



Utah Climate and Water Report

August 1, 2017



Farnsworth Lake

June, 2017

Photo by Randy Julander

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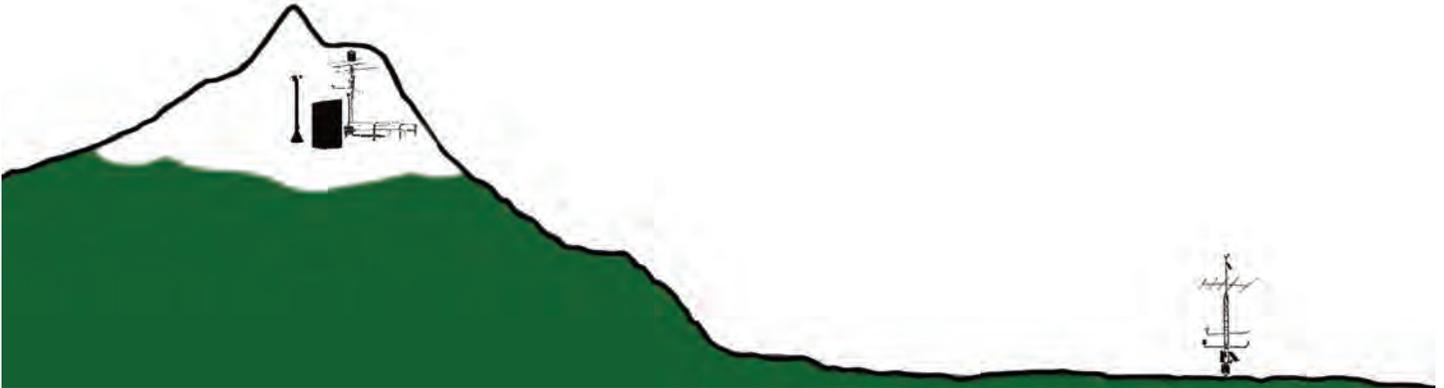
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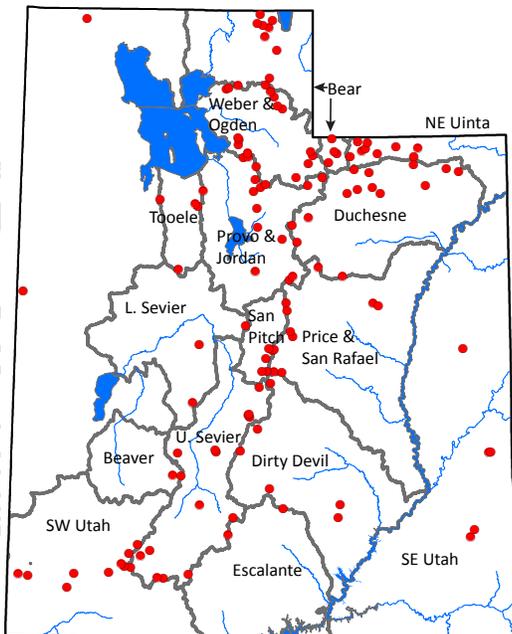
Utah Climate and Water Report

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.



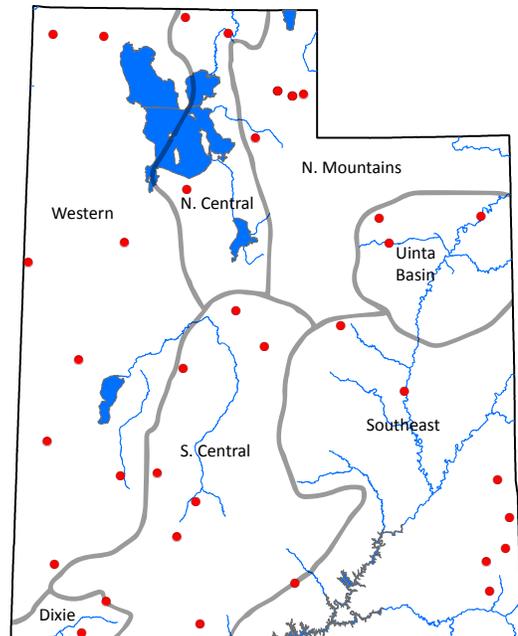
SNOTEL

- 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

August 1, 2017

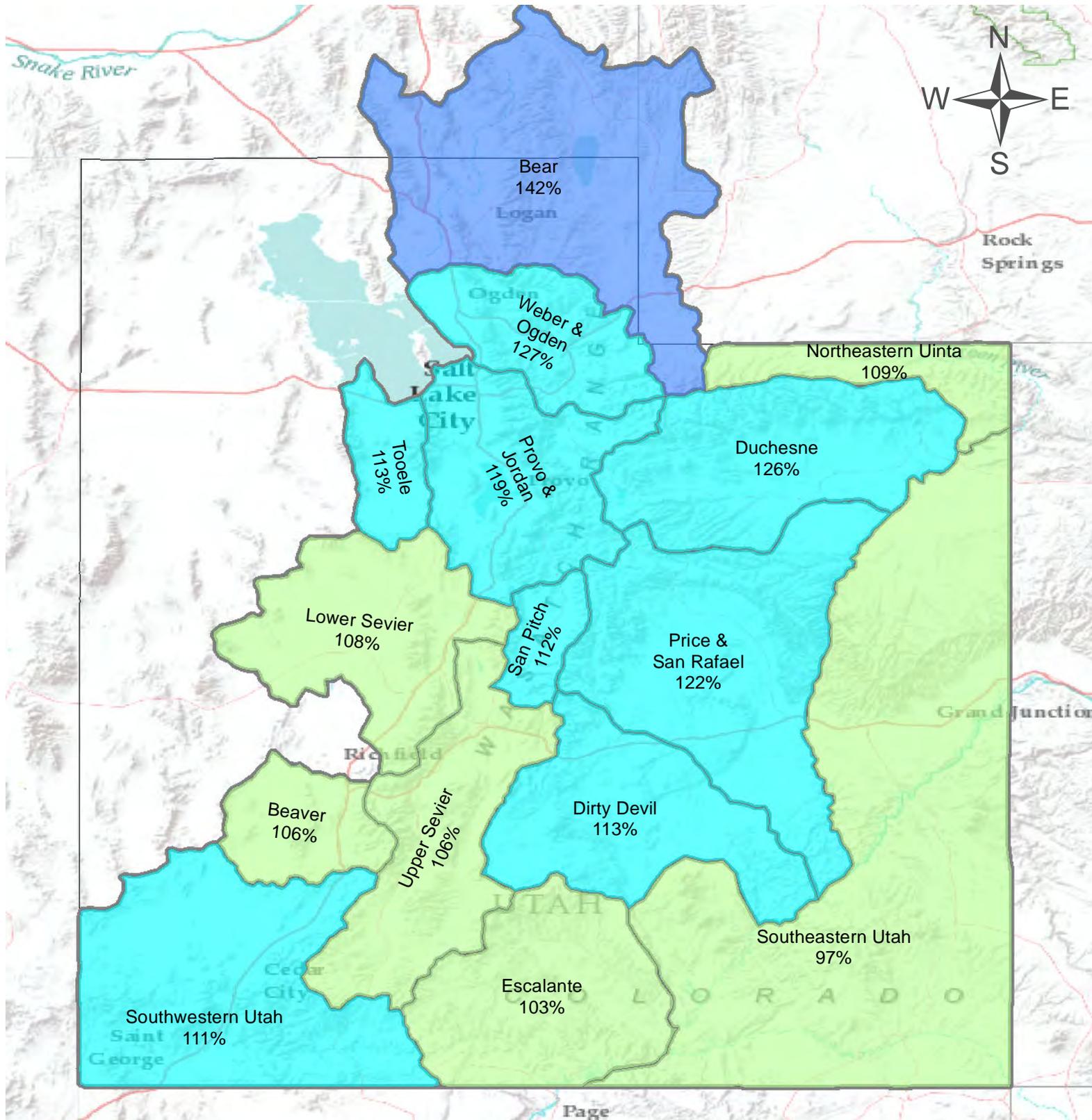
*This report has been reorganized to better reflect two distinct geographic areas being monitored – the low elevation valley sites (**Soil Climate Analysis Network**) that are critical for agricultural production and operations, and the high elevation mountainous areas where water supply is generated (**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)

The average precipitation across all SCAN sites during July was 1.1 inches compared to just 0.1 inch last month, a dramatic turnaround in precipitation amounts. It was much drier in northern Utah ~0.2 inches and wetter in the south at 1.5 inches. June is typically the driest month of the year with a rebound in July and August. Soil moisture at 36% of capacity is just a little more than last year's 33%.

Current Mountain Conditions (SNOTEL)

Streamflow across the state continues to be near average at nearly all locations, a sign of a good runoff year and in stark contrast to the past few years. July precipitation was a most welcome 135% of average much better than the dry June figures. Statewide soil moisture is in much better condition at 42% of saturation compared to 31% last year. Reservoir storage is in outstanding shape at 79% of capacity compared to 59% last year. Overall, a lot of positive indicators (streamflow, reservoir storage and soil moisture) regarding water supply across the state.



Statewide Precipitation

As of August 1, 2017:

122% of Normal Precipitation

135% of Normal Precipitation Last Month

% of Normal

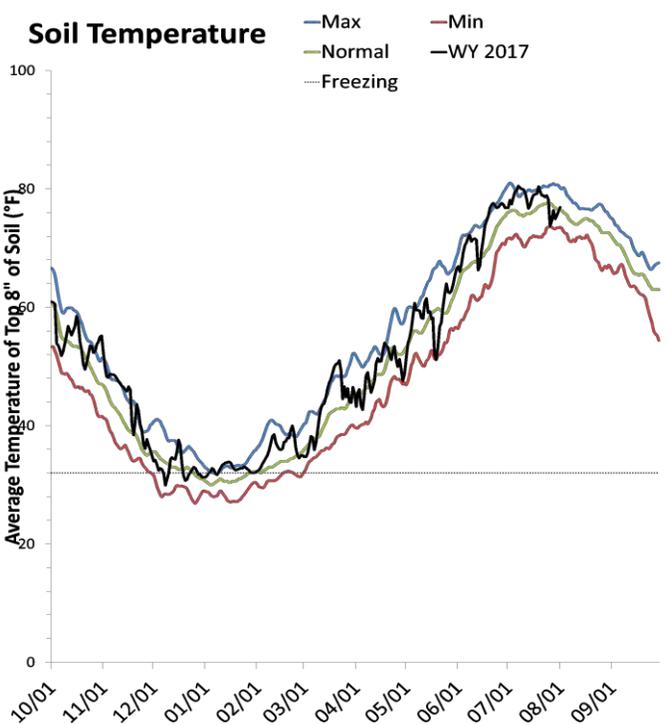
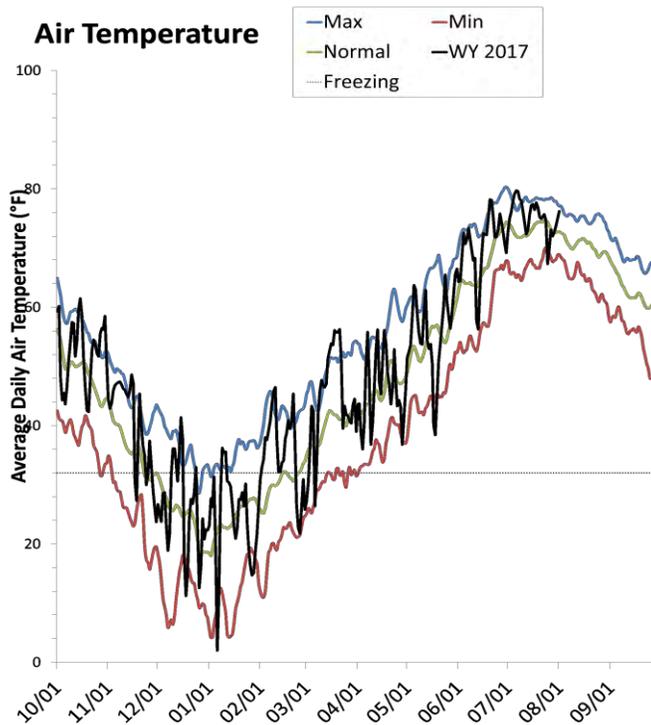
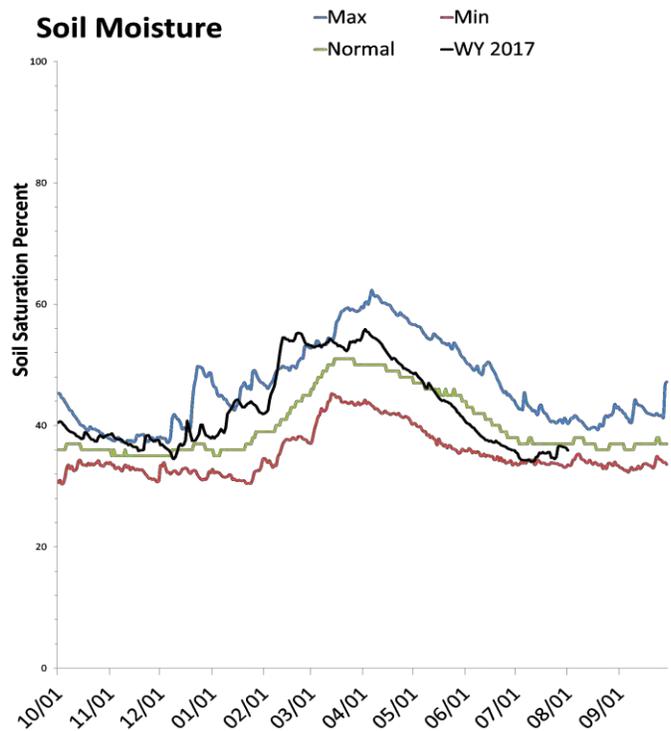
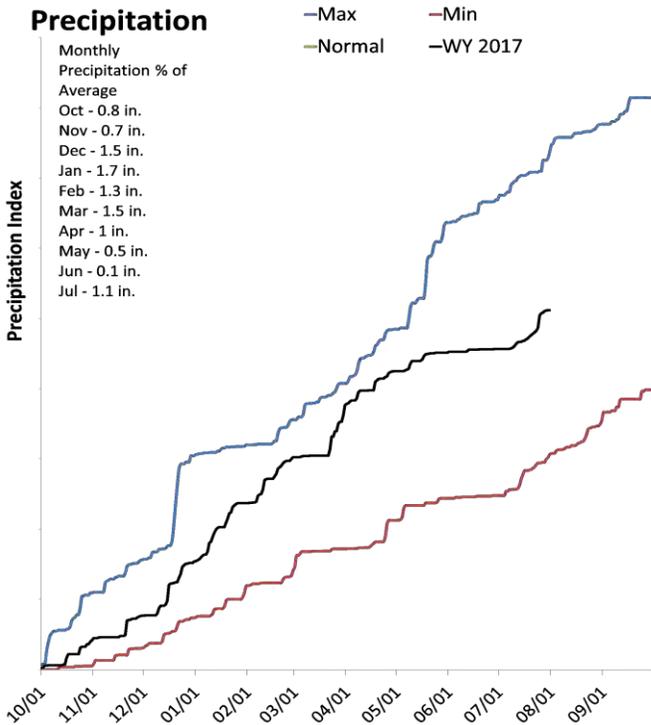
- < 50%
- 50 - 69%
- 70 - 89%
- 90 - 109%
- 110 - 129%
- 130 - 149%
- > 150%



Statewide SCAN

August 1, 2017

The average precipitation at SCAN sites within Utah was 1.1 inches in July, which brings the seasonal accumulation (Oct-Jul) to 10.2 inches. Soil moisture is at 36% compared to 33% last year.



