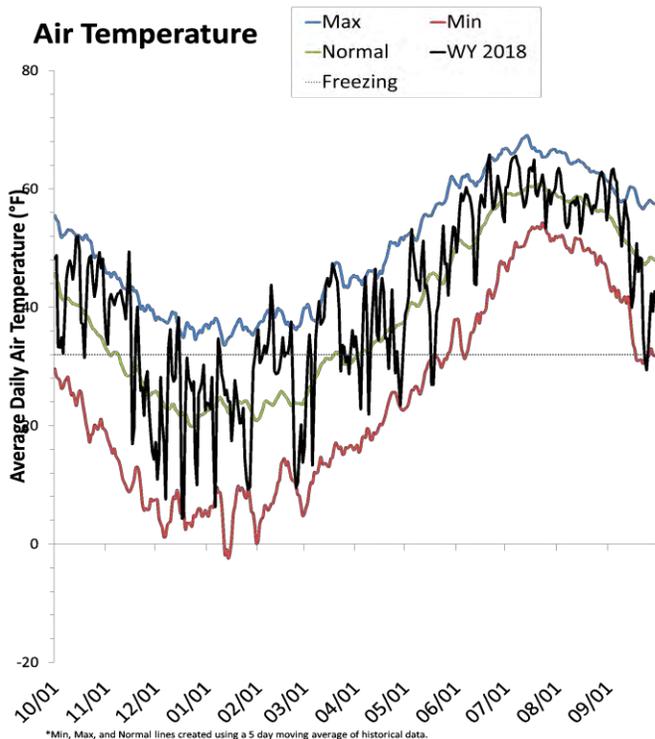
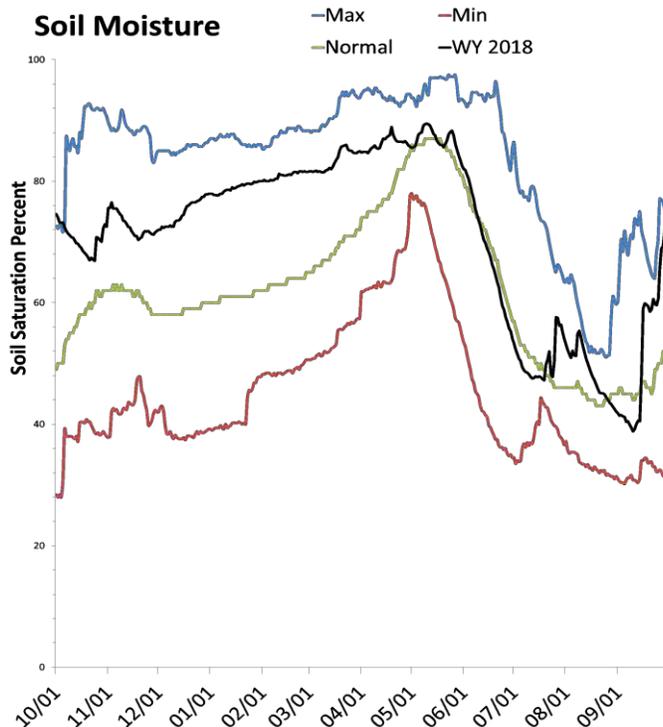
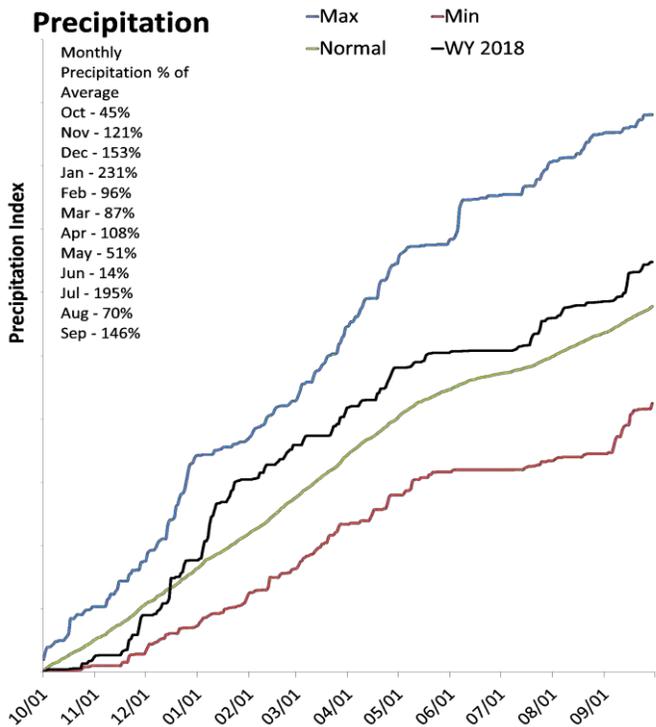
[^]EOM, end of month; [#]WAI, Water Availability Index; [^]KAF, thousand acre-feet.



San Pitch River Basin

October 1, 2017

Precipitation in September was much above average at 164%, which brings the seasonal accumulation (Oct-Sep) to 113% of average. Soil Moisture is at 71% compared to 75% last year. Reservoir storage is at 0% of capacity, compared to 0% last year. The water availability index for the San Pitch is 29%.



*Min, Max, and Normal lines created using a 5 day moving average of historical data.

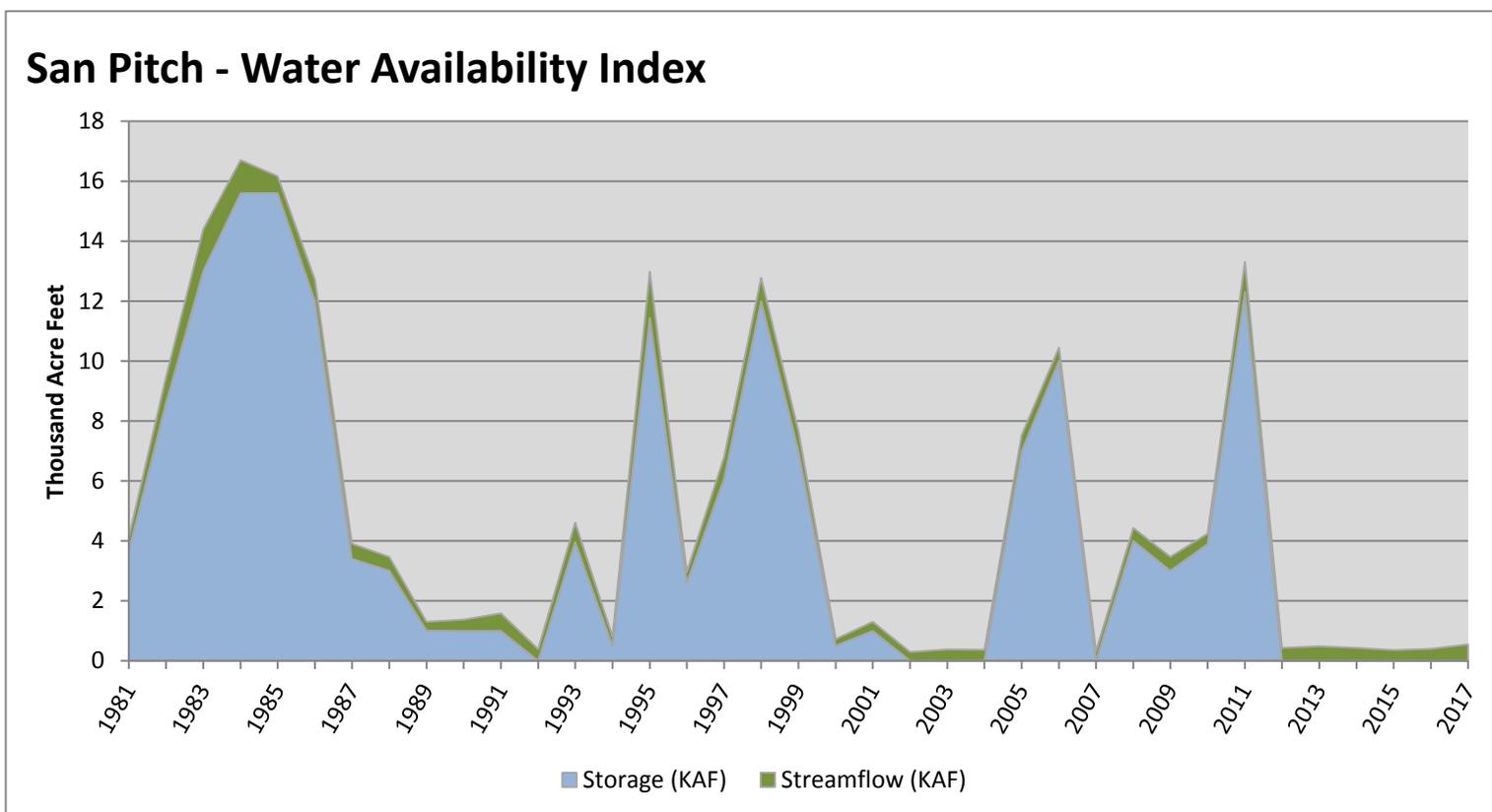
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

October 1, 2017

Water Availability Index

Basin or Region	Sep EOM [^] Storage	September Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
San Pitch	0.00	0.54	0.54	29	-1.75	14, 13, 00, 94

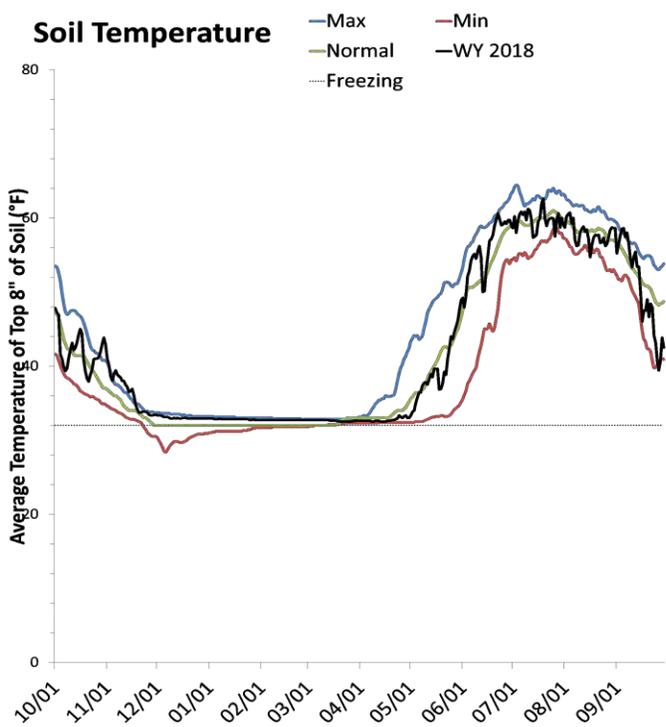
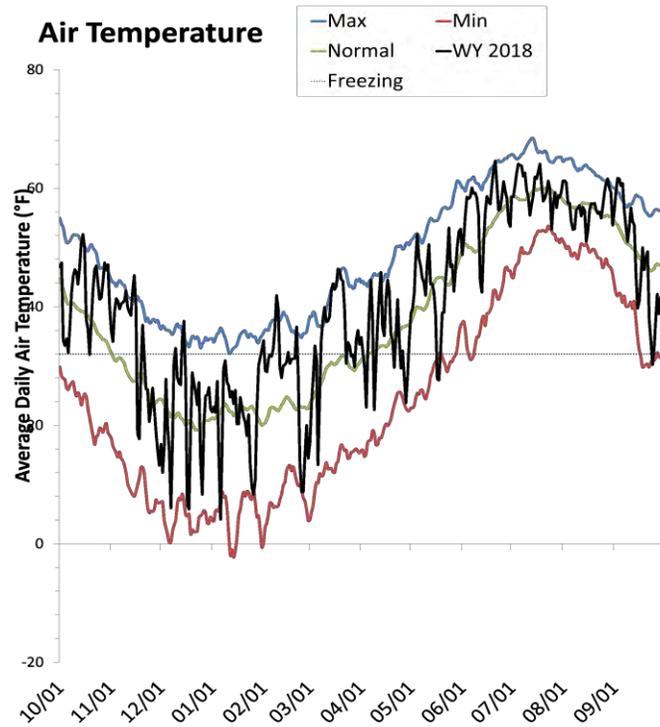
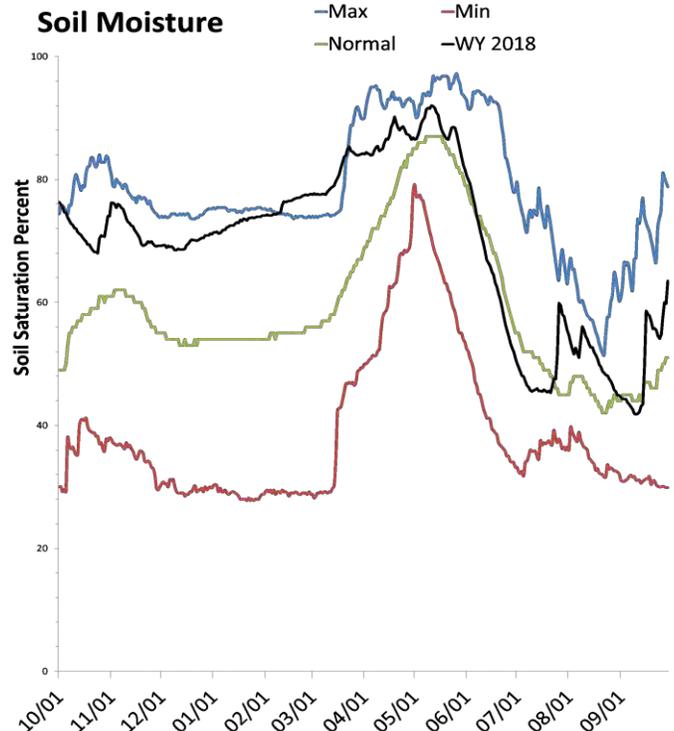
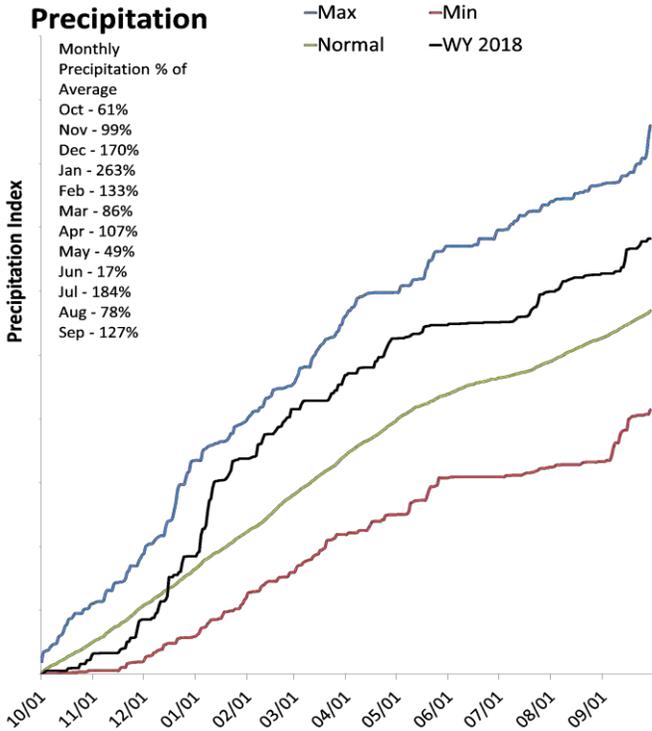
[^]EOM, end of month; [#]WAI, Water Availability Index; [^]KAF, thousand acre-feet.



Price & San Rafael Basins

October 1, 2017

Precipitation in September was above average at 121%, which brings the seasonal accumulation (Oct-Sep) to 119% of average. Soil moisture is at 63% compared to 78% last year. Reservoir storage is at 65% of capacity, compared to 35% last year. The water availability index for the Price River is 84%, and 74% for Joe's Valley.

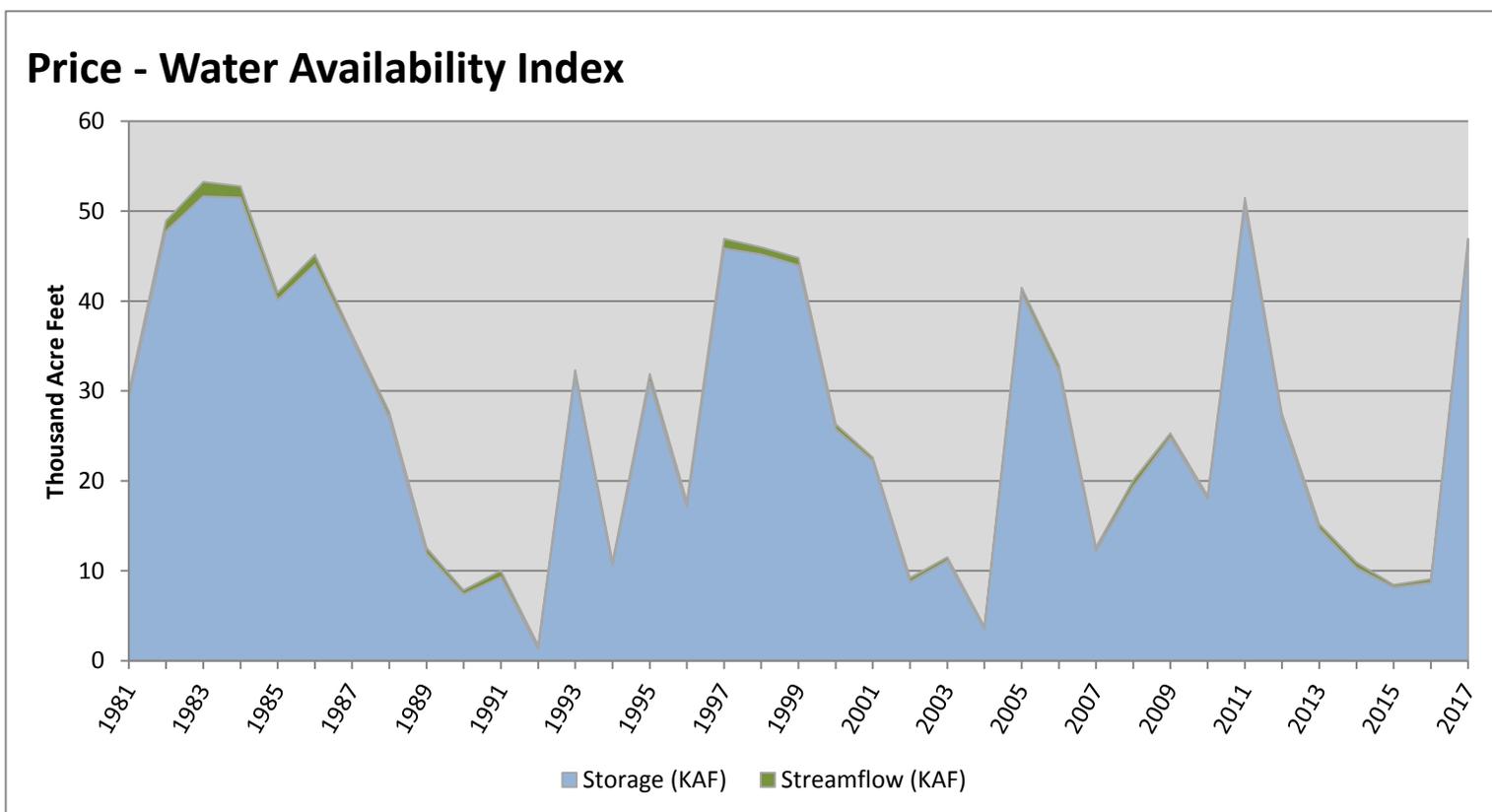


October 1, 2017

Water Availability Index

Basin or Region	Sep EOM [^] Storage	September Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Price	46.29	0.66	46.95	84	2.85	86, 98, 97, 82

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

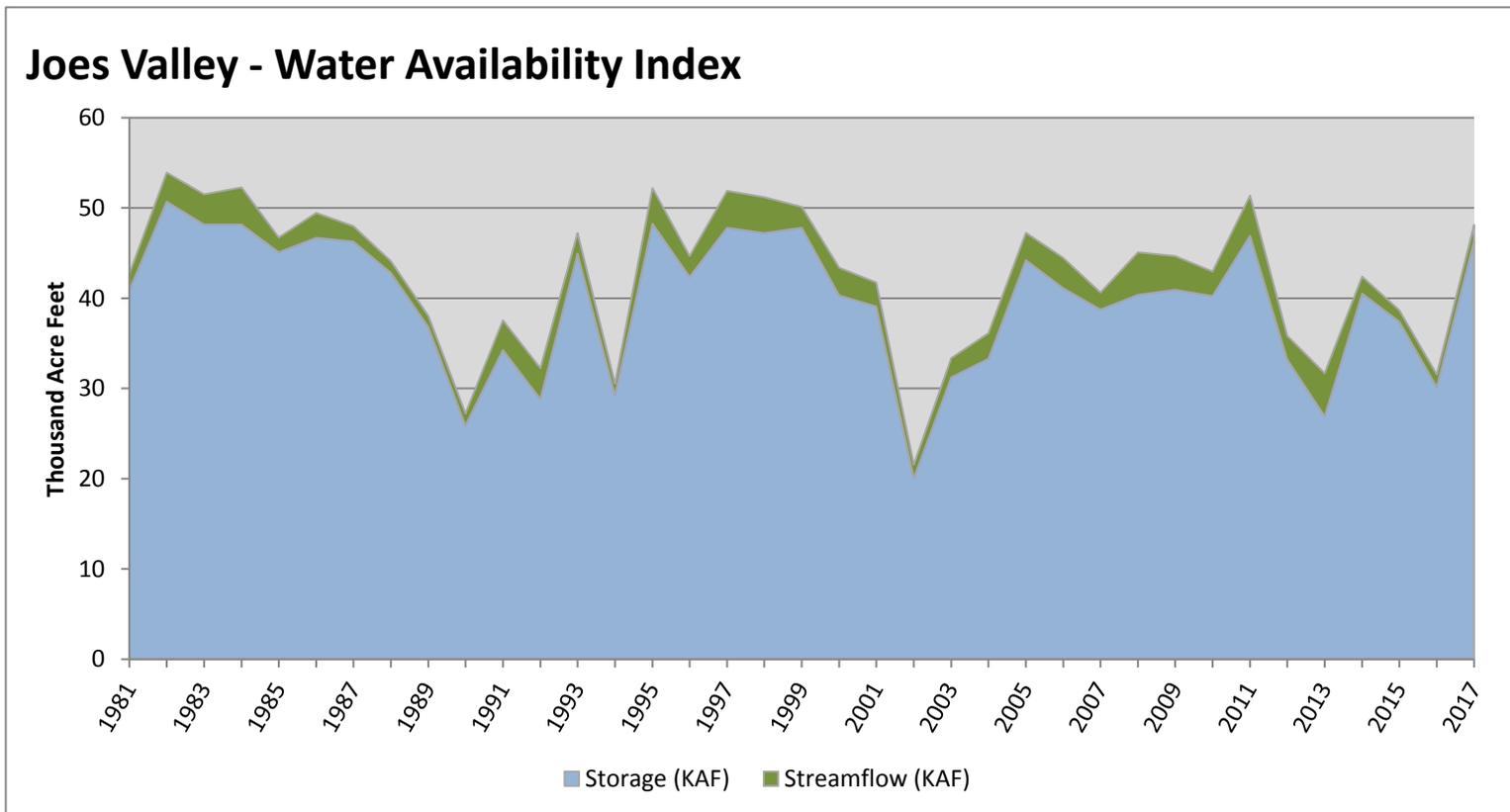


October 1, 2017

Water Availability Index

Basin or Region	Sep EOM [^] Storage	September Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Joos Valley	46.30	1.83	48.13	74	1.97	05, 87, 86, 99