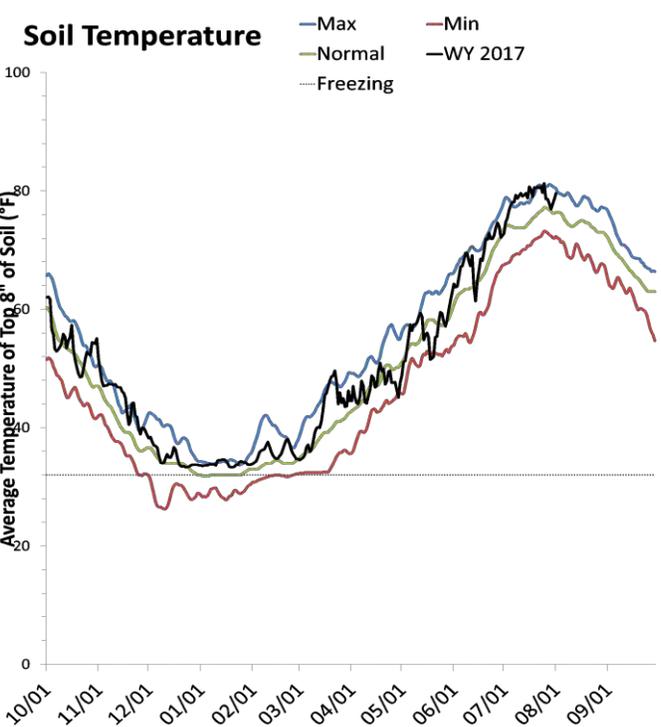
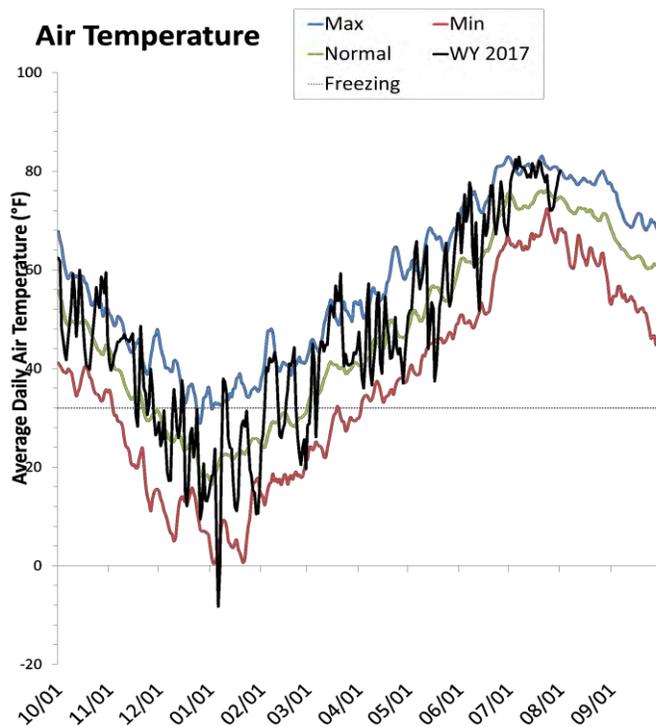
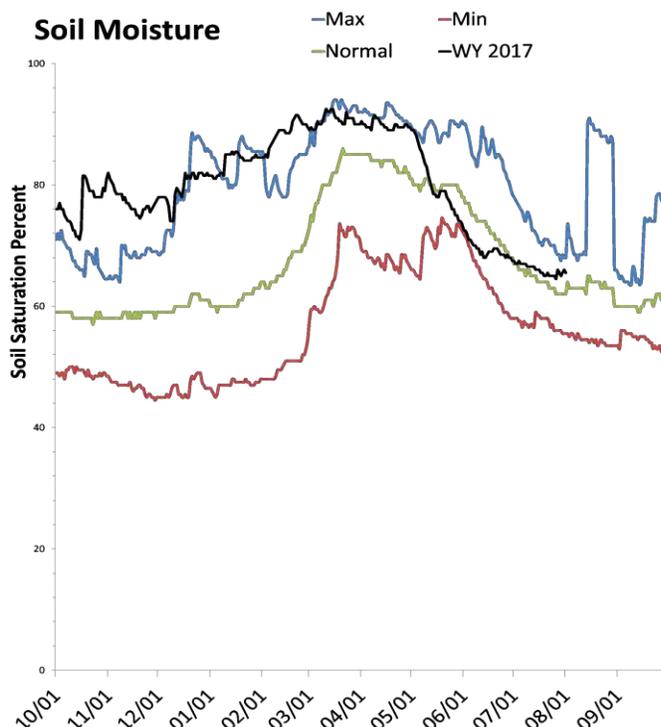
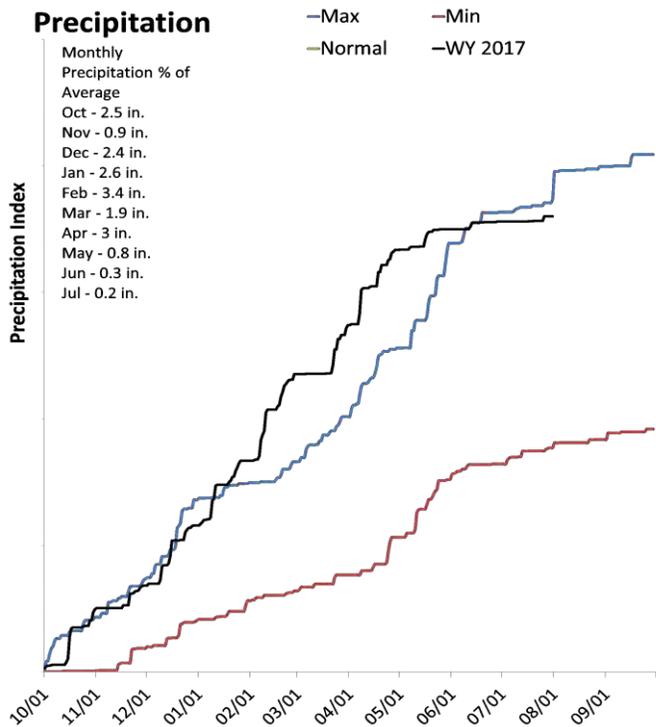
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

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North Central

August 1, 2017

The average precipitation in July at SCAN sites within the basin was 0.2 inches, which brings the seasonal accumulation (Oct-Jul) to 18 inches. Soil moisture is at 66% compared to 63% last year.



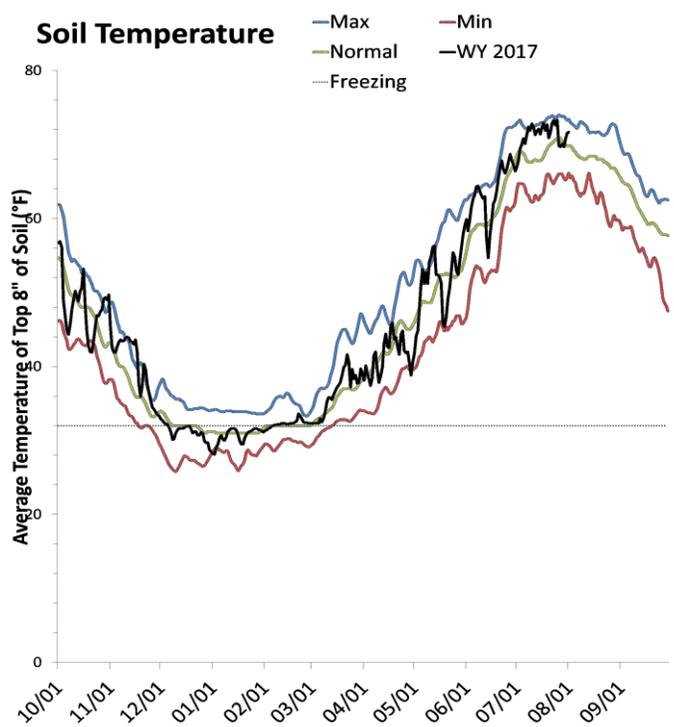
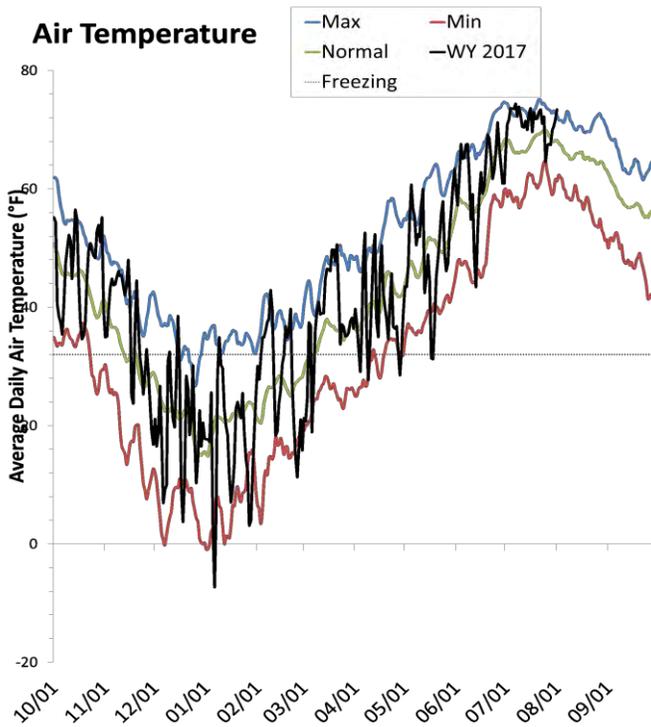
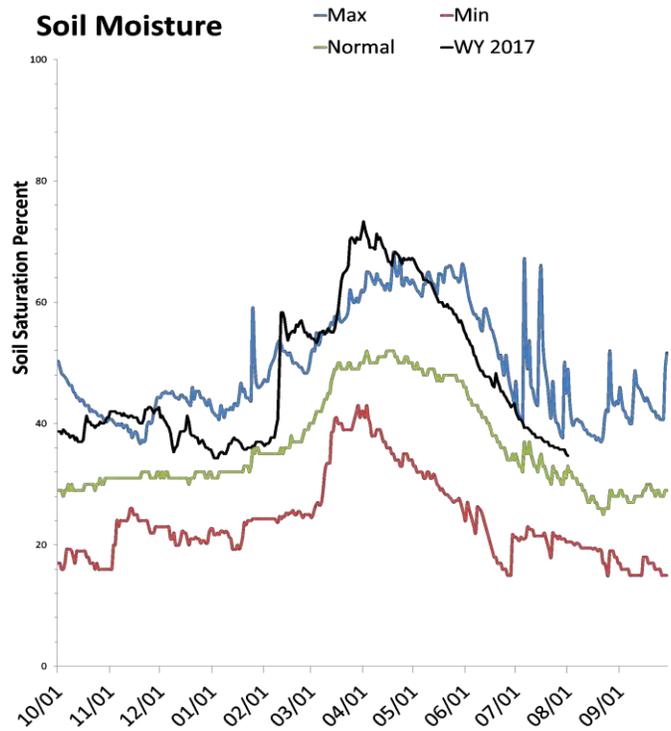
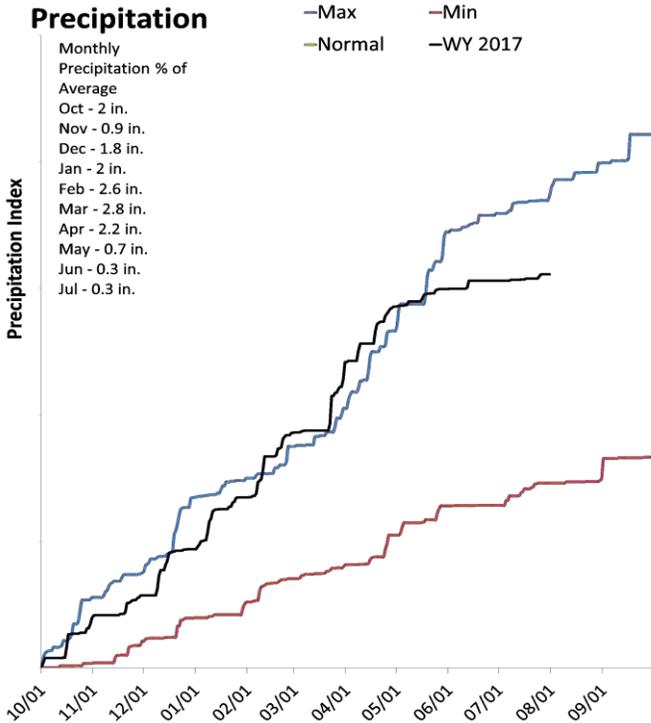
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

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Northern Mountains

August 1, 2017

The average precipitation in July at SCAN sites within the basin was 0.3 inches, which brings the seasonal accumulation (Oct-Jul) to 15.6 inches. Soil moisture is at 36% compared to 33% last year.



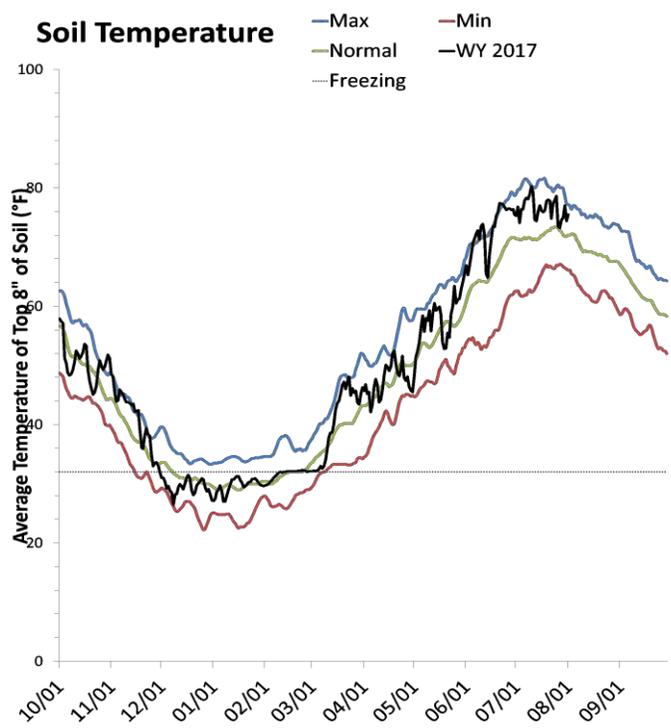
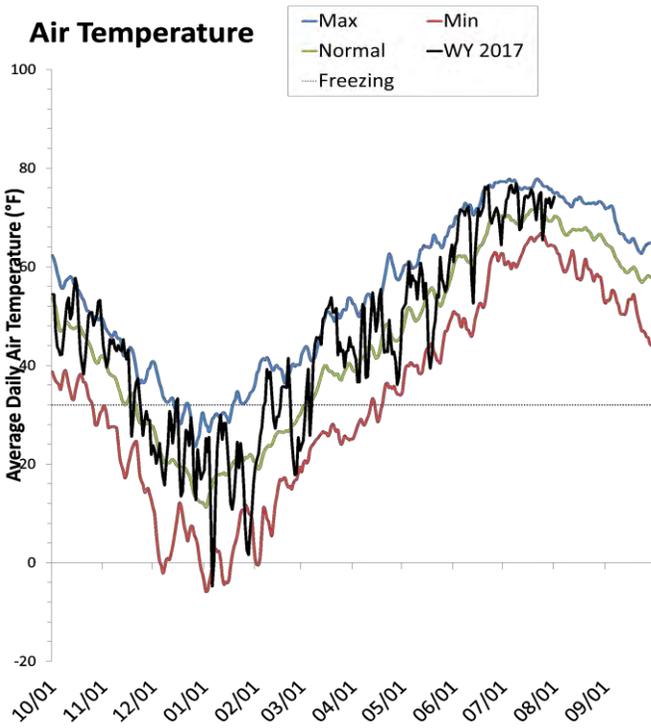
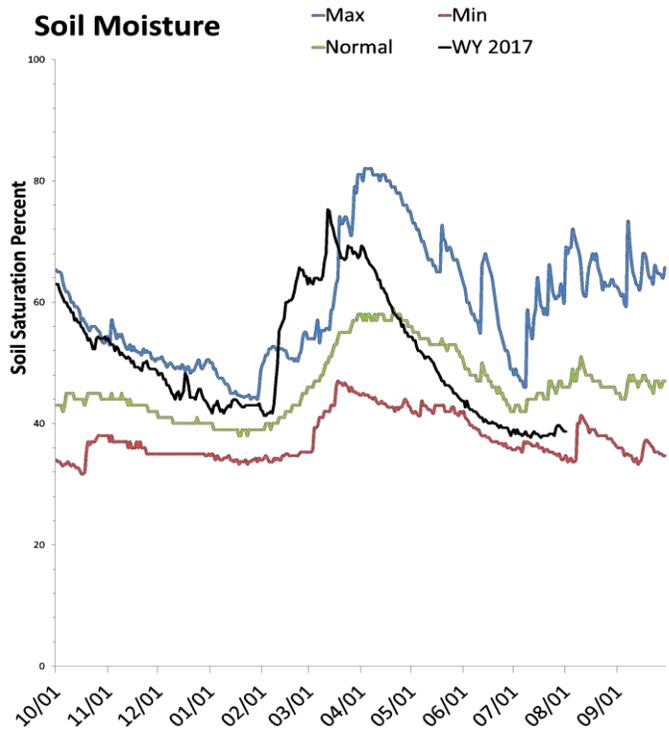
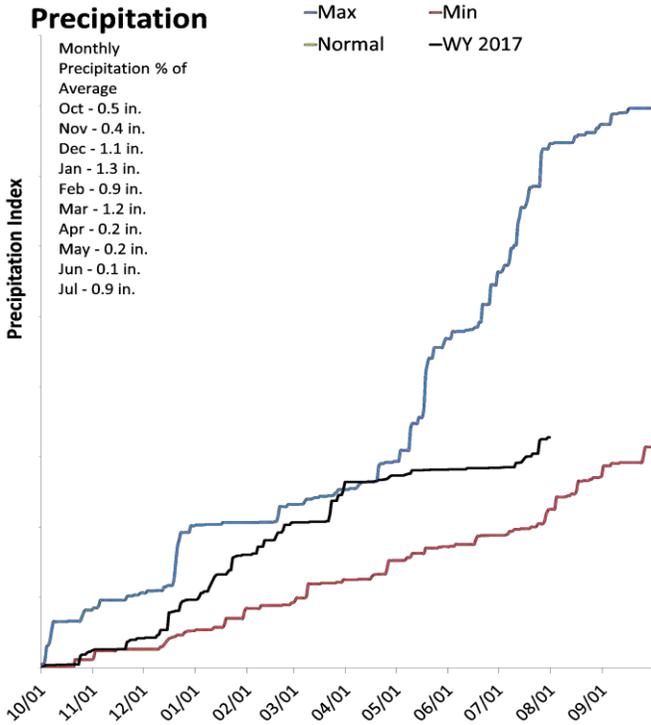
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