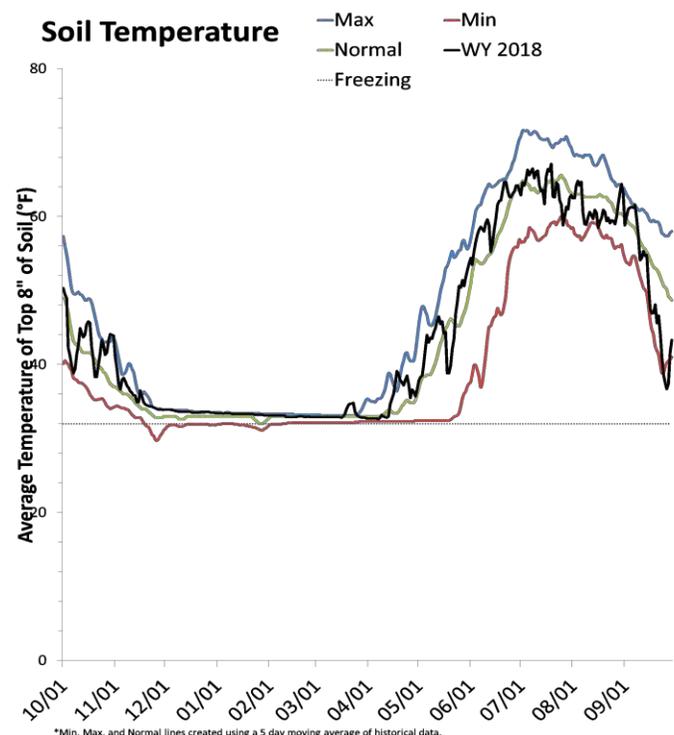
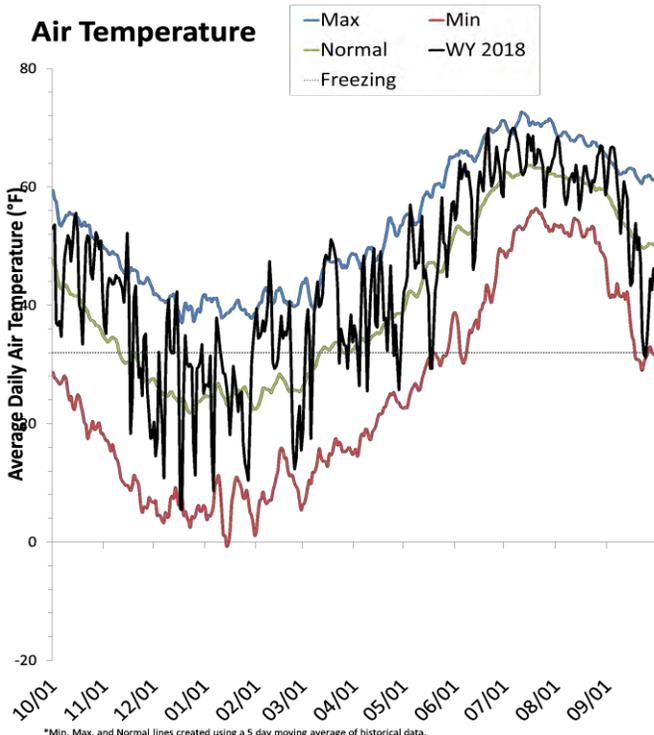
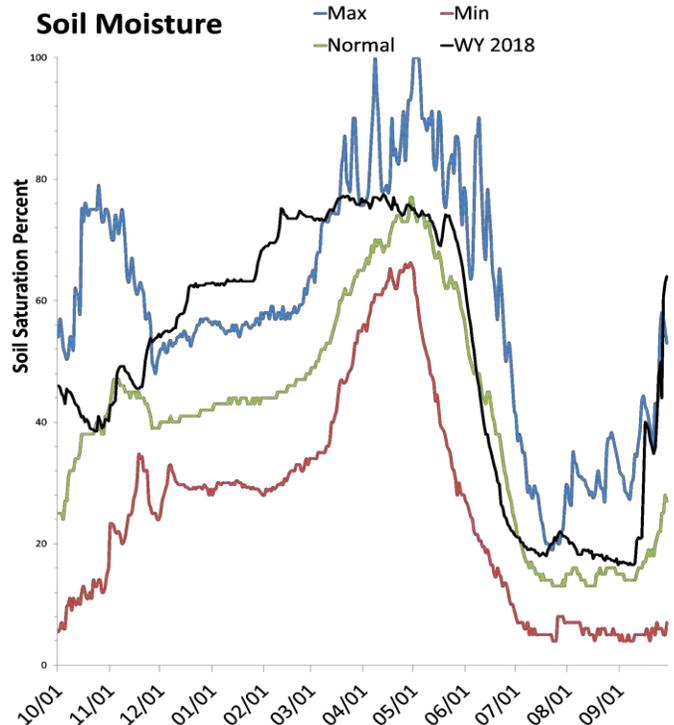
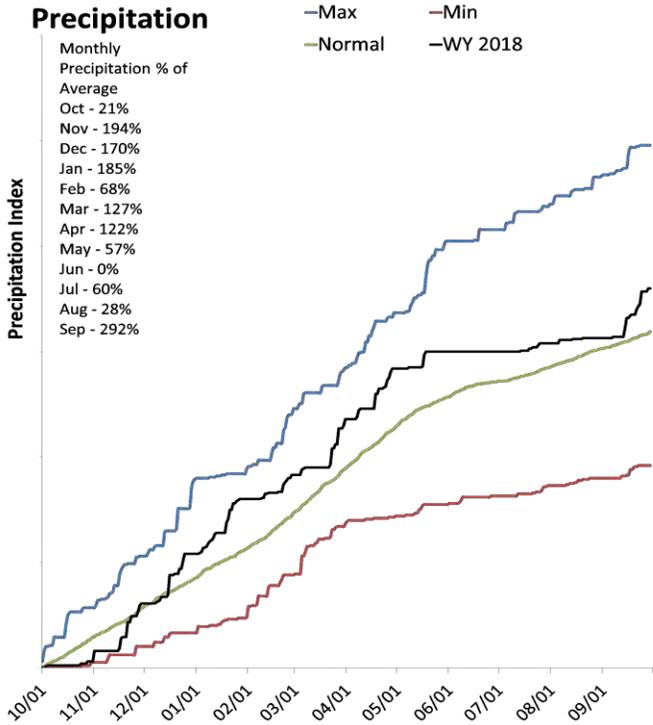
[^]EOM, end of month; [#]WAI, Water Availability Index; [^]KAF, thousand acre-feet.



Lower Sevier Basin

October 1, 2017

Precipitation in September was much above average at 294%, which brings the seasonal accumulation (Oct-Sep) to 113% of average. Soil moisture is at 64% compared to 35% last year. Reservoir storage is at 7% of capacity, compared to 4% last year. The water availability index for the Lower Sevier is 11%.



*Min, Max, and Normal lines created using a 5 day moving average of historical data.

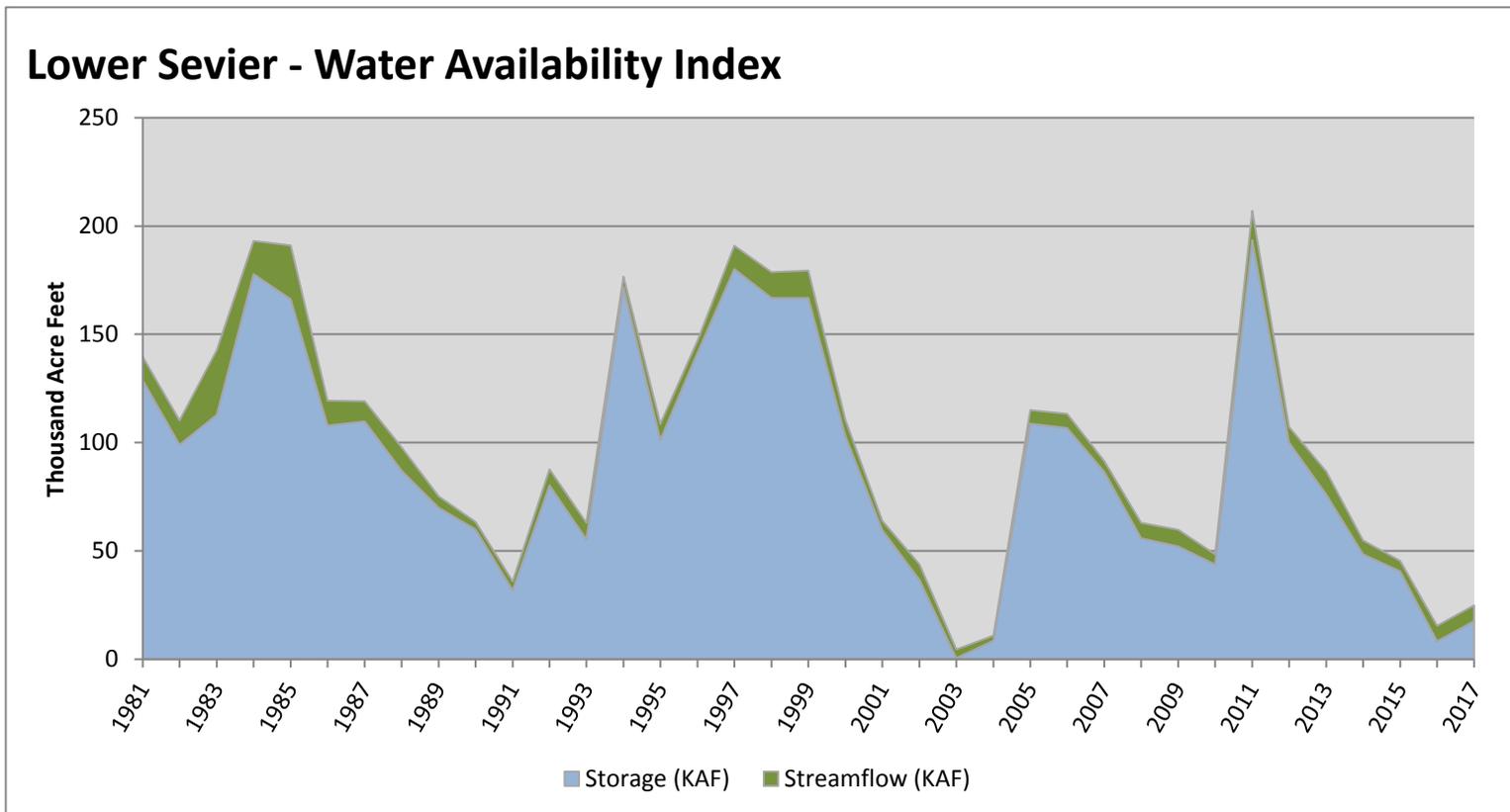
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

October 1, 2017

Water Availability Index

Basin or Region	Sep EOM [^] Storage	September Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Lower Sevier	17.64	7.28	24.92	11	-3.29	04, 16, 91, 02

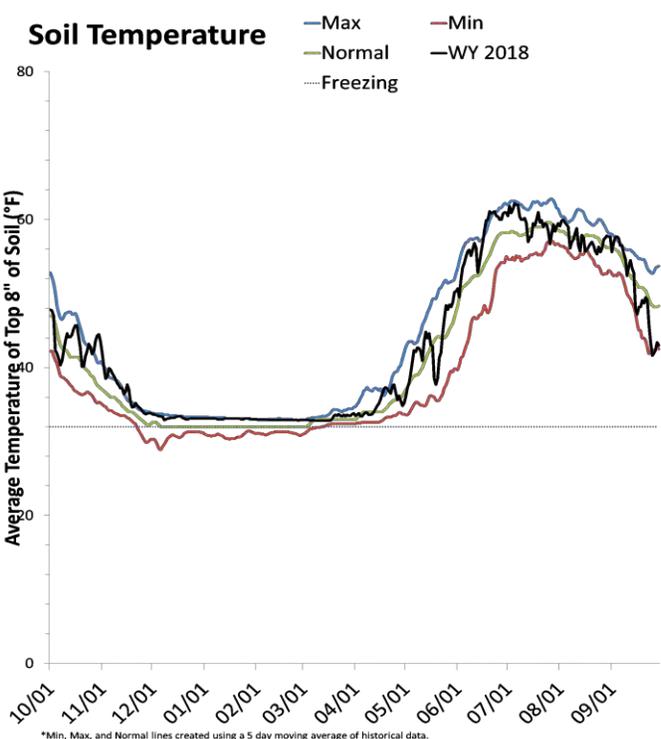
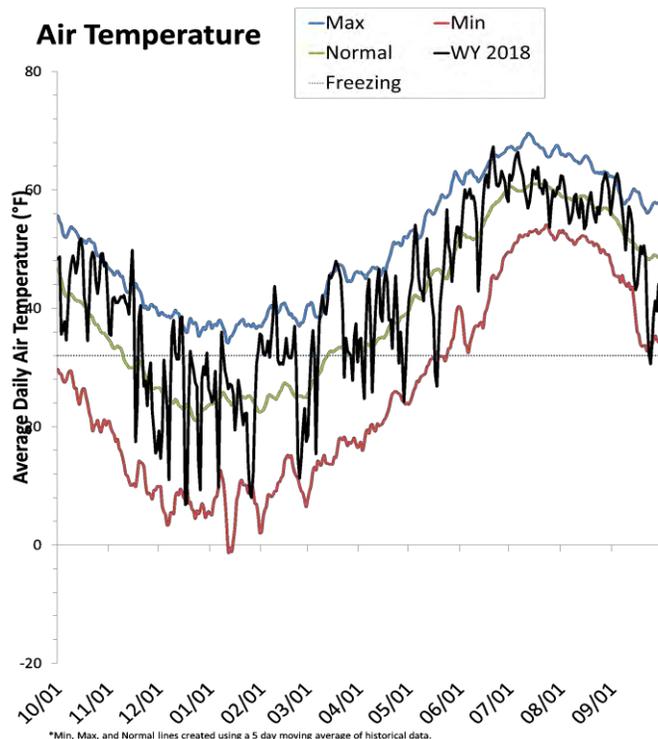
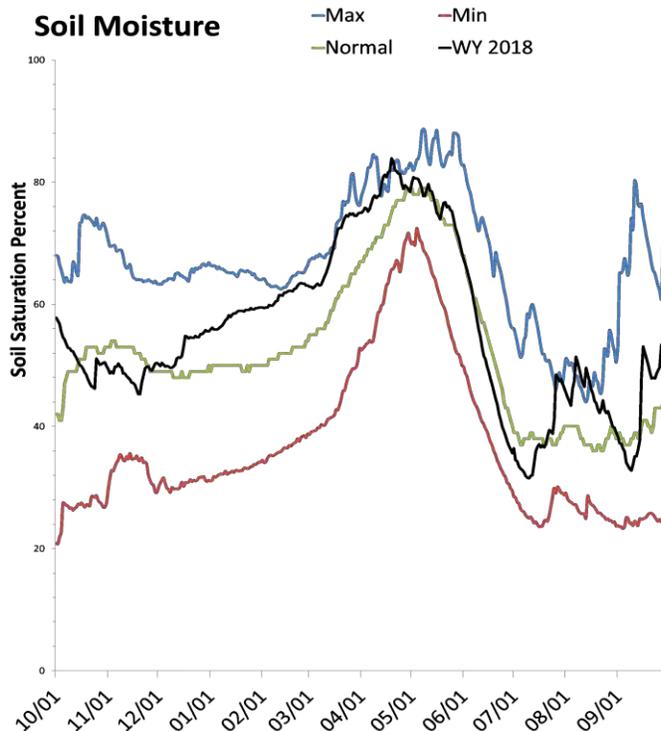
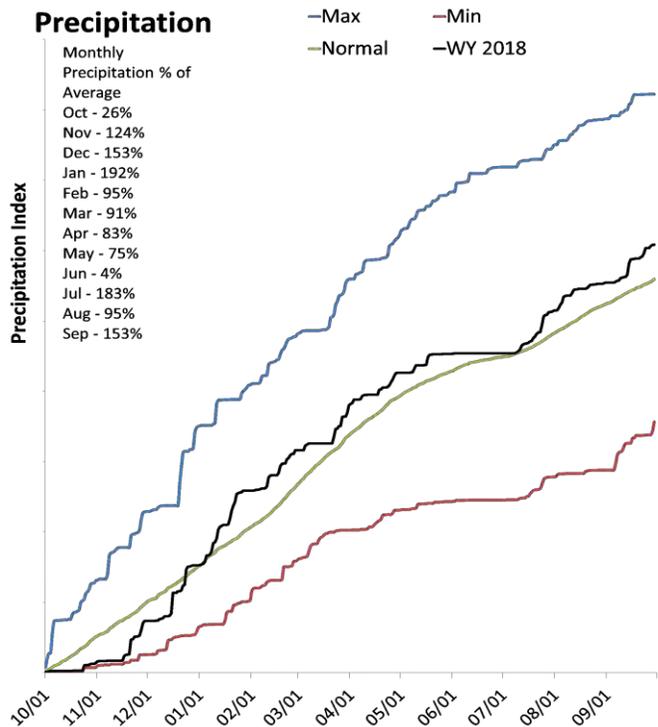
[^]EOM, end of month; [#]WAI, Water Availability Index; [^]KAF, thousand acre-feet.



Upper Sevier Basin

October 1, 2017

Precipitation in September was much above average at 175%, which brings the seasonal accumulation (Oct-Sep) to 109% of average. Soil moisture is at 55% compared to 53% last year. Reservoir storage is at 28% of capacity, compared to 21% last year. The water availability index for the Upper Sevier is 45%.



*Min, Max, and Normal lines created using a 5 day moving average of historical data.

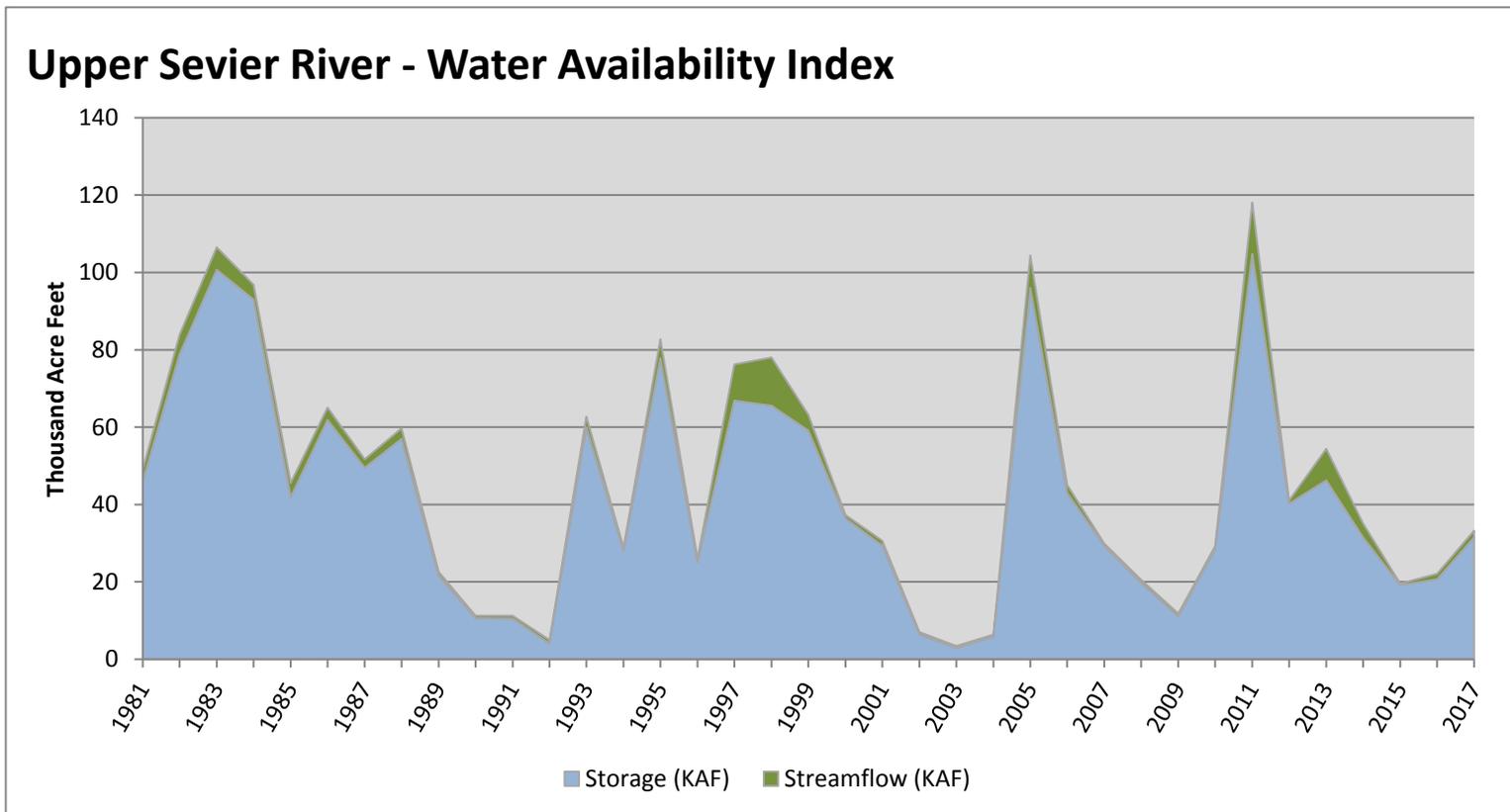
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

October 1, 2017

Water Availability Index

Basin or Region	Sep EOM [^] Storage	September Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Upper Sevier River	31.48	1.75	33.23	45	-0.44	07, 01, 14, 00

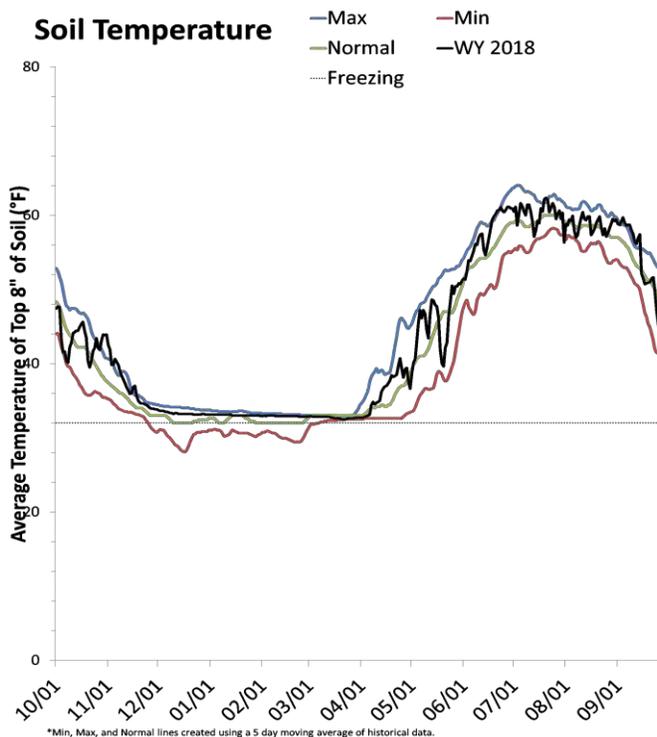
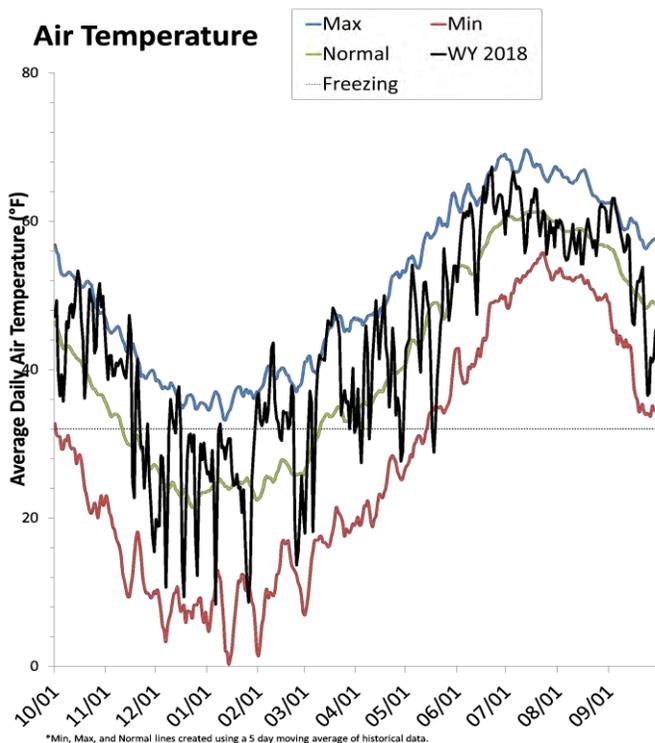
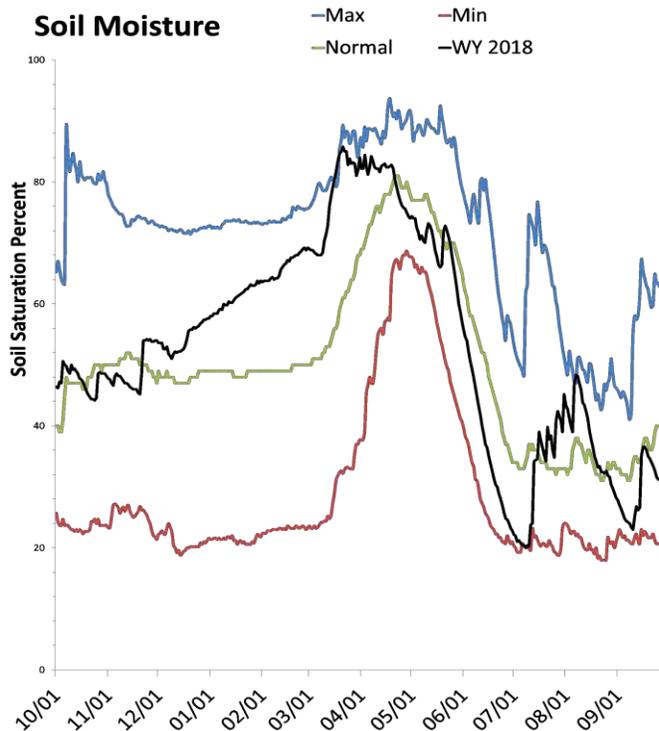
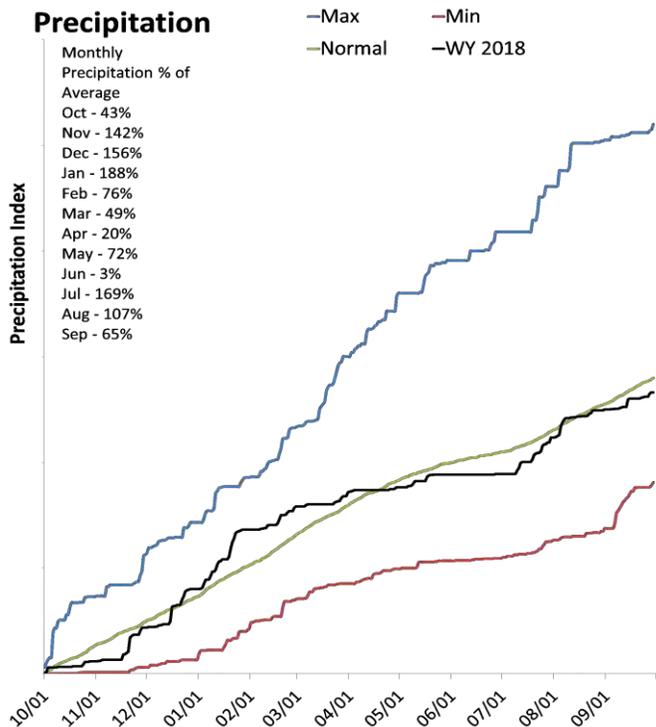
[^]EOM, end of month; [#]WAI, Water Availability Index; [^]KAF, thousand acre-feet.