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Uinta Basin

August 1, 2017

The average precipitation in July at SCAN sites within the basin was 0.9 inches, which brings the seasonal accumulation (Oct-Jul) to 6.6 inches. Soil moisture is at 39% compared to 35% last year.



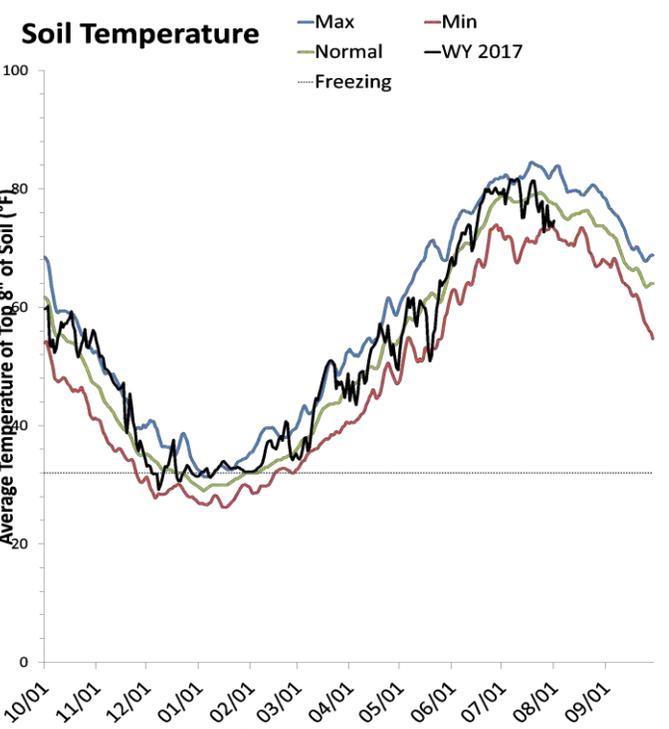
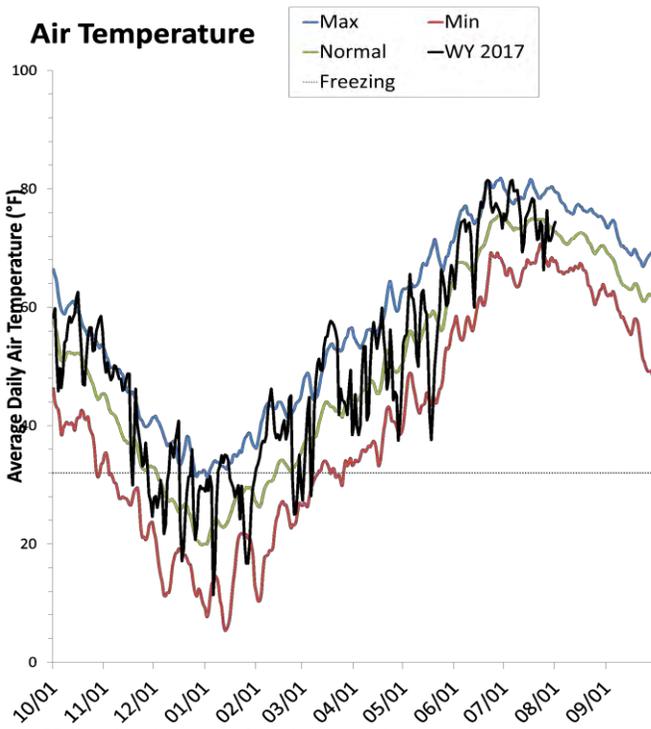
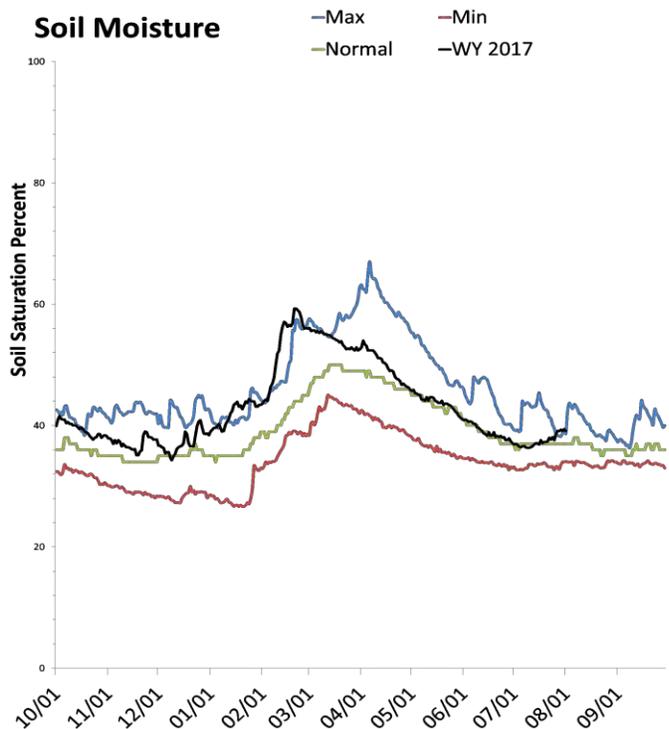
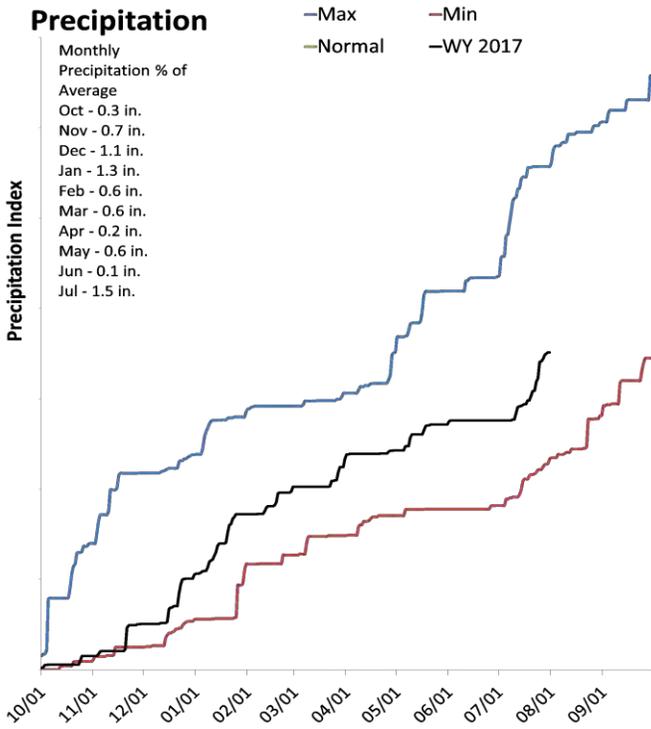
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

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Southeast

August 1, 2017

The average precipitation in July at SCAN sites within the basin was 1.5 inches, which brings the seasonal accumulation (Oct-Jul) to 7 inches. Soil moisture is at 39% compared to 36% last year.



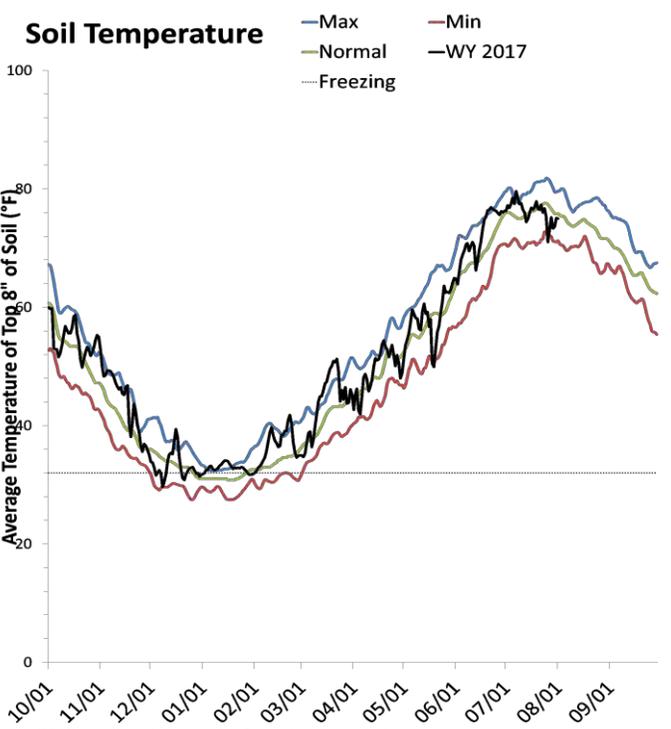
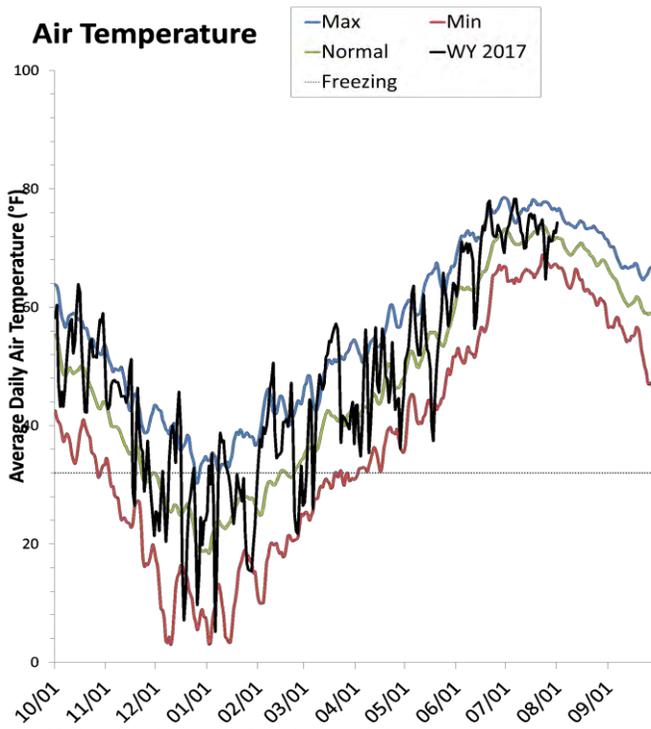
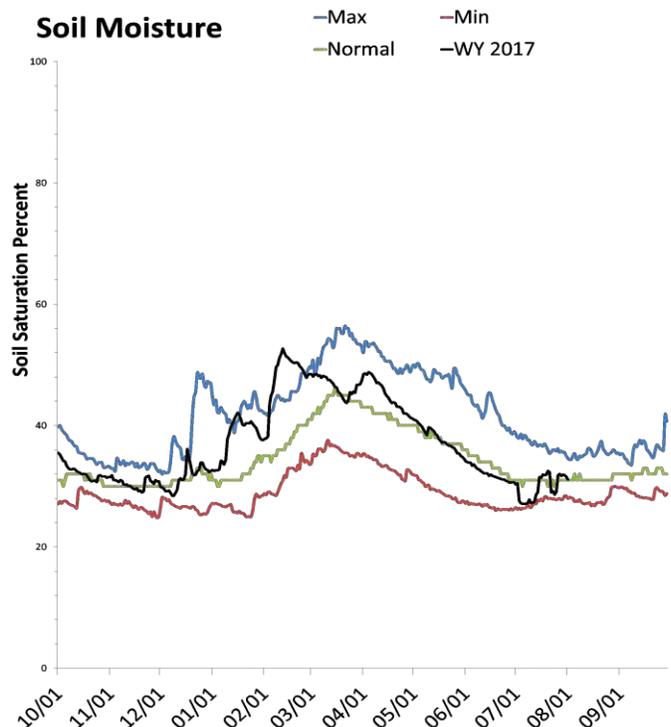
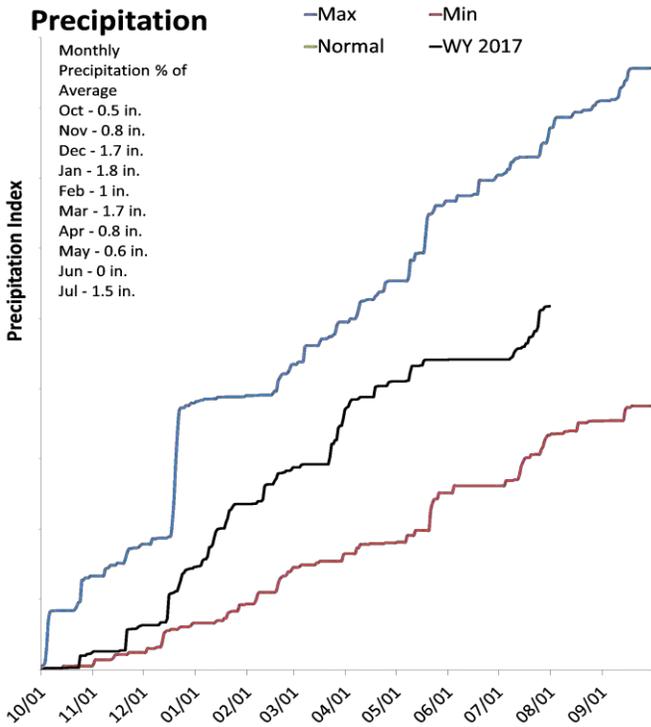
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

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South Central

August 1, 2017

The average precipitation in July at SCAN sites within the basin was 1.5 inches, which brings the seasonal accumulation (Oct-Jul) to 10.4 inches. Soil moisture is at 32% compared to 30% last year.