Southeastern Utah

October 1, 2017

Precipitation in September was much below average at 64%, which brings the seasonal accumulation (Oct-Sep) to 95% of average. Soil moisture is at 35% compared to 46% last year. Reservoir storage is at 39% of capacity, compared to 71% last year. The water availability index for Moab is 58%.

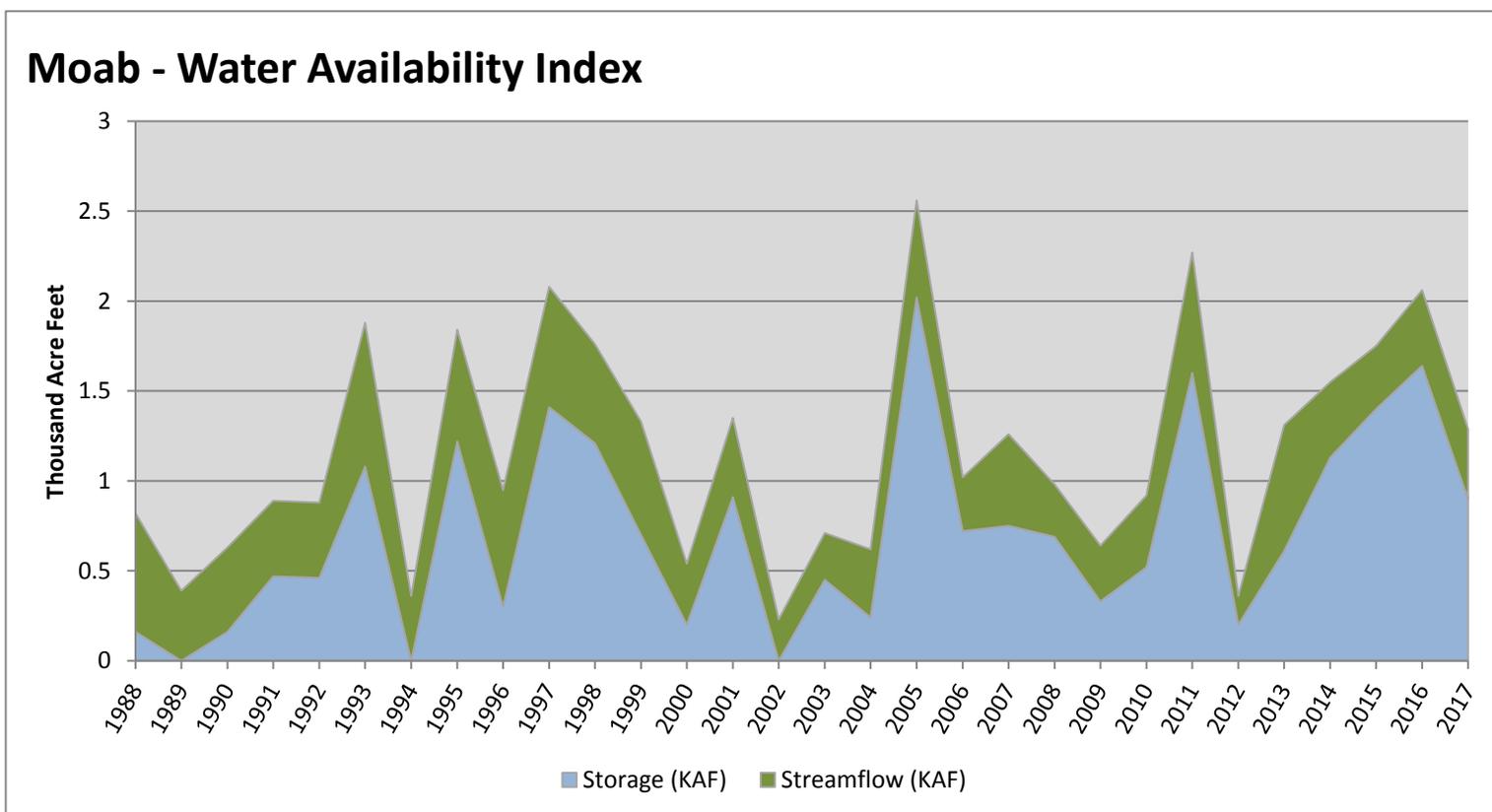


October 1, 2017

Water Availability Index

Basin or Region	Sep EOM [^] Storage	September Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Moab	0.90	0.39	1.29	58	0.67	06, 07, 13, 99

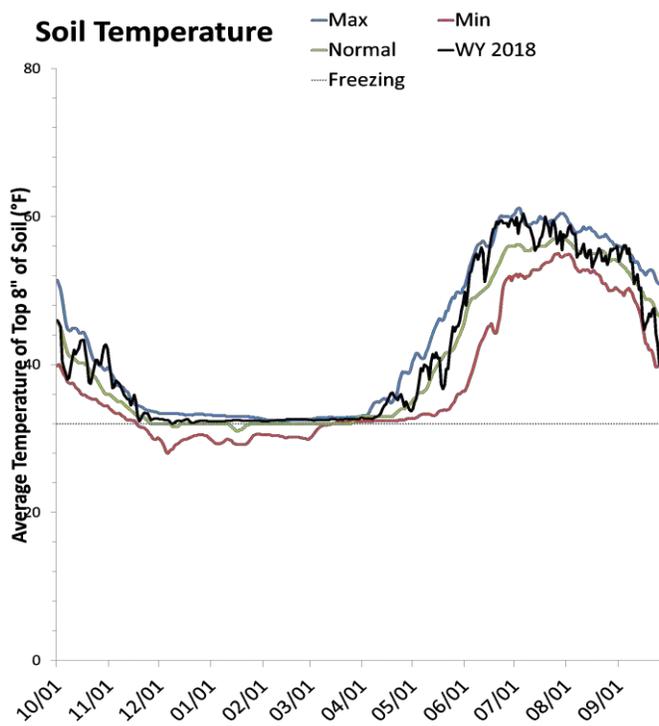
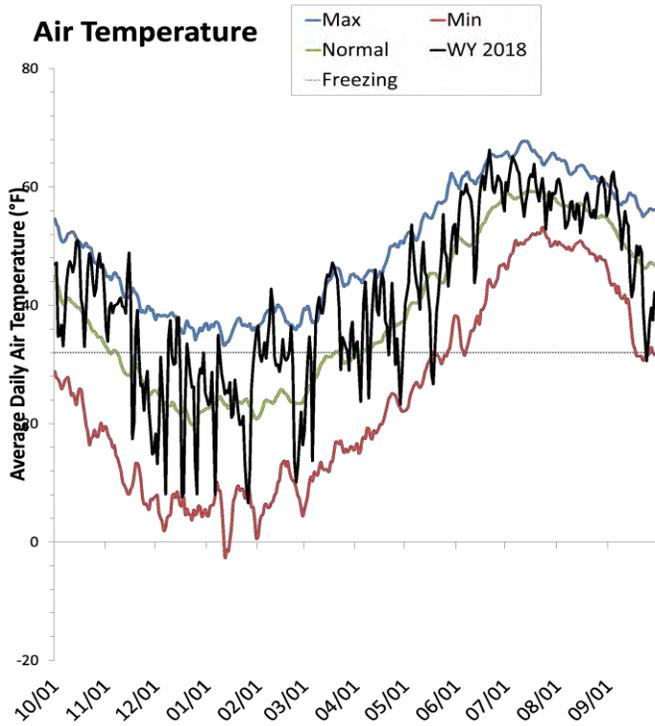
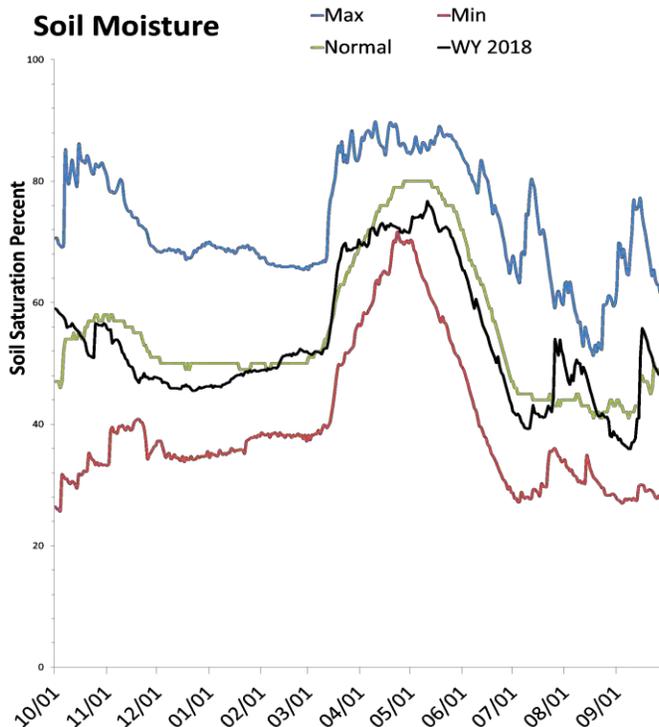
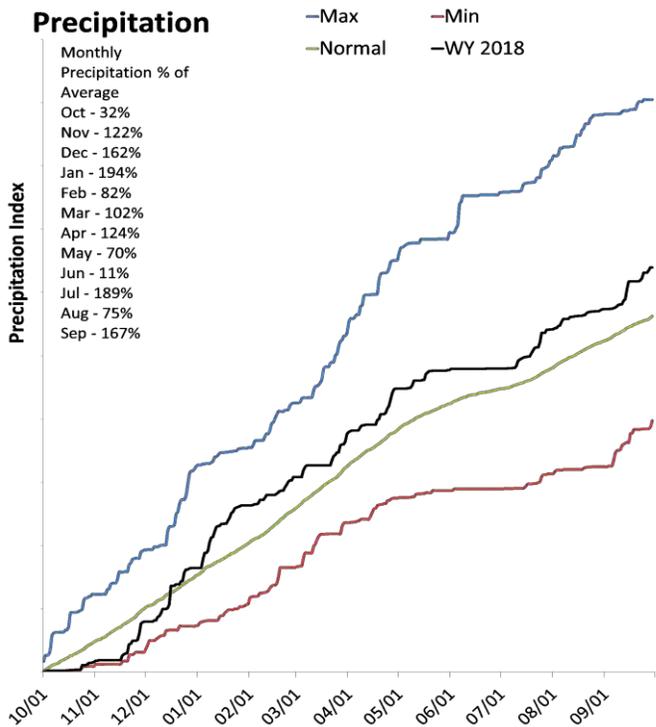
[^]EOM, end of month; [#]WAI, Water Availability Index; [^]KAF, thousand acre-feet.



Dirty Devil Basin

October 1, 2017

Precipitation in September was much above average at 201%, which brings the seasonal accumulation (Oct-Sep) to 115% of average. Soil moisture is at 54% compared to 47% last year.



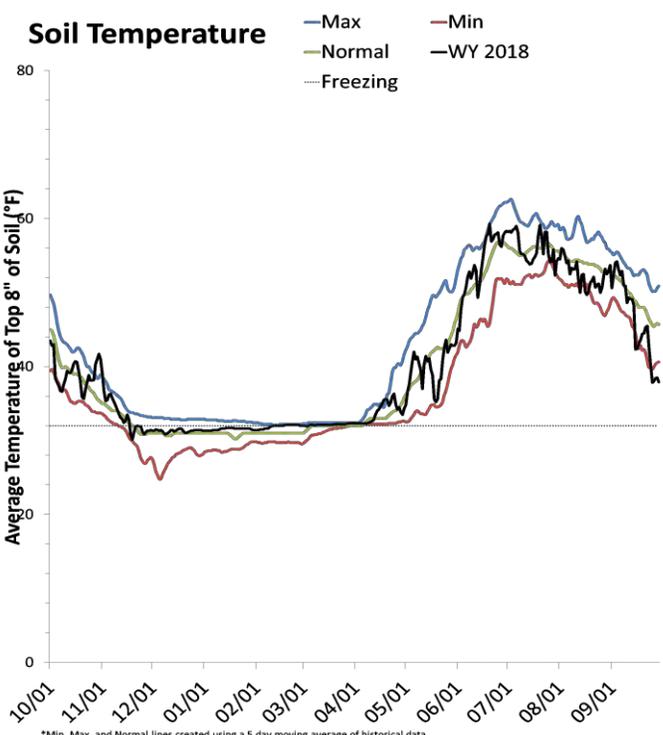
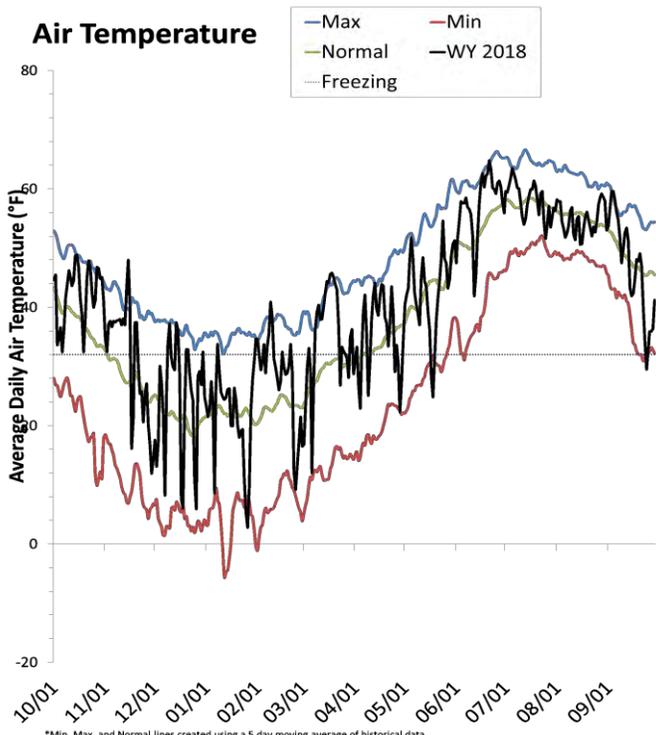
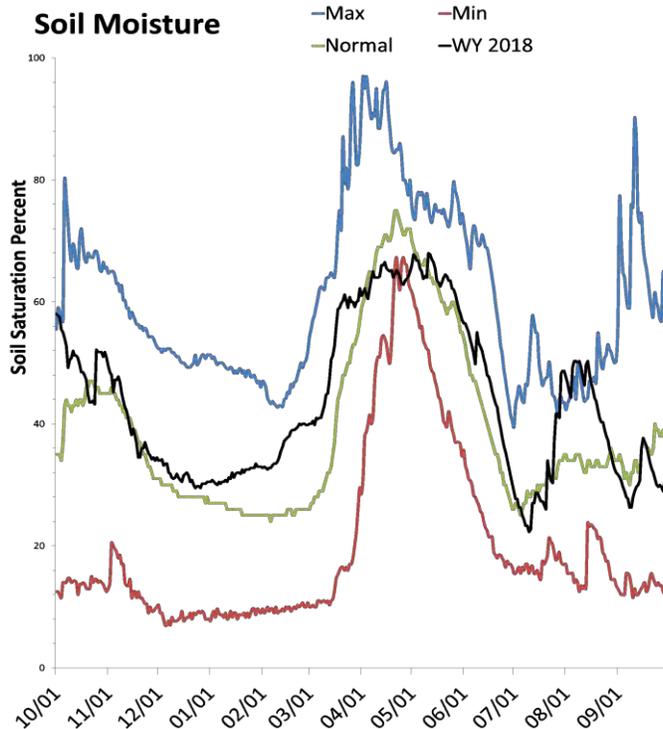
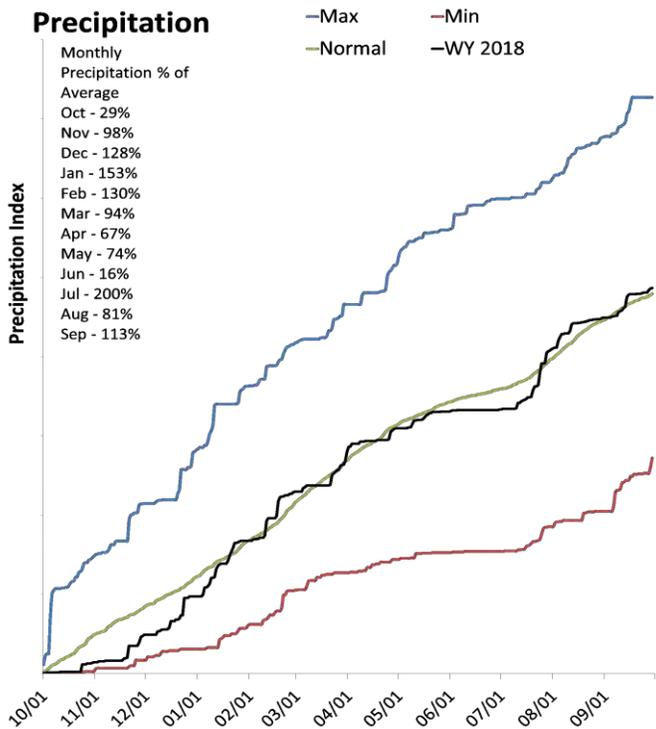
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

*Min, Max, and Normal lines created using a 5 day moving average of historical data.

Escalante River Basin

October 1, 2017

Precipitation in September was much above average at 133%, which brings the seasonal accumulation (Oct-Sep) to 103% of average. Soil moisture is at 32% compared to 55% last year.



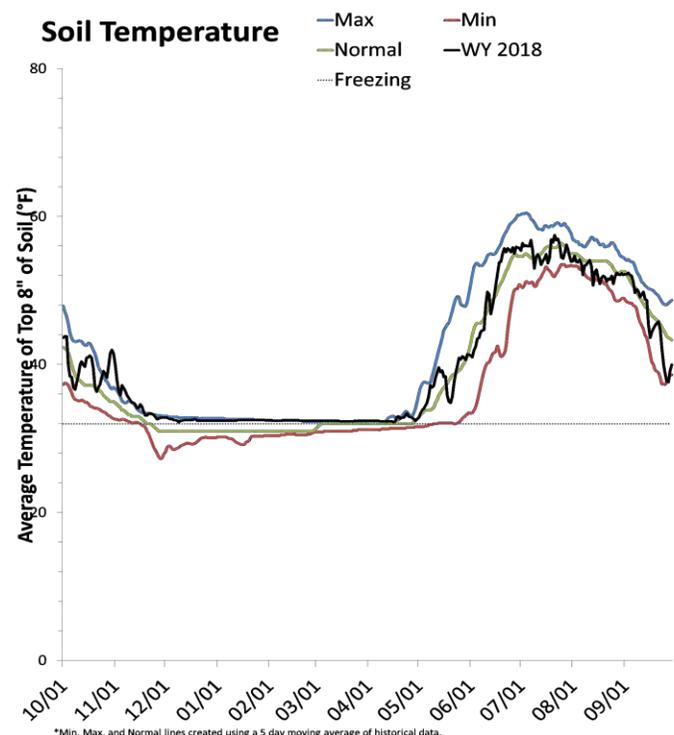
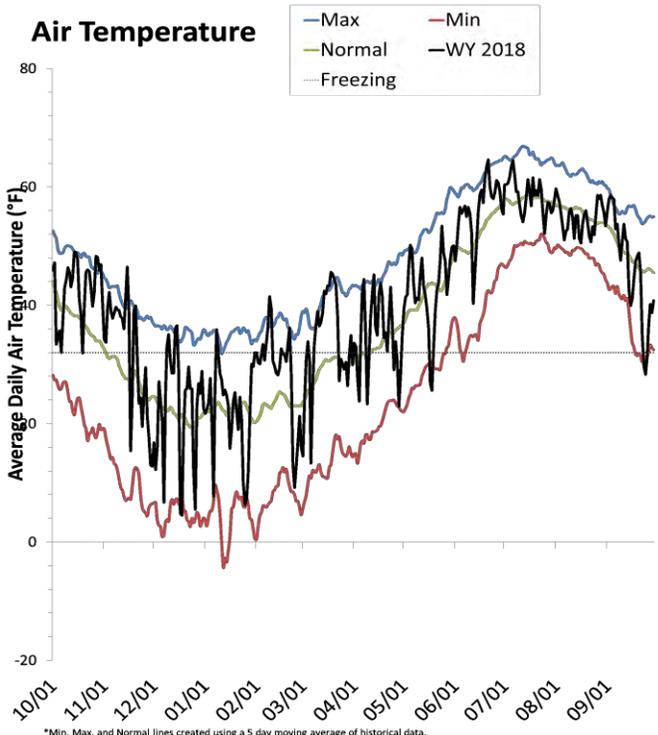
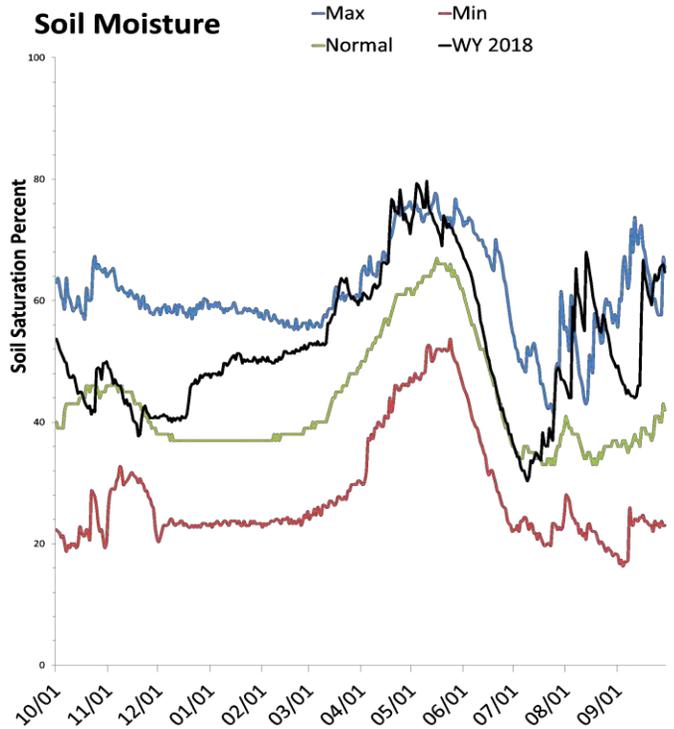
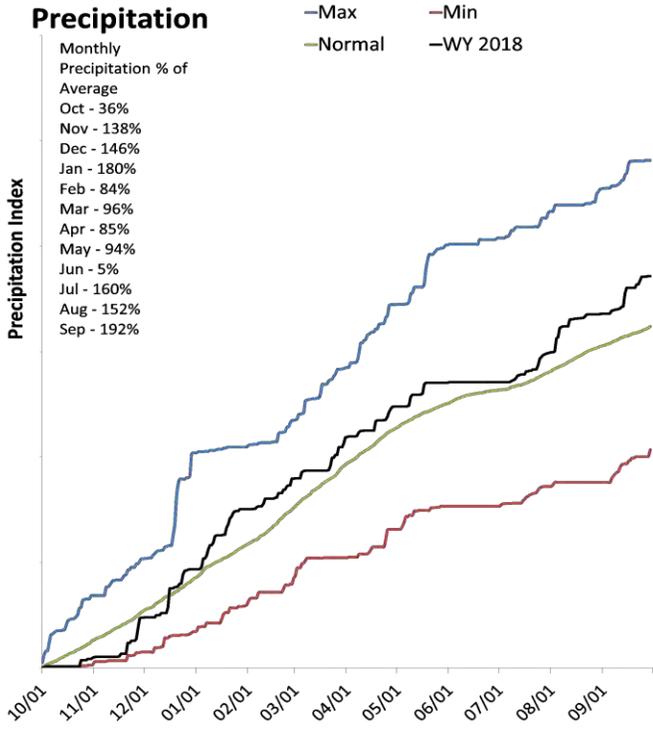
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

*Min, Max, and Normal lines created using a 5 day moving average of historical data.