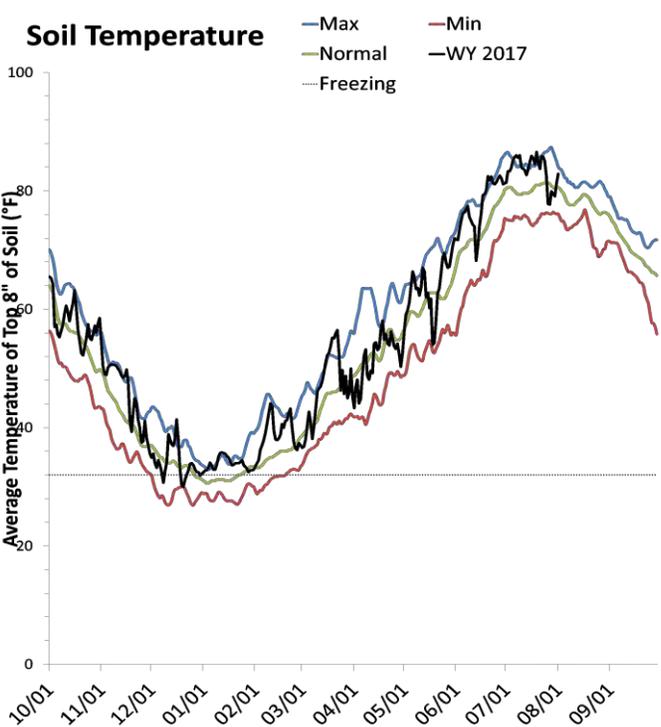
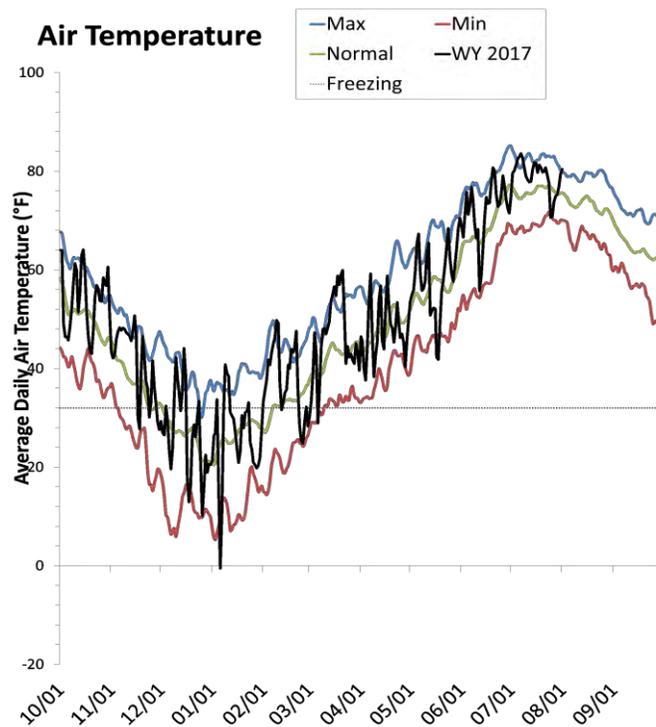
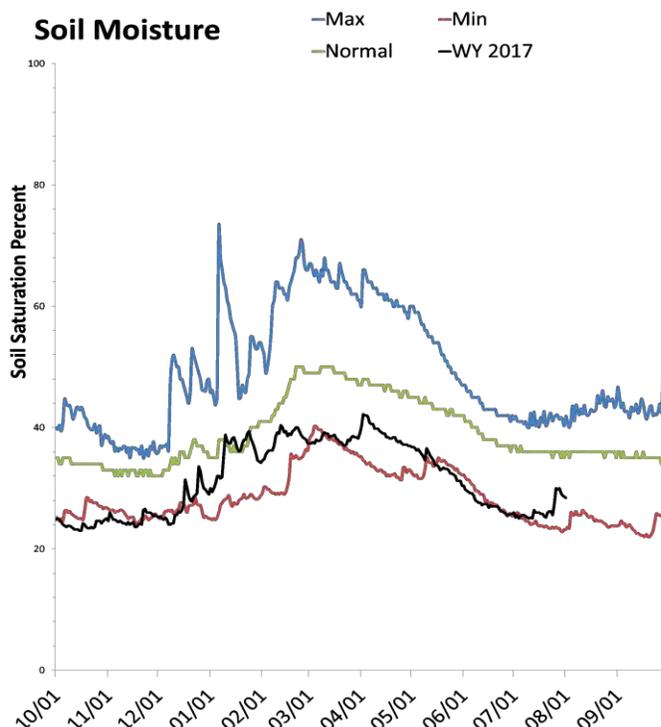
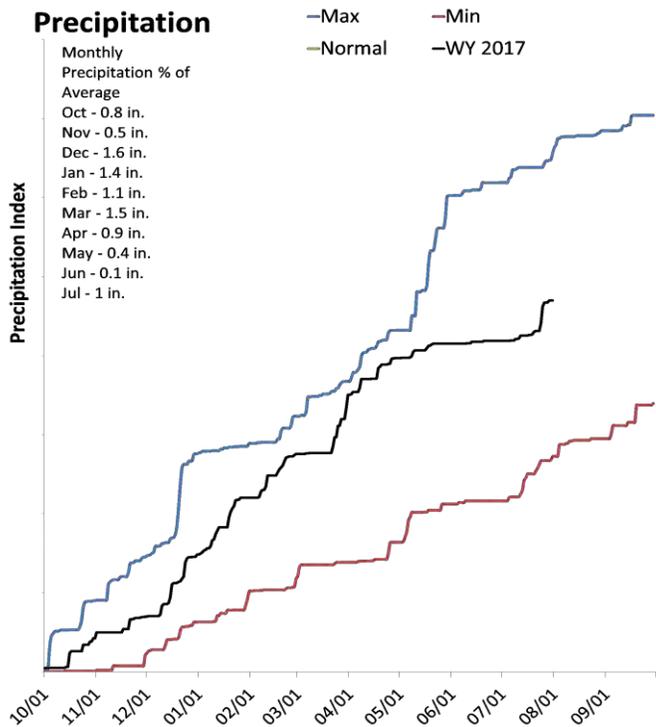
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

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Western and Dixie

August 1, 2017

The average precipitation in July at SCAN sites within the basin was 1 inches, which brings the seasonal accumulation (Oct-Jul) to 9.4 inches. Soil moisture is at 29% compared to 20% last year.



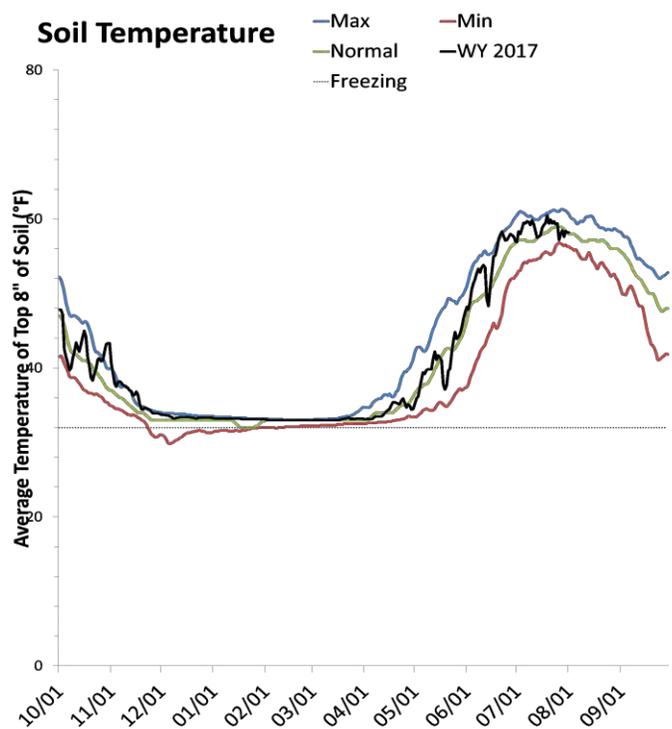
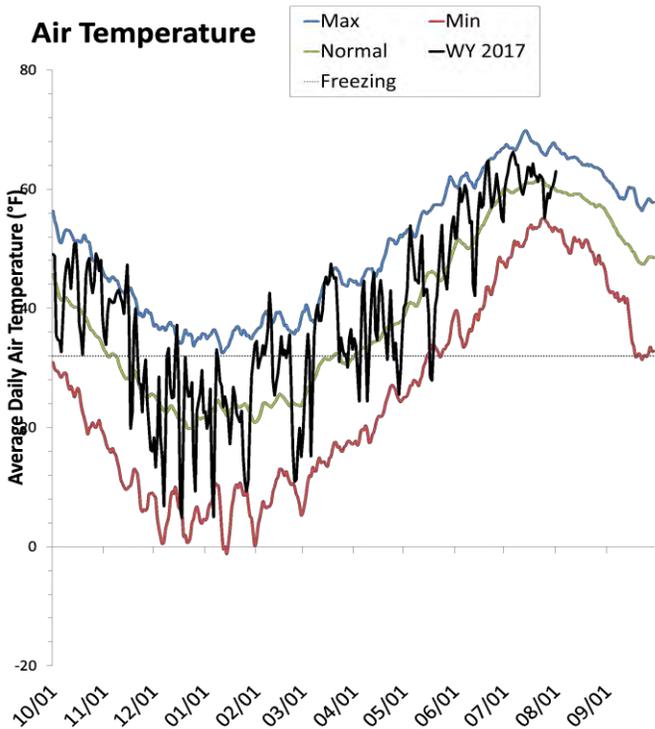
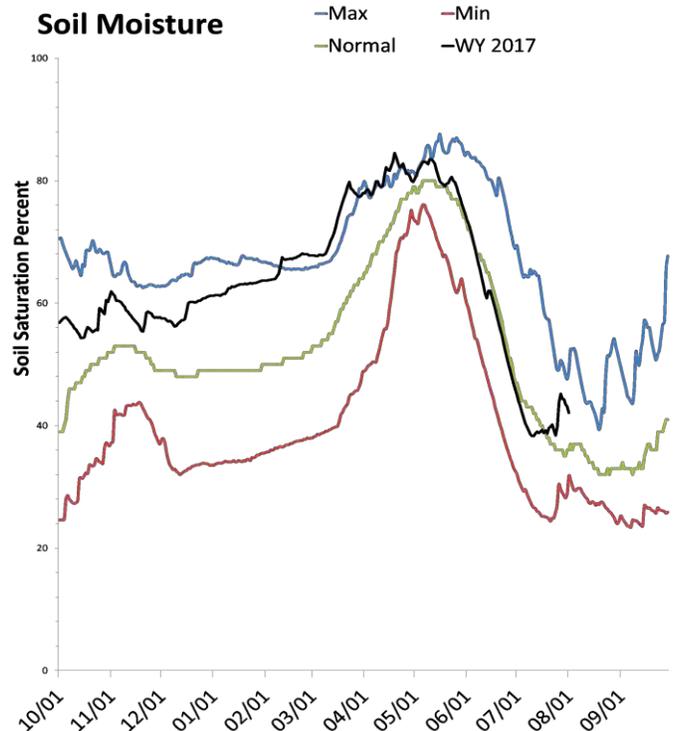
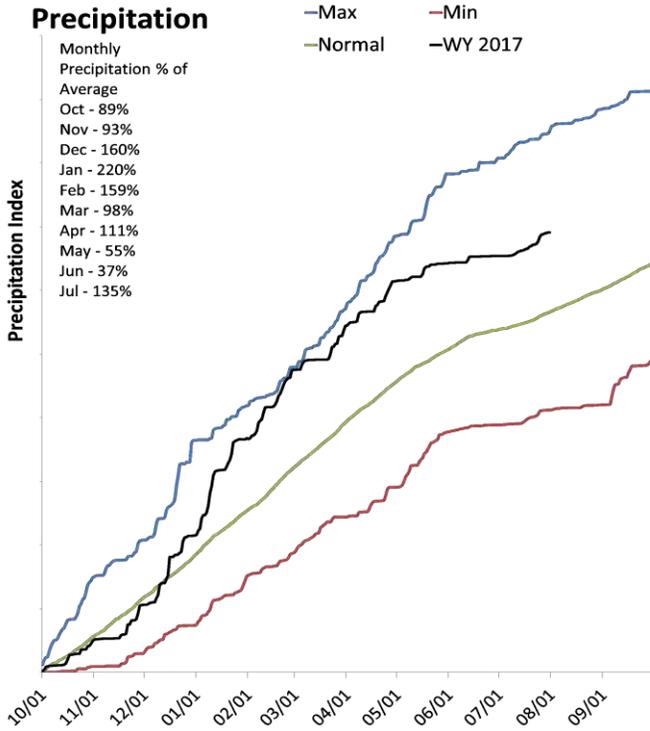
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

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Statewide SNOTEL

August 1, 2017

Precipitation at SNOTEL sites during July was much above average at 135%, which brings the seasonal accumulation (Oct-Jul) to 122% of average. Soil moisture is at 42% compared to 31% last year. Reservoir storage is at 79% of capacity, compared to 56% last year.



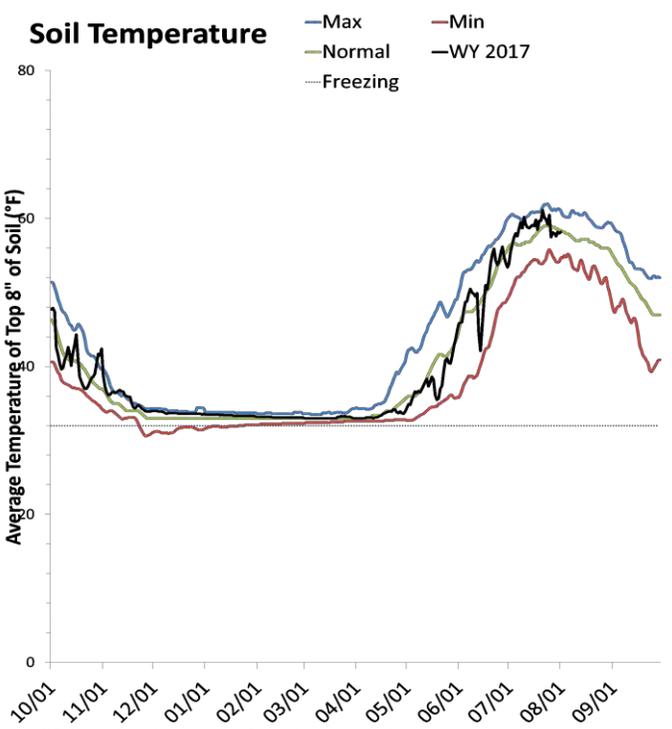
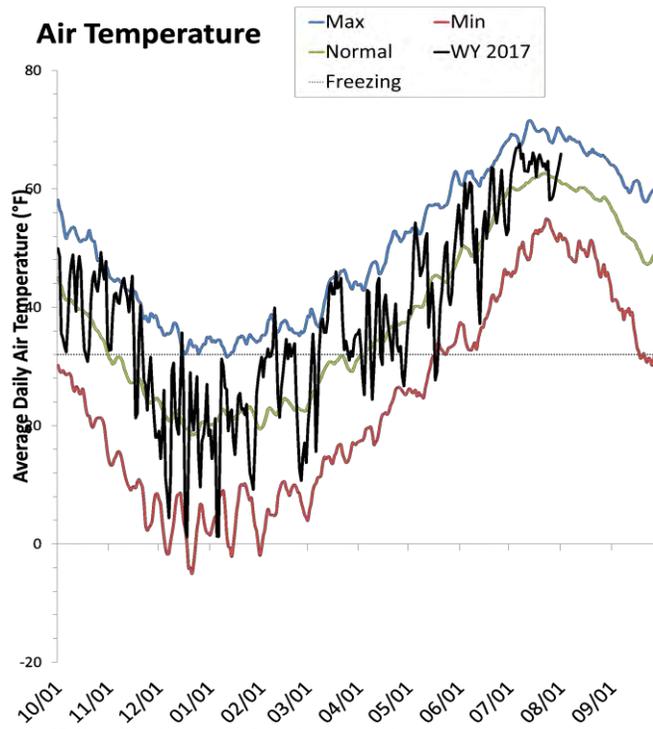
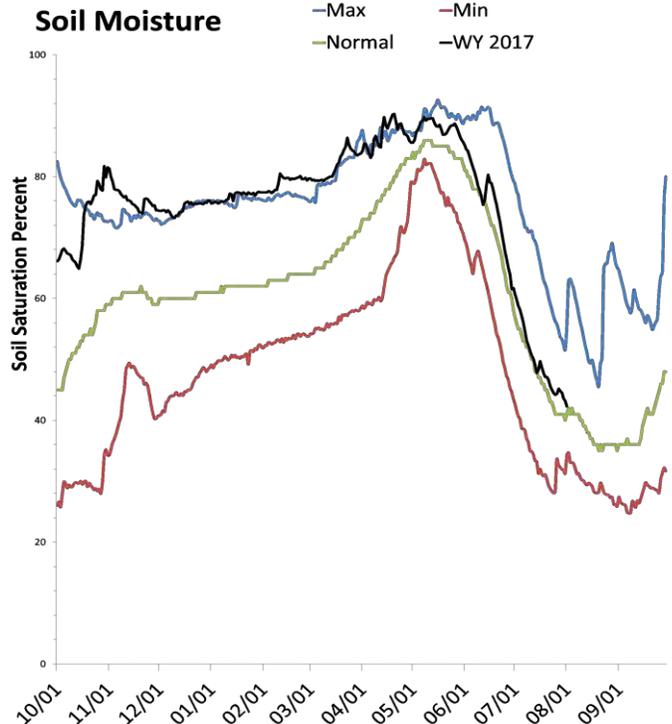
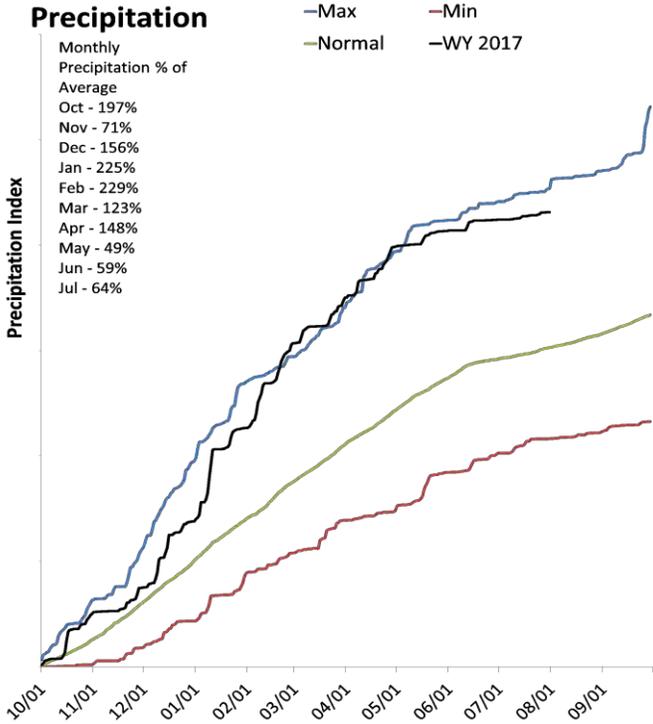
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

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Bear River Basin

August 1, 2017

Precipitation in July was much below average at 64%, which brings the seasonal accumulation (Oct-Jul) to 142% of average. Soil moisture is at 43% compared to 33% last year. Reservoir storage is at 91% of capacity, compared to 45% last year. The water availability index for the Bear River is 76%, 68% for Woodruff Narrows and 85% for the Little Bear.



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

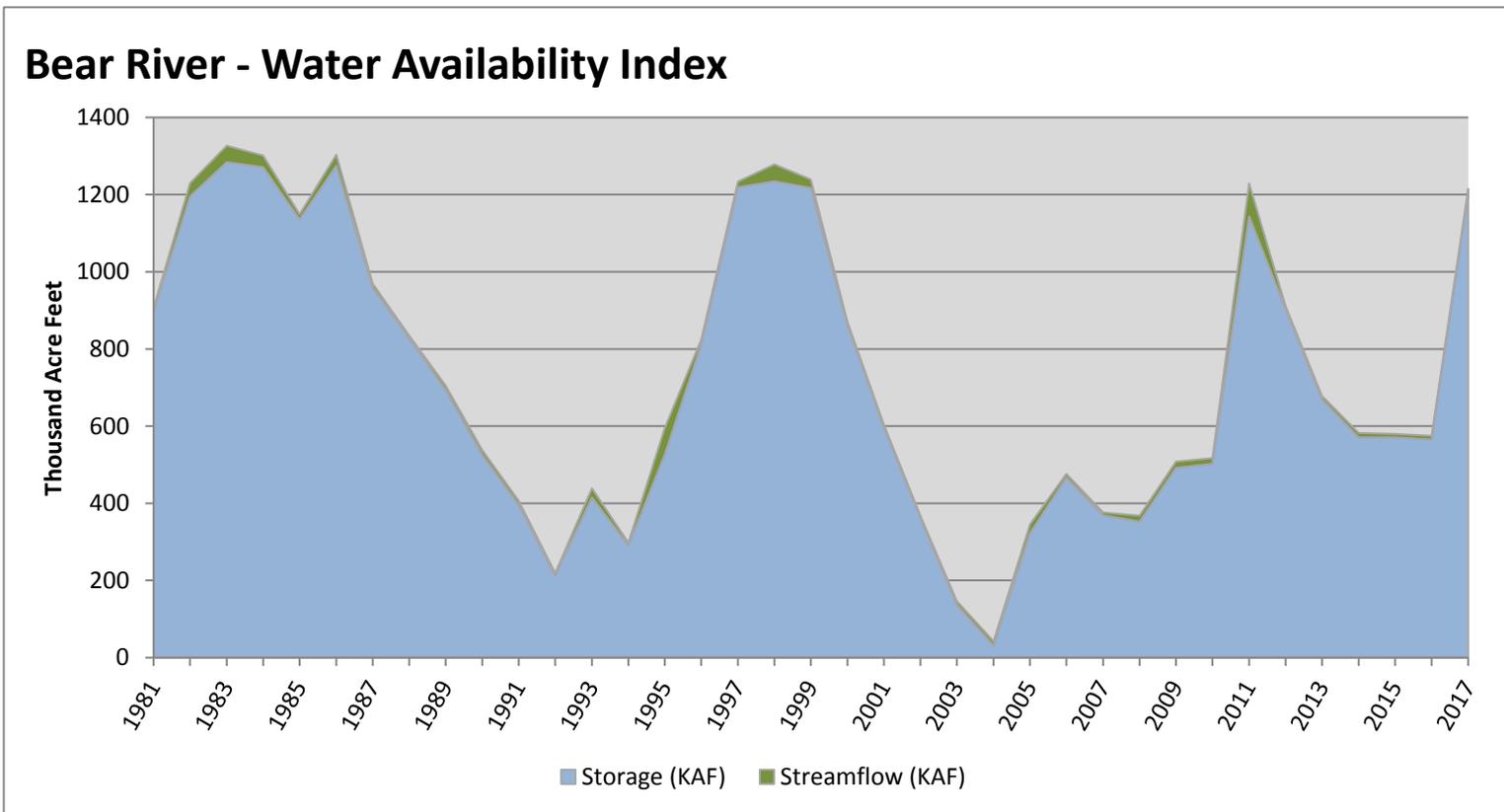
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August 1, 2017

Water Availability Index

Basin or Region	Jul EOM [*] Storage	July Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Bear River	1201.46	13.07	1214.53	76	2.19	87, 85, 11, 82

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

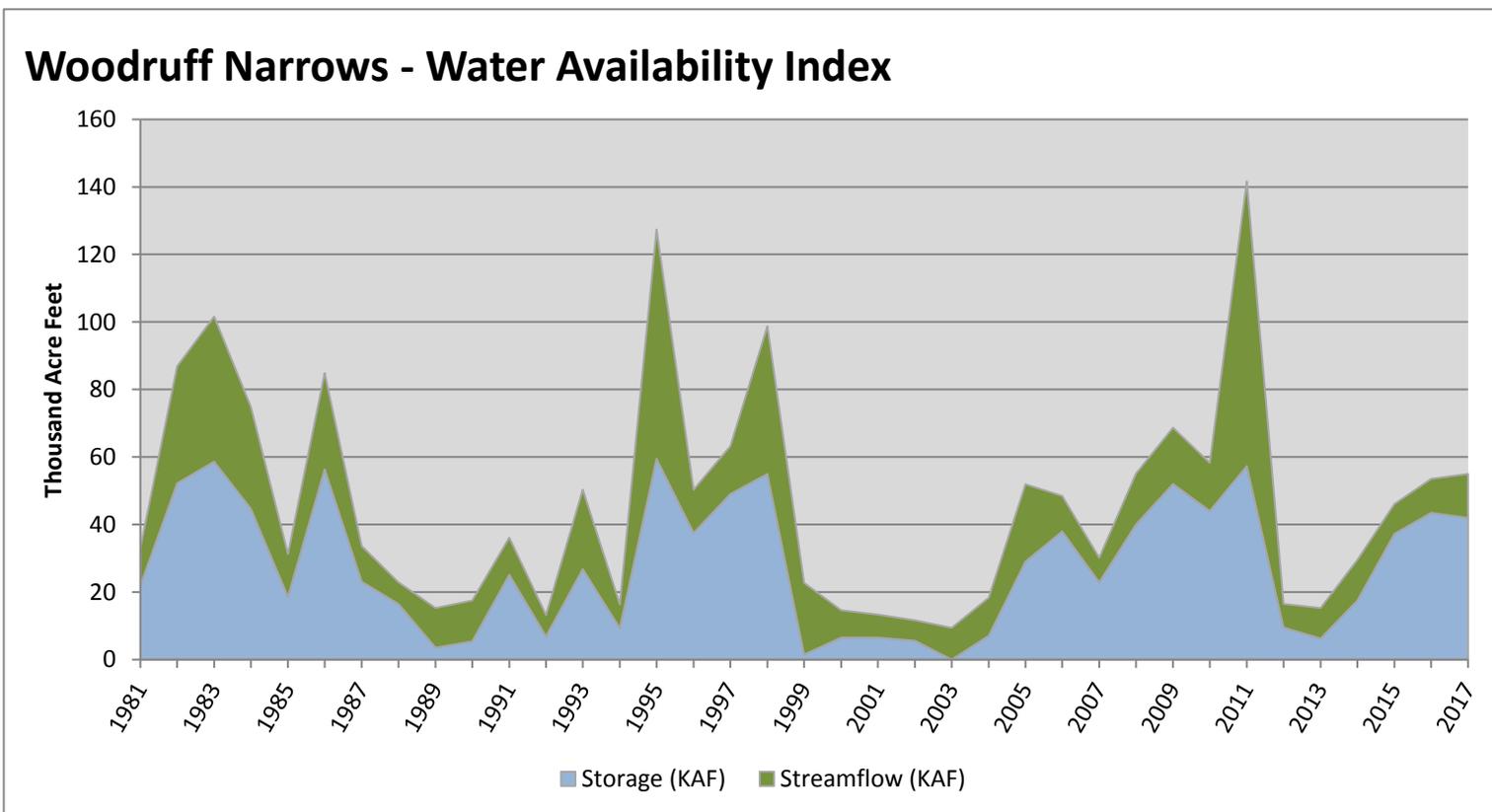


August 1, 2017

Water Availability Index

Basin or Region	Jul EOM [*] Storage	July Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Woodruff Narrows	41.95	13.07	55.02	68	1.54	05, 16, 08, 10

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

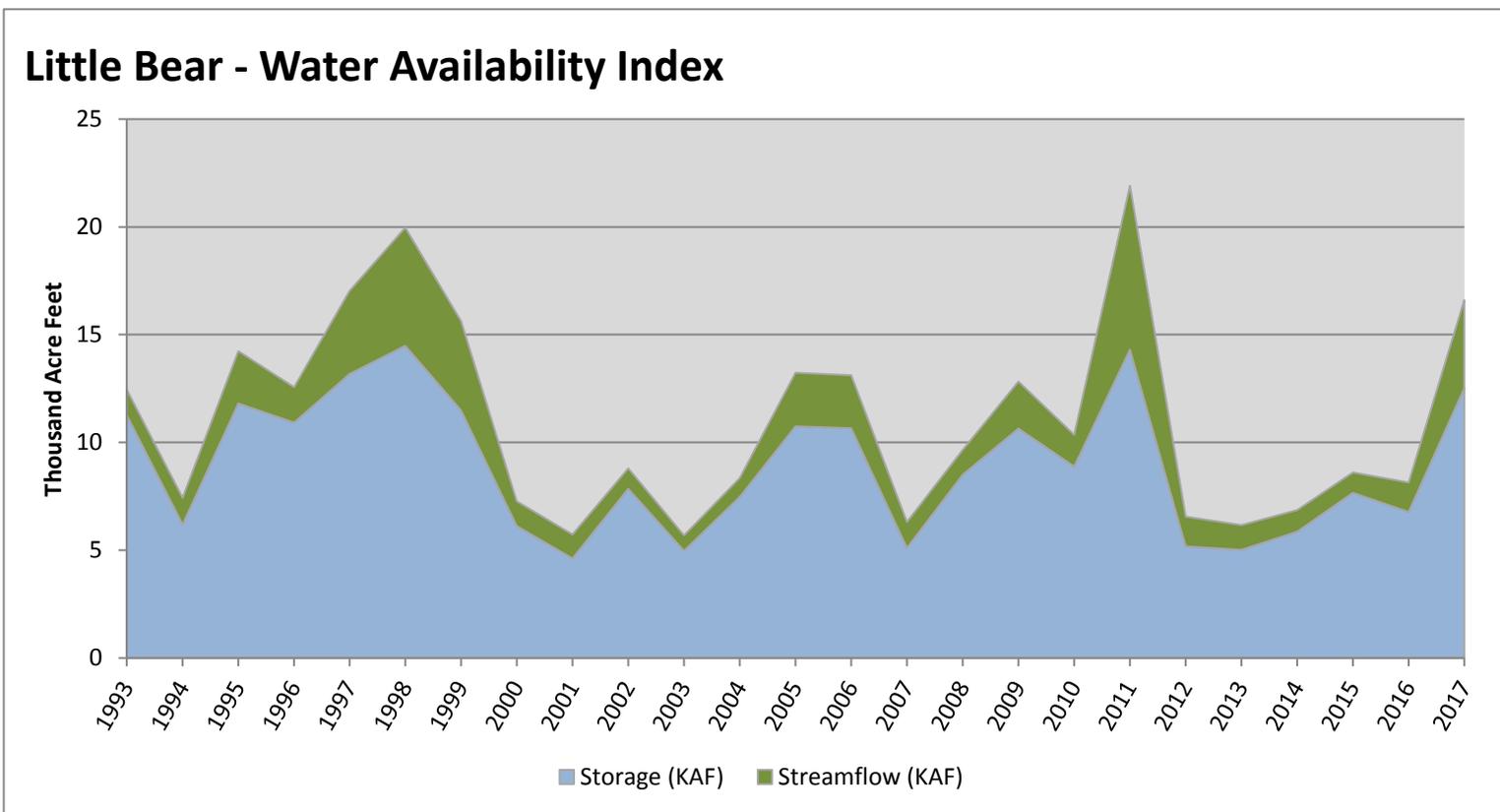


August 1, 2017

Water Availability Index

Basin or Region	Jul EOM [*] Storage	July Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Little Bear	12.52	4.09	16.61	85	2.88	95, 99, 97, 98