Beaver River Basin

October 1, 2017

Precipitation in September was much above average at 188%, which brings the seasonal accumulation (Oct-Sep) to 115% of average. Soil moisture is at 63% compared to 44% last year. Reservoir storage is at 11% of capacity, compared to 12% last year. The water availability index for the Beaver River is 34%.



*Min, Max, and Normal lines created using a 5 day moving average of historical data.

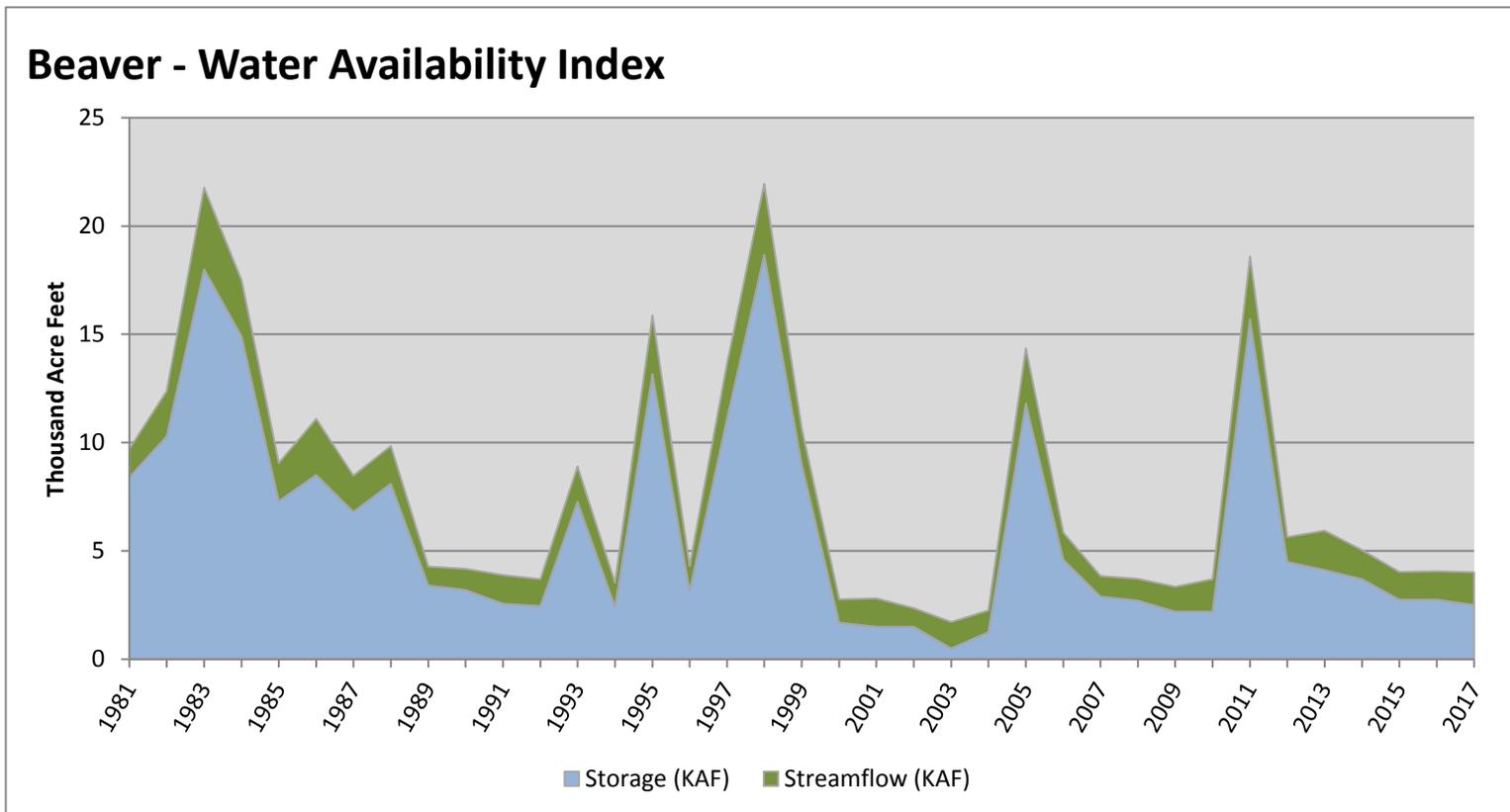
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

October 1, 2017

Water Availability Index

Basin or Region	Sep EOM [^] Storage	September Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Beaver	2.50	1.51	4.01	34	-1.32	07, 91, 15, 16

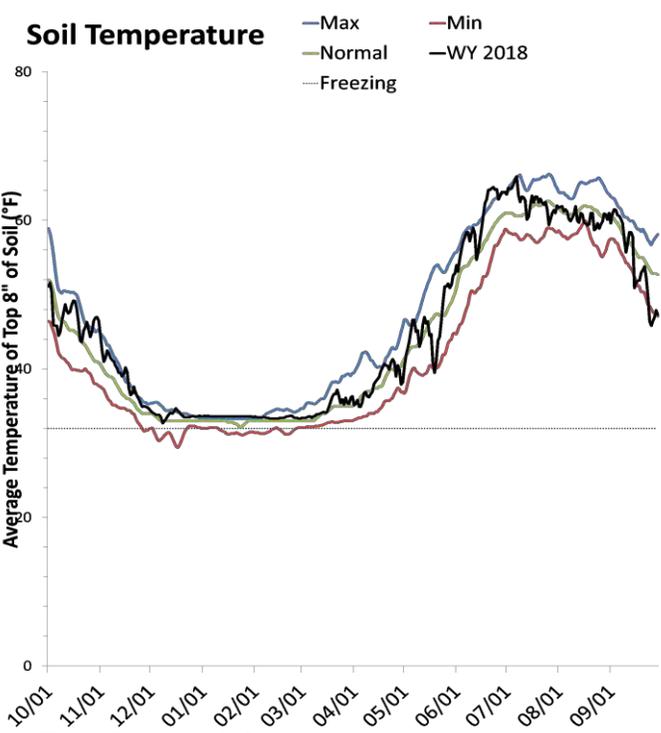
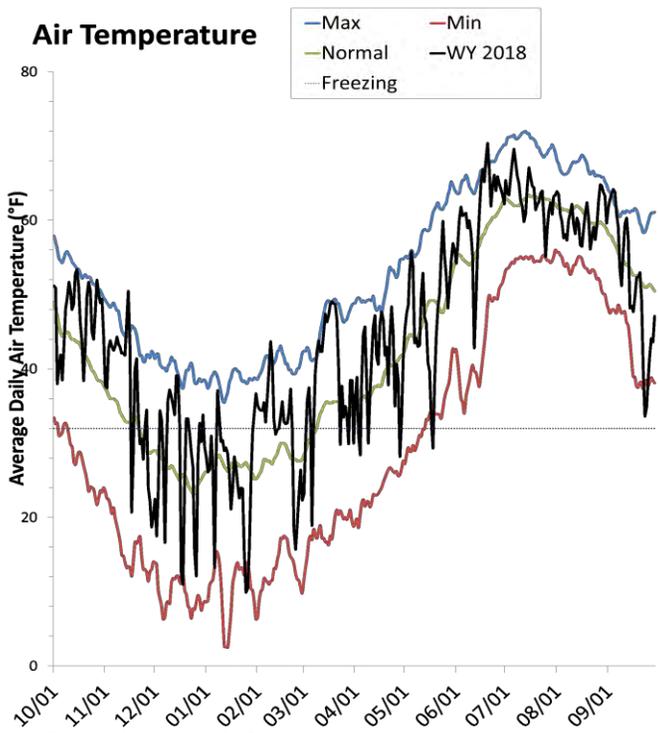
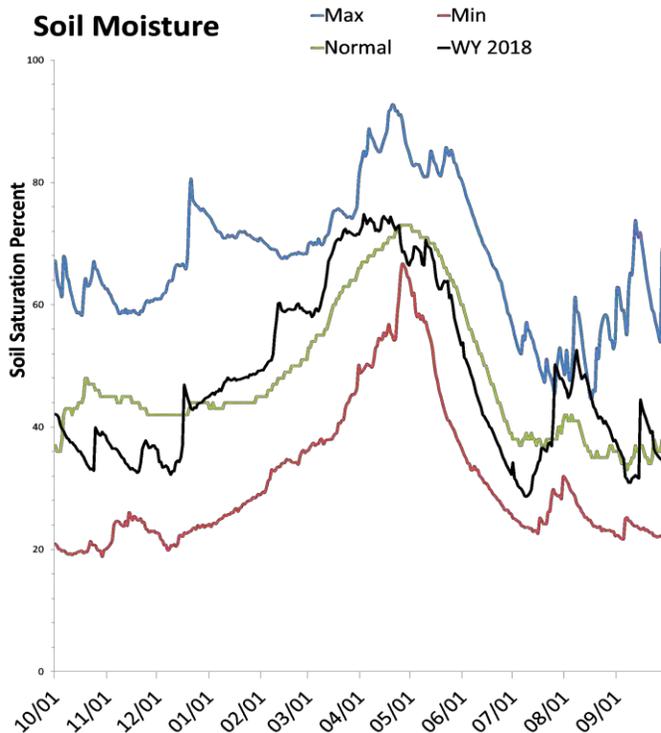
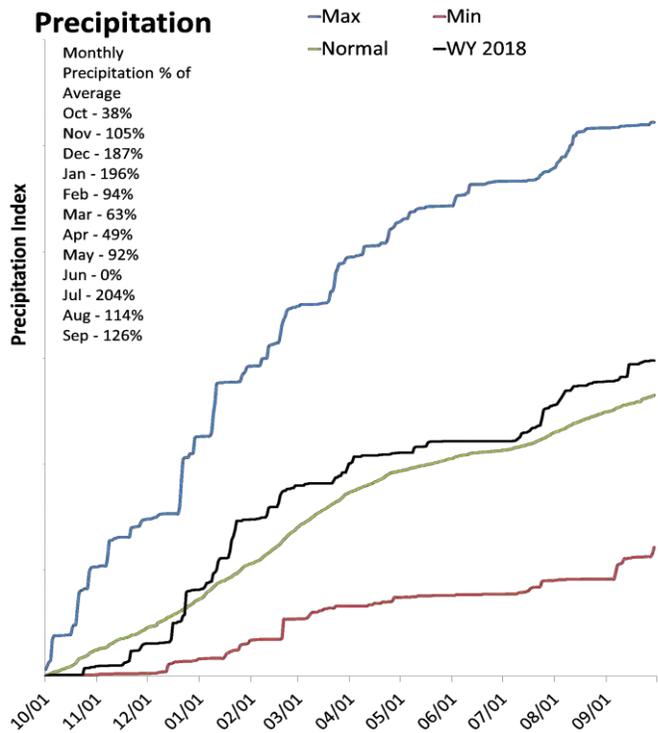
[^]EOM, end of month; [#]WAI, Water Availability Index; [^]KAF, thousand acre-feet.



Southwestern Utah

October 1, 2017

Precipitation in September was much above average at 134%, which brings the seasonal accumulation (Oct-Sep) to 113% of average. Soil moisture is at 34% compared to 42% last year. Reservoir storage is at 60% of capacity, compared to 53% last year. The water availability index for the Virgin River is 38%.



*Min, Max, and Normal lines created using a 5 day moving average of historical data.