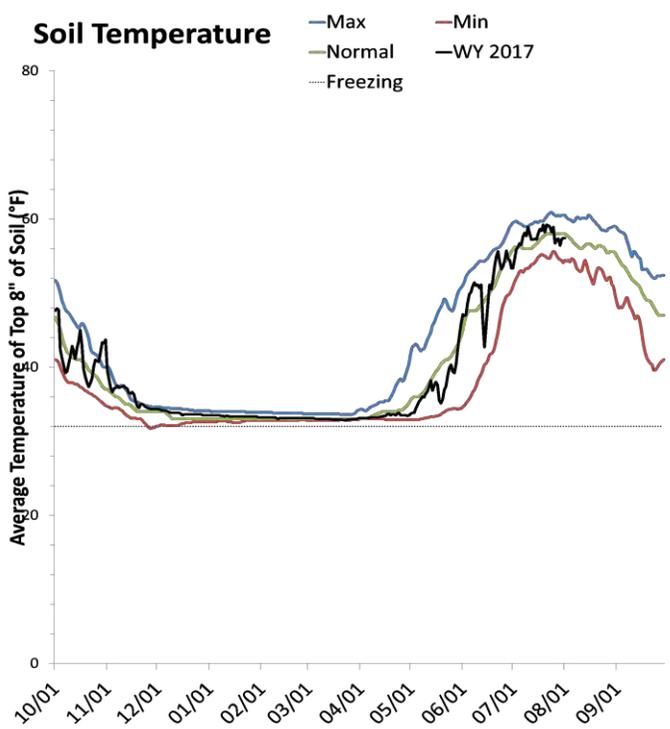
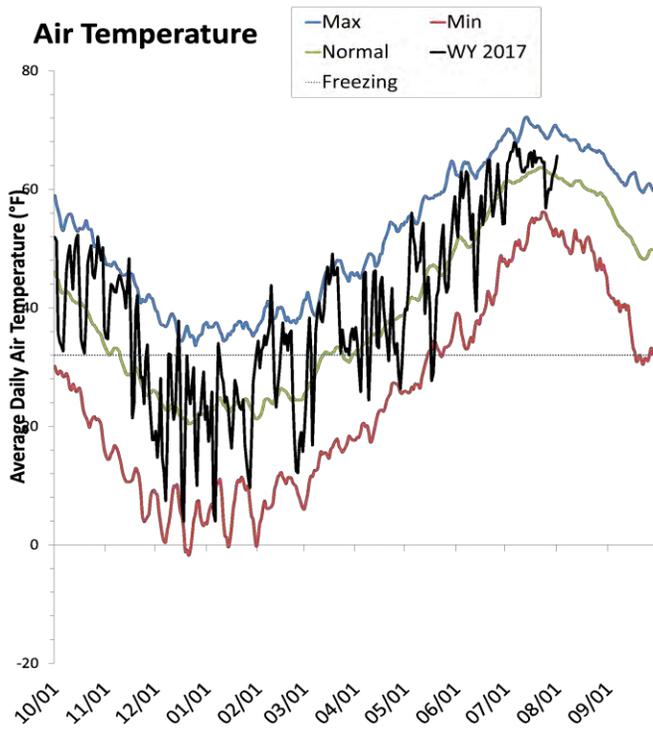
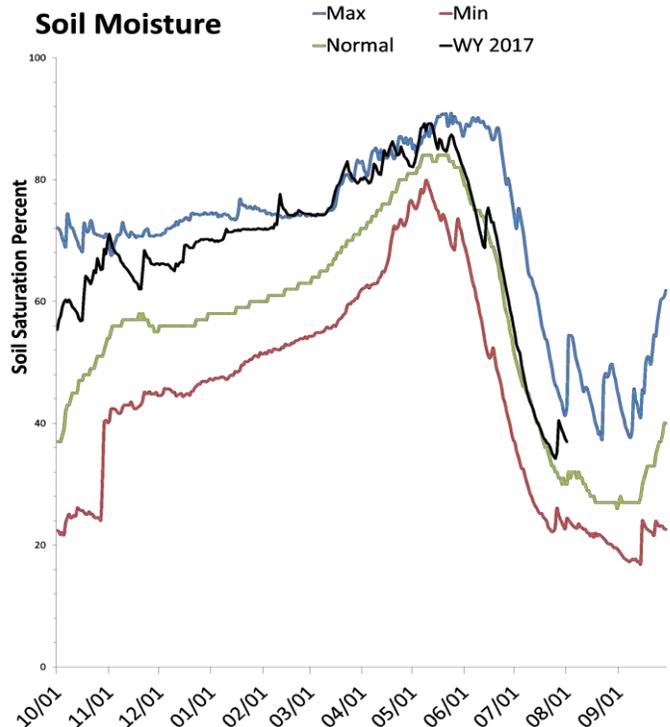
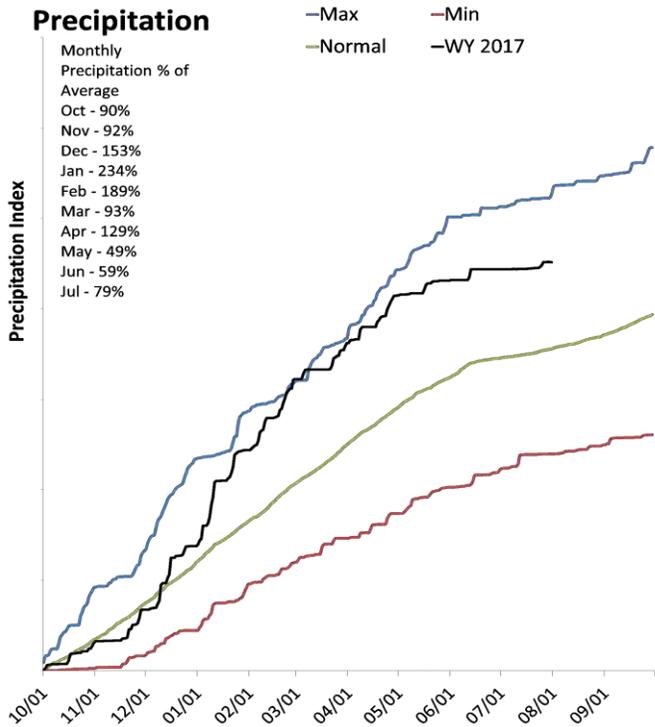
^{*}EOM, end of month; [#]WAI, Water Availability Index; [^]KAF, thousand acre-feet.



Weber & Ogden River Basins

August 1, 2017

Precipitation in July was below average at 80%, which brings the seasonal accumulation (Oct-Jul) to 127% of average. Soil moisture is at 37% compared to 23% last year. Reservoir storage is at 87% of capacity, compared to 69% last year. The water availability index for the Ogden River is 79% and 68% for the Weber River.



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

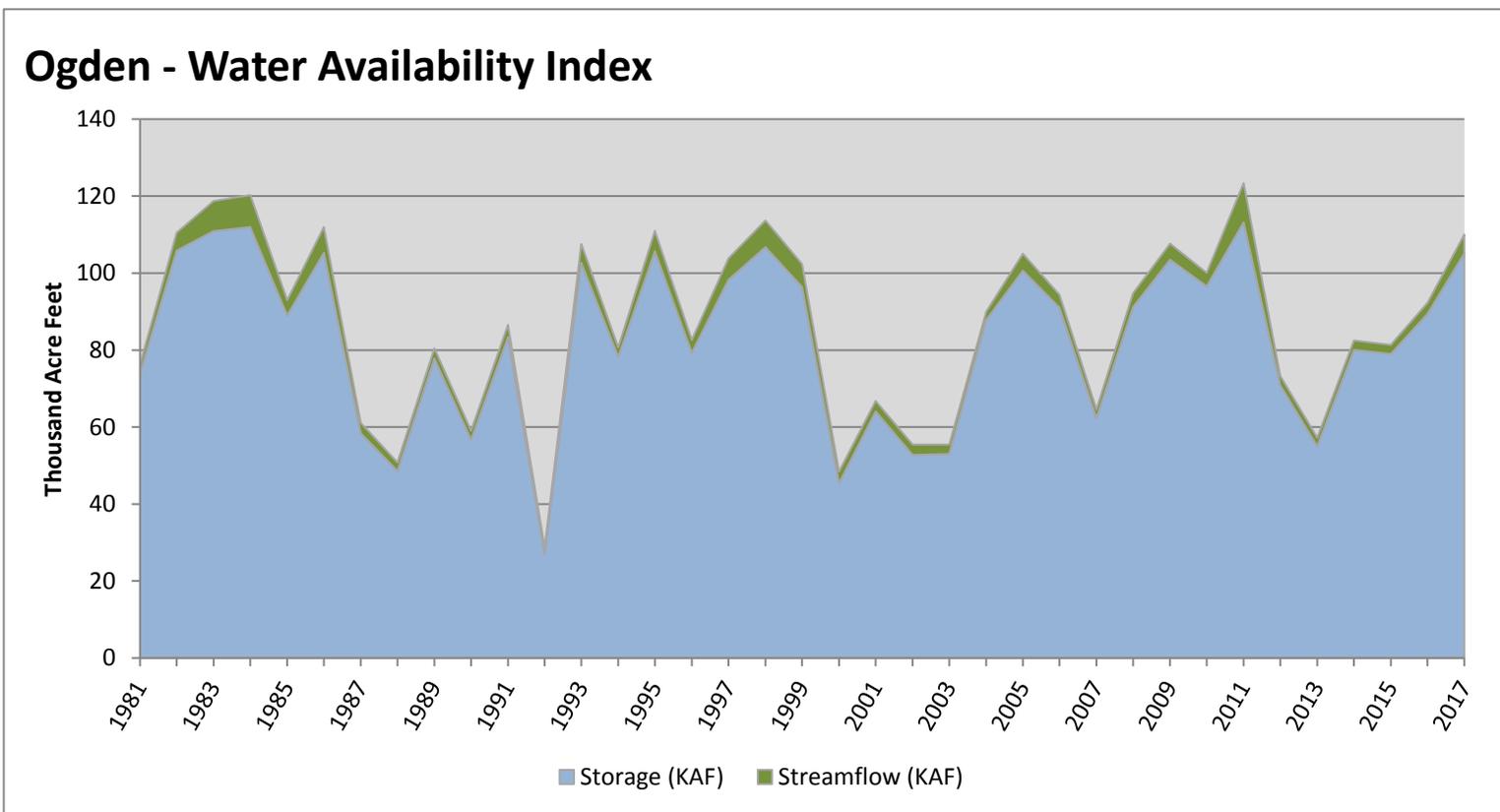
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

August 1, 2017

Water Availability Index

Basin or Region	Jul EOM [*] Storage	July Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Ogden	105.12	4.91	110.03	79	2.41	93, 09, 82, 95

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

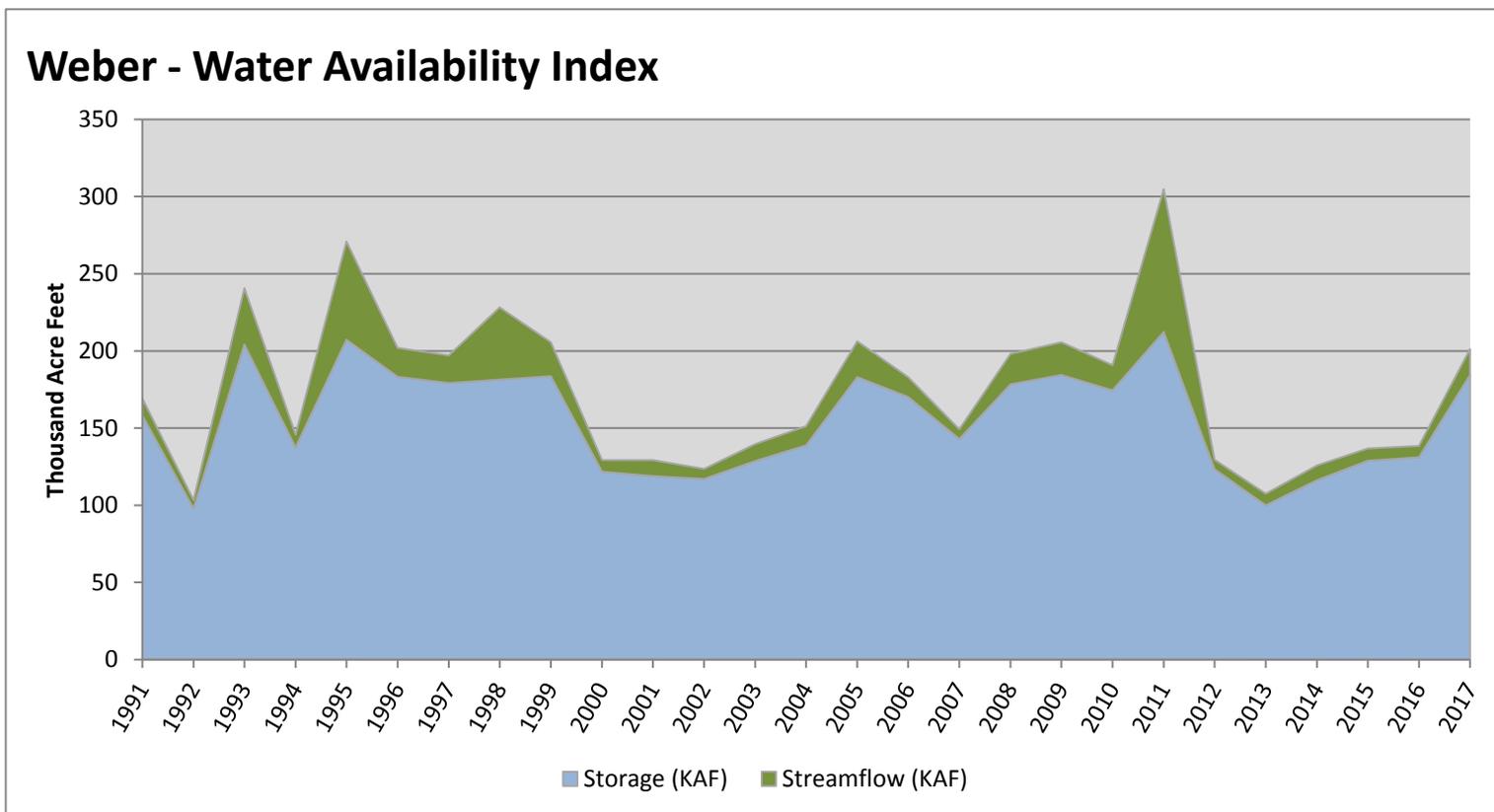


August 1, 2017

Water Availability Index

Basin or Region	Jul EOM [*] Storage	July Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Weber	184.42	16.69	201.11	68	1.49	97, 08, 96, 99