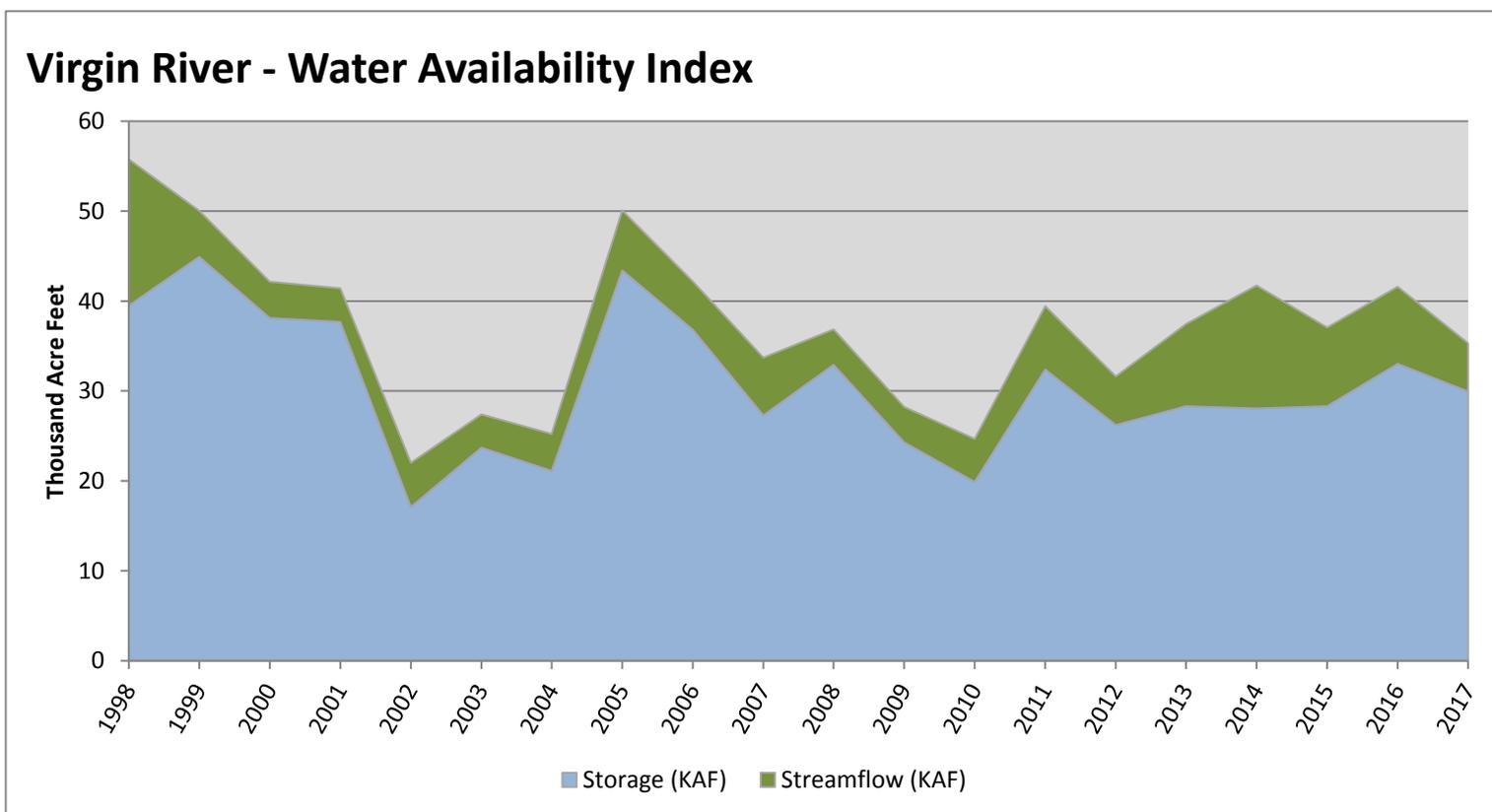
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

October 1, 2017

Water Availability Index

Basin or Region	Sep EOM [^] Storage	September Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Virgin River	29.93	5.39	35.32	38	-0.99	12, 07, 08, 15

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



October 1, 2017

Water Availability Index

Basin or Region	Sep EOM* Storage	September Flow	Storage + Flow	Percentile	WAI#	Years with similiar WAI
	KAF^	KAF^	KAF^	%		
Bear River	1114	6.9	1121	79	2.4	85, 11, 99, 82
Woodruff Narrows	39.6	6.9	46.5	74	2.0	10, 16, 95, 09
Little Bear	9.8	2.7	12.5	85	2.9	99, 06, 11, 98
Ogden	78.7	3.3	82.0	84	2.9	97, 98, 86, 82
Weber	137.5	8.1	145.5	75	2.1	96, 09, 99, 97
Provo River	382.4	6.4	388.8	78	2.4	99, 96, 97, 05
Western Uinta	165.4	3.8	169.2	77	2.3	11, 14, 96, 93
Eastern Uinta	25.0	4.4	29.5	29	-1.8	93, 14, 81, 00
Blacks Fork	5.6	3.8	9.4	49	-0.1	15, 06, 85, 09
Price	46.3	0.7	47.0	84	2.9	86, 98, 97, 82
Smiths Creek	5.4	1.0	6.4	53	0.3	09, 08, 16, 85
Joes Valley	46.3	1.8	48.1	74	2.0	05, 87, 86, 99
Moab	0.9	0.4	1.3	58	0.7	06, 07, 13, 99
Upper Sevier River	31.5	1.8	33.2	45	-0.4	07, 01, 14, 00
San Pitch	0.0	0.5	0.5	29	-1.8	14, 13, 00, 94
Lower Sevier	17.6	7.3	24.9	11	-3.3	04, 16, 91, 02
Beaver	2.5	1.5	4.0	34	-1.3	07, 91, 15, 16
Virgin River	29.9	5.4	35.3	38	-1.0	12, 07, 08, 15

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

What is a Water Availability Index?

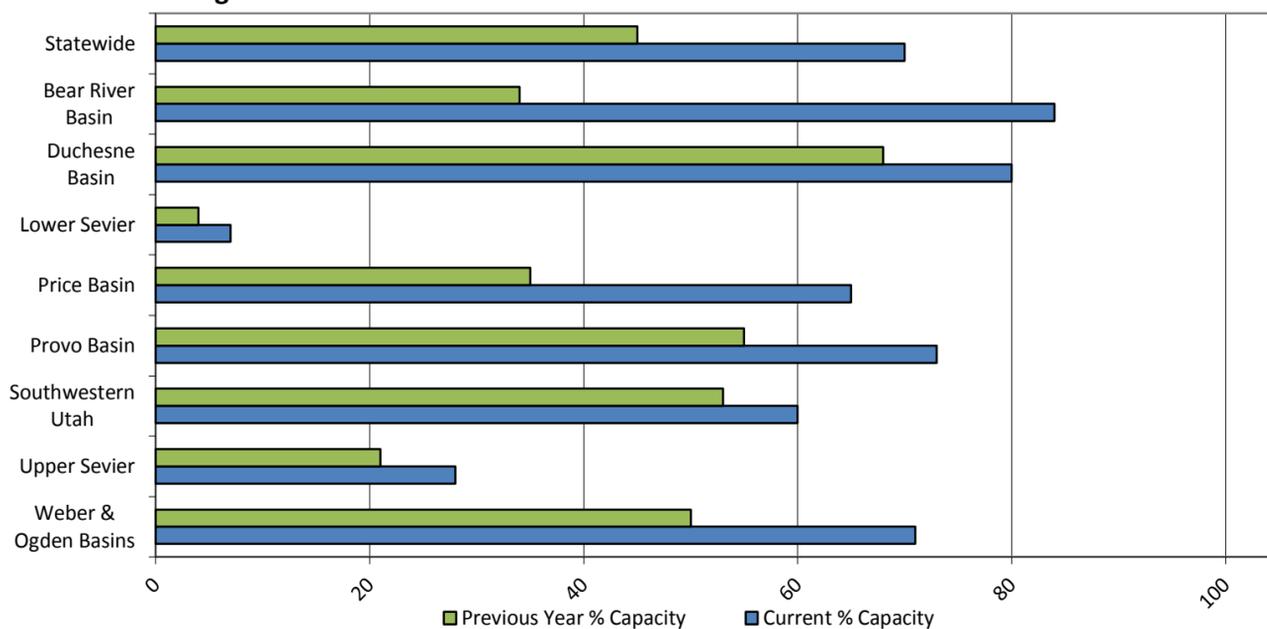
The Water Availability Index (WAI) is an observed hydrologic indicator of current surface water availability within a watershed. The index is calculated by combining current reservoir storage with the previous months streamflow. WAI values are scaled from +4.1 (abundant supply) to -4.1 (extremely dry) 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 September 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	8.7	5.9		25.7	34%	23%			
Causey Reservoir	4.6	2.4	2.5	7.1	65%	34%	35%	185%	98%
Cleveland Lake	2.7	1.5		5.4	50%	28%			
Currant Creek Reservoir	14.8	14.5	14.9	15.5	95%	93%	96%	99%	97%
Deer Creek Reservoir	122.6	100.1	93.9	149.7	82%	67%	63%	131%	107%
East Canyon Reservoir	35.6	20.2	31.6	49.5	72%	41%	64%	113%	64%
Echo Reservoir	23.7	14.2	24.3	73.9	32%	19%	33%	97%	58%
Grantsville Reservoir		0.3	0.8	3.3		9%	23%		39%
Gunlock	5.8	4.0	5.8	10.4	56%	38%	56%	101%	69%
Gunnison Reservoir	0.0	0.0	5.3	20.3	0%	0%	26%	0%	0%
Huntington North Reservoir	2.9	1.4	1.4	4.2	69%	33%	34%	202%	96%
Hyrum Reservoir	9.8	4.0	6.7	15.3	64%	26%	44%	146%	59%
Joes Valley Reservoir	46.3	30.2	40.4	61.6	75%	49%	66%	115%	75%
Jordanelle Reservoir	259.8	197.0	258.3	320.0	81%	62%	81%	101%	76%
Ken's Lake	0.9	1.6	0.7	2.3	39%	71%	30%	132%	241%
Kolob Reservoir	5.2	5.4		5.6	93%	97%			
Lost Creek Reservoir	17.6	14.1	12.6	22.5	78%	63%	56%	139%	112%
Lower Enterprise	1.0	0.3	0.3	2.6	38%	12%	12%	333%	100%
Miller Flat Reservoir	3.4	1.5		5.2	64%	29%			
Millsite	1.2	11.3	10.9	16.7	7%	68%	65%	11%	104%
Minersville Reservoir	2.5	2.8	6.5	23.3	11%	12%	28%	38%	42%
Moon Lake Reservoir	18.8	12.0	16.5	35.8	53%	33%	46%	114%	73%
Otter Creek Reservoir	24.0	20.7	22.7	52.5	46%	39%	43%	106%	91%
Panguitch Lake	9.4	9.5	15.0	22.3	42%	42%	67%	63%	63%
Pineview Reservoir	74.1	57.1	50.7	110.1	67%	52%	46%	146%	113%
Piute Reservoir	7.5	0.0	19.5	71.8	10%	0%	27%	38%	0%
Porcupine Reservoir	9.0	5.1	4.3	11.3	80%	45%	38%	209%	119%
Quail Creek	24.1	29.0	21.0	40.0	60%	73%	53%	115%	138%
Red Fleet Reservoir	17.5	18.5	17.4	25.7	68%	72%	68%	100%	106%
Rockport Reservoir	55.7	22.8	40.1	60.9	91%	37%	66%	139%	57%
Sand Hollow Reservoir	44.7	45.5		50.0	89%	91%			
Scofield Reservoir	46.3	8.7	27.8	65.8	70%	13%	42%	167%	31%
Settlement Canyon Reservoir		0.2	0.4	1.0		16%	39%		41%
Sevier Bridge Reservoir	17.6	8.3	95.9	236.0	7%	4%	41%	18%	9%
Smith And Morehouse Reservoir	4.9	4.8	3.8	8.1	61%	60%	47%	130%	127%
Starvation Reservoir	130.7	123.8	123.2	165.3	79%	75%	75%	106%	100%
Stateline Reservoir	5.4	4.9	5.8	12.0	45%	41%	48%	94%	85%
Steinaker Reservoir	7.5	9.2	14.9	33.4	23%	27%	45%	51%	61%
Strawberry Reservoir	925.3	769.5	681.5	1105.9	84%	70%	62%	136%	113%
Upper Enterprise	1.7	0.3	1.8	10.0	17%	3%	18%	96%	14%
Upper Stillwater Reservoir	15.9	9.5	17.1	32.5	49%	29%	53%	93%	56%
Utah Lake	480.1	287.7	672.6	870.9	55%	33%	77%	71%	43%
Vernon Creek Reservoir		0.1	0.2	0.6		13%	32%		42%
Willard Bay	172.8	137.6	132.0	215.0	80%	64%	61%	131%	104%
Woodruff Creek	1.5	0.3	0.7	4.0	36%	6%	18%	208%	36%
Woodruff Narrows Reservoir	39.6	42.2	24.8	57.3	69%	74%	43%	160%	170%
Meeks Cabin Reservoir	5.6	3.5	8.8	32.5	17%	11%	27%	64%	40%
Bear Lake	1114.5	417.0	595.0	1302.0	86%	32%	46%	187%	70%
Basin-wide Total	3758.5	2419.8	3129.0	5376.0	70%	45%	58%	120%	77%
# of reservoirs	40	40	40	40	40	40	40	40	40

Reservoir Storage



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