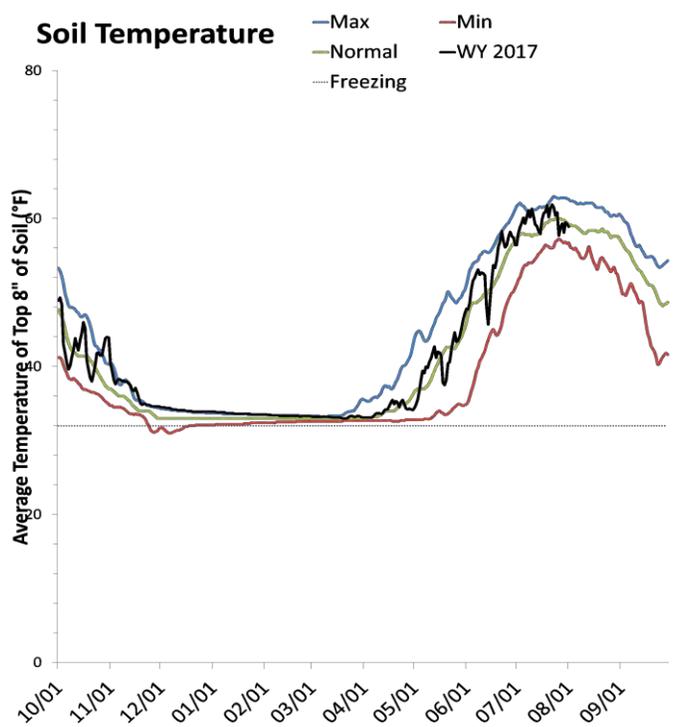
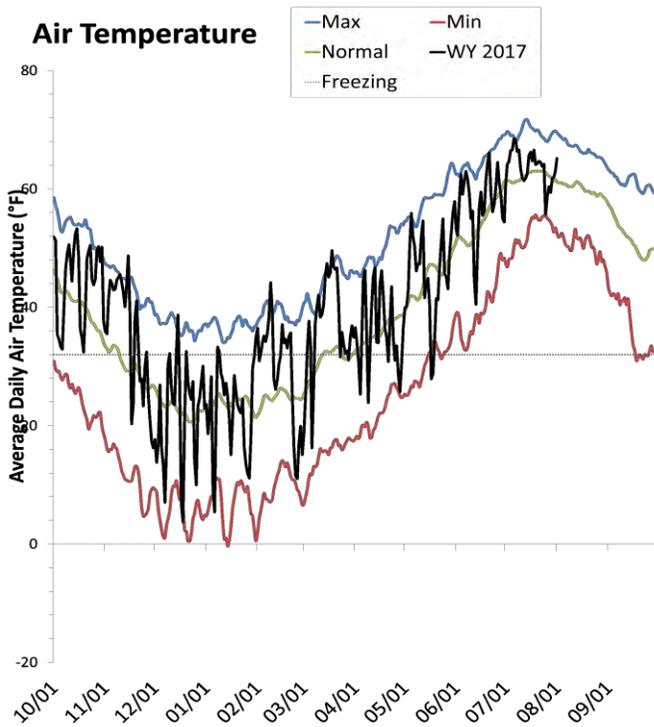
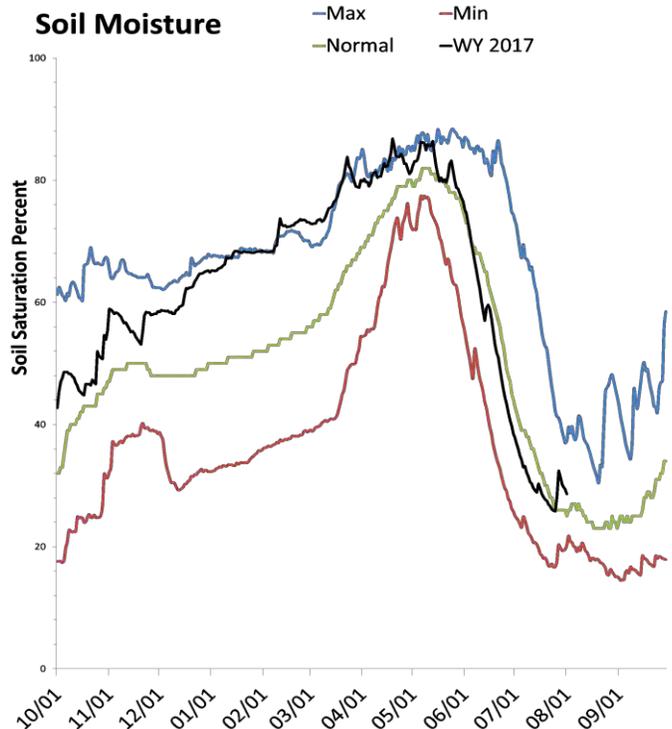
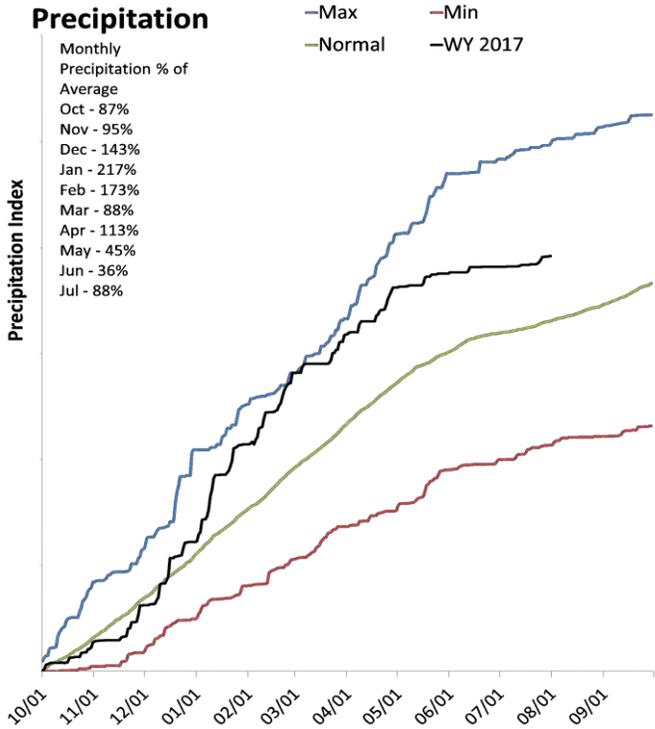
^{*}EOM, end of month; [#]WAI, Water Availability Index; [^]KAF, thousand acre-feet.



Provo & Jordan River Basins

August 1, 2017

Precipitation in July was below average at 87%, which brings the seasonal accumulation (Oct-Jul) to 119% of average. Soil moisture is at 29% compared to 22% last year. Reservoir storage is at 80% of capacity, compared to 63% last year. The water availability index for the Provo River is 83%.



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

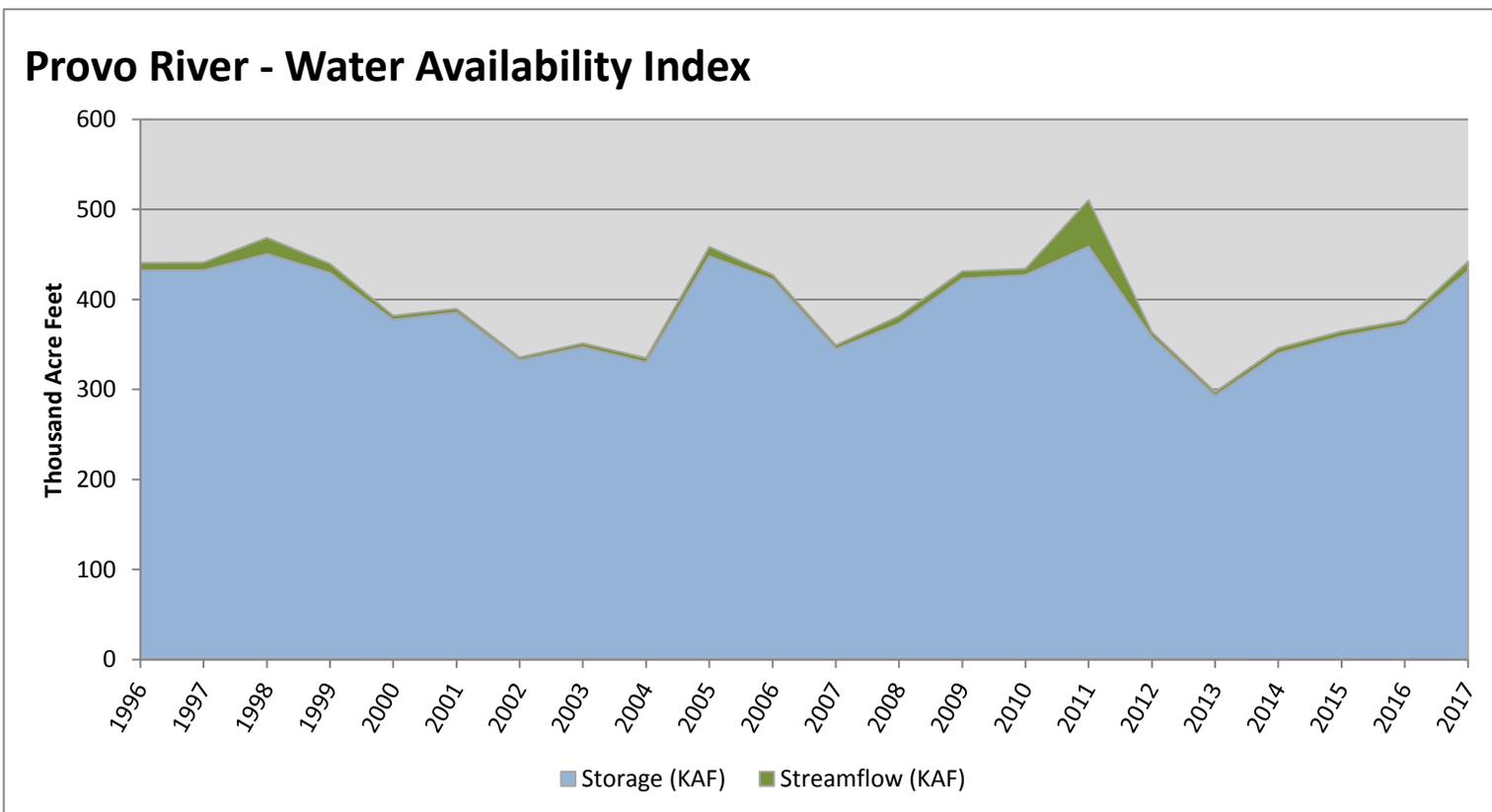
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

August 1, 2017

Water Availability Index

Basin or Region	Jul EOM [*] Storage	July Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Provo River	431.51	10.79	442.30	83	2.72	96, 97, 05, 98

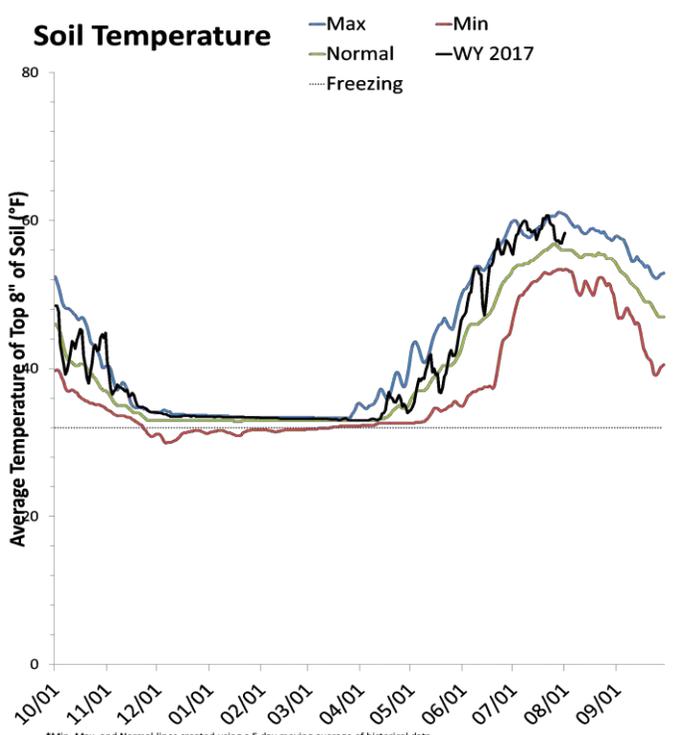
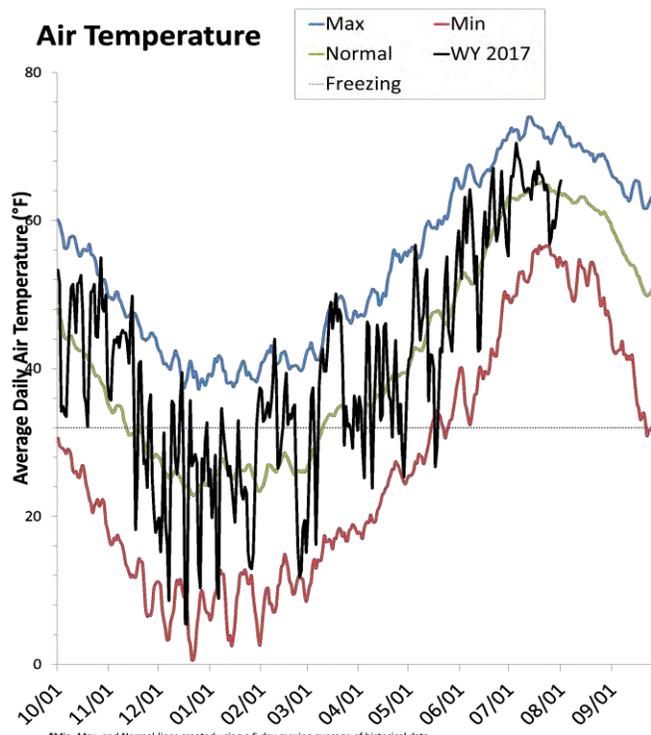
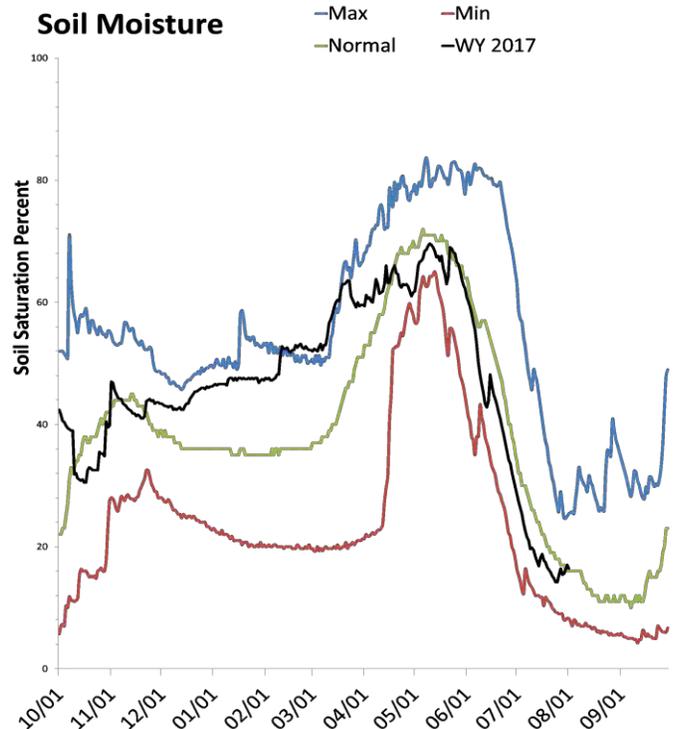
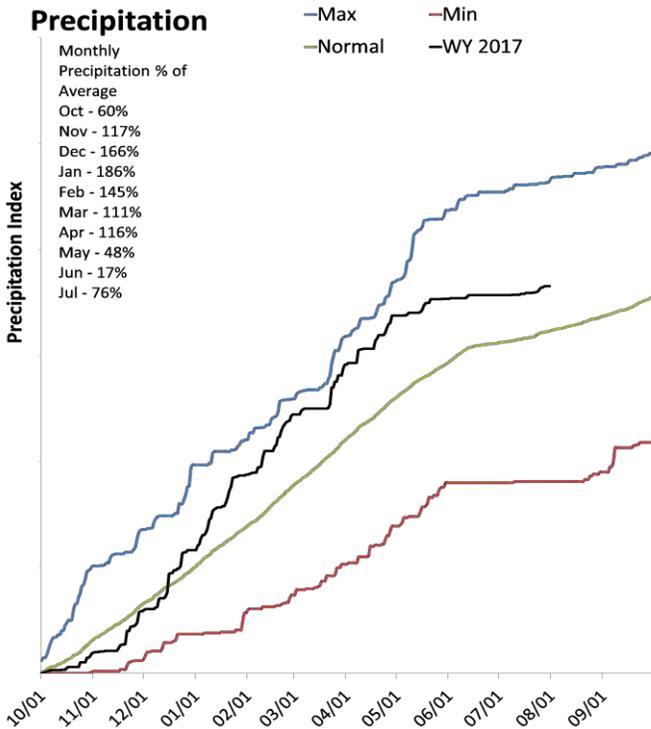
^{*}EOM, end of month; [#]WAI, Water Availability Index; [^]KAF, thousand acre-feet.



Tooele Valley & West Desert Basins

August 1, 2017

Precipitation in July was below average at 74%, which brings the seasonal accumulation (Oct-Jul) to 113% of average. Soil moisture is at 17% compared to 8% last year. Reservoir storage is at 58% of capacity, compared to 36% last year.



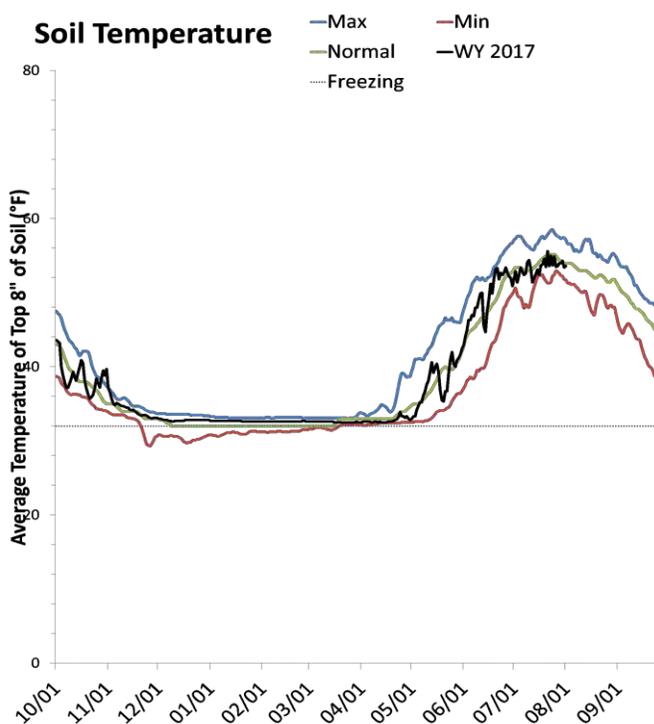
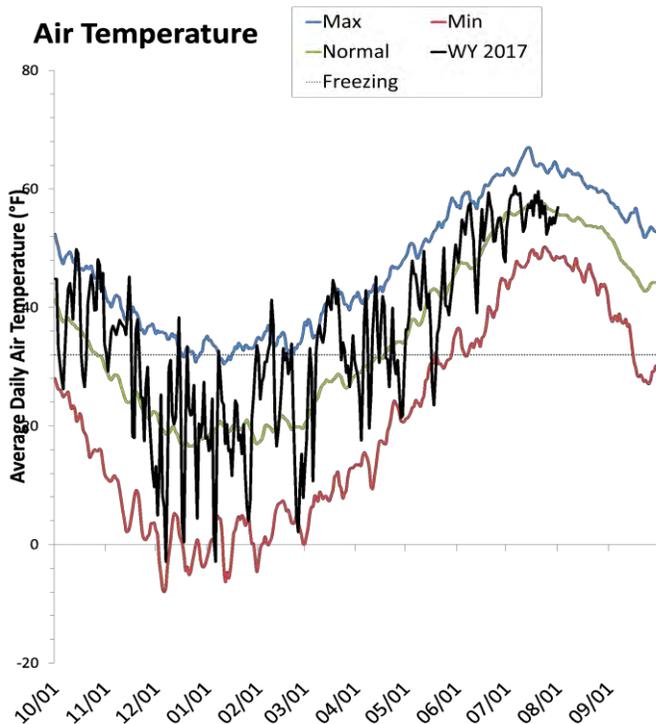
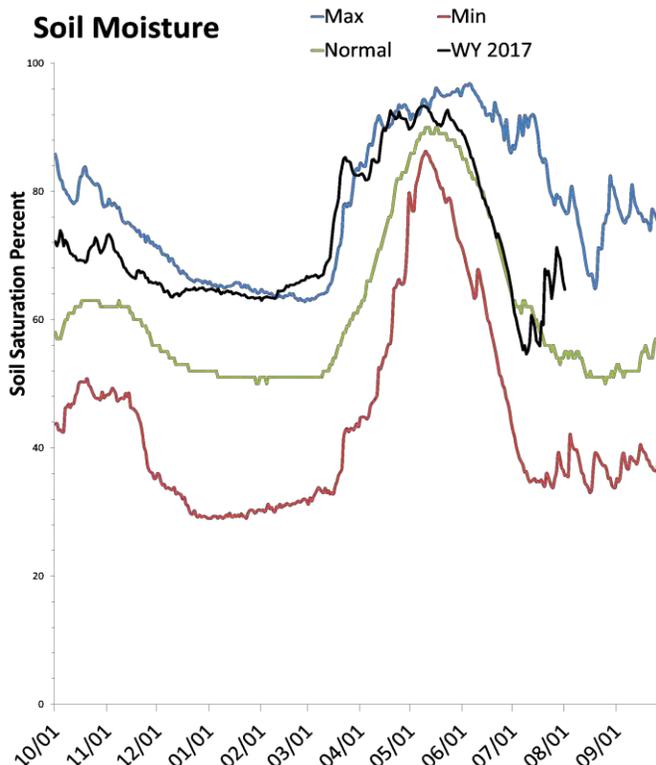
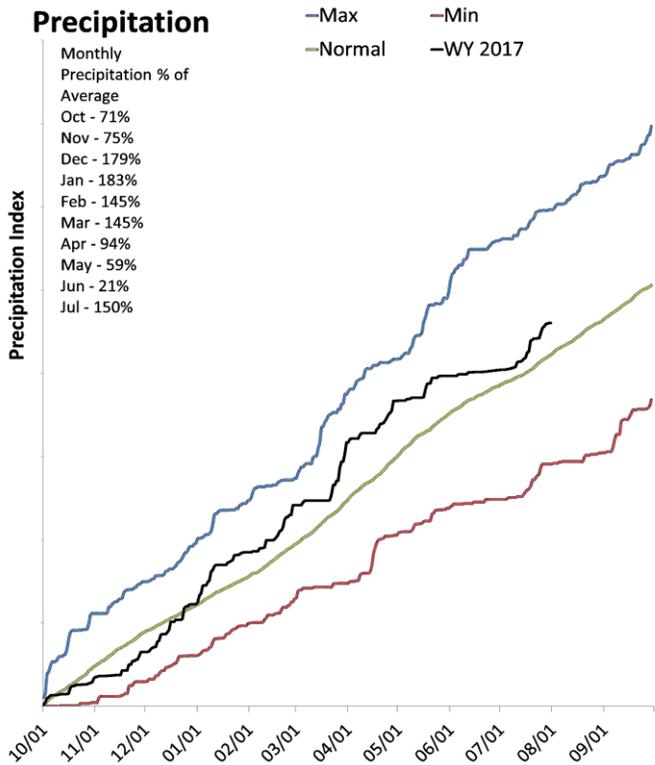
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

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

Northeastern Uinta Basin

August 1, 2017

Precipitation in July was much above average at 151%, which brings the seasonal accumulation (Oct-Jul) to 109% of average. Soil moisture is at 64% compared to 47% last year. Reservoir storage is at 94% of capacity, compared to 88% last year. The water availability index for Blacks Fork is 66% and 88% for Smiths Creek.



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

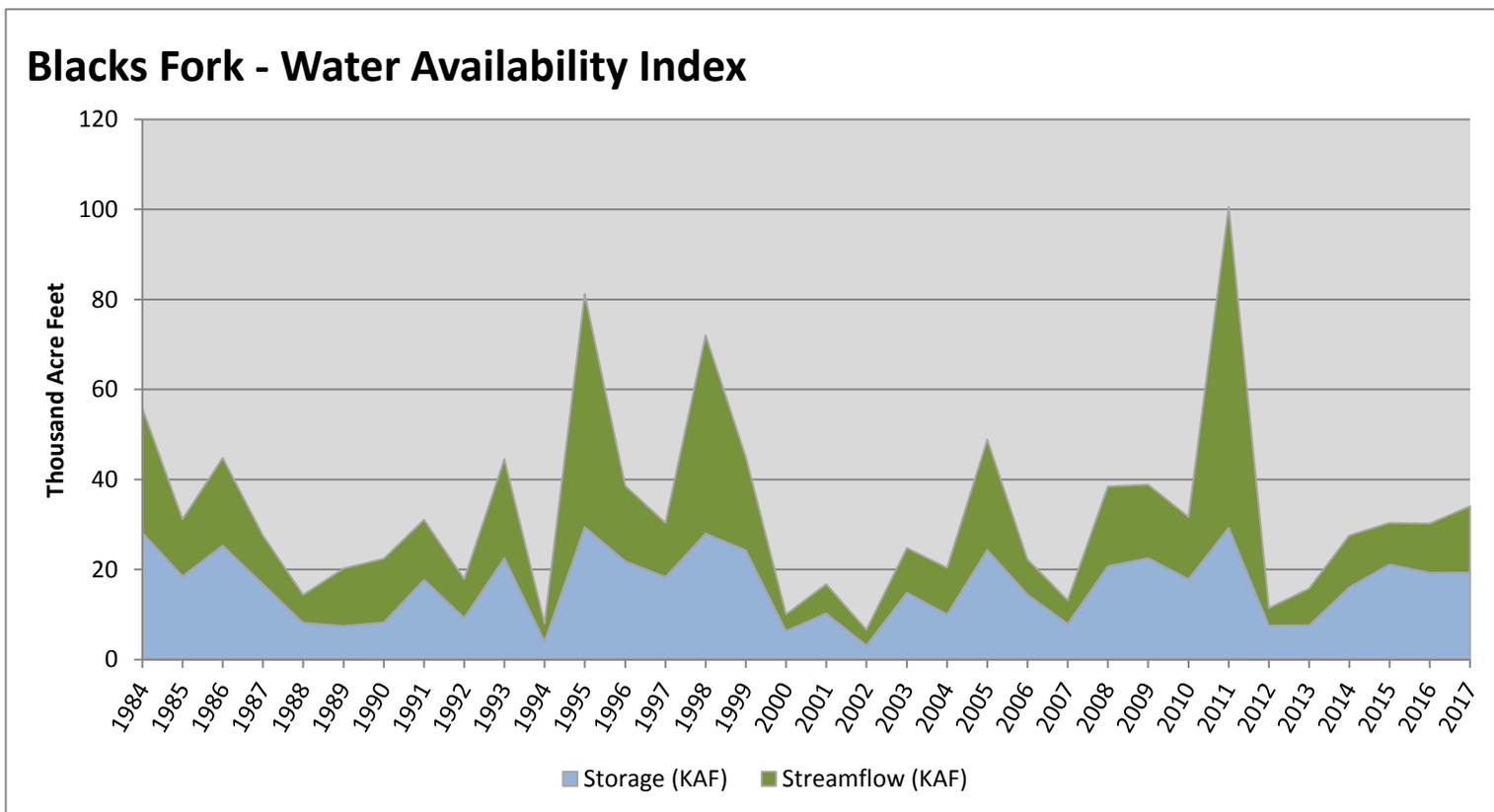
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

August 1, 2017

Water Availability Index

Basin or Region	Jul EOM [*] Storage	July Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Blacks Fork	19.35	14.71	34.06	66	1.31	85, 10, 08, 96

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

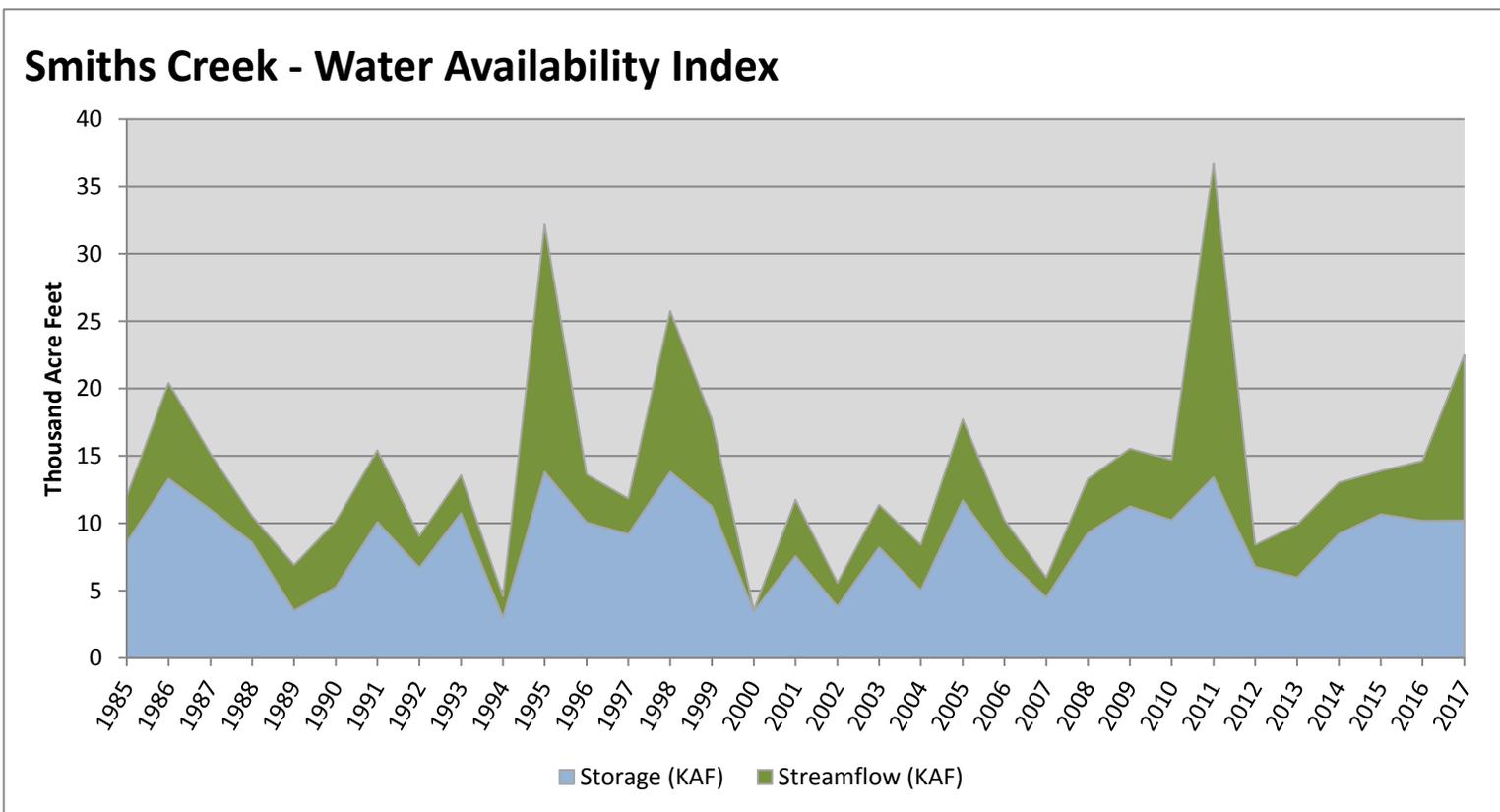


August 1, 2017

Water Availability Index

Basin or Region	Jul EOM [*] Storage	July Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Smiths Creek	10.21	12.28	22.49	88	3.19	99, 86, 98, 95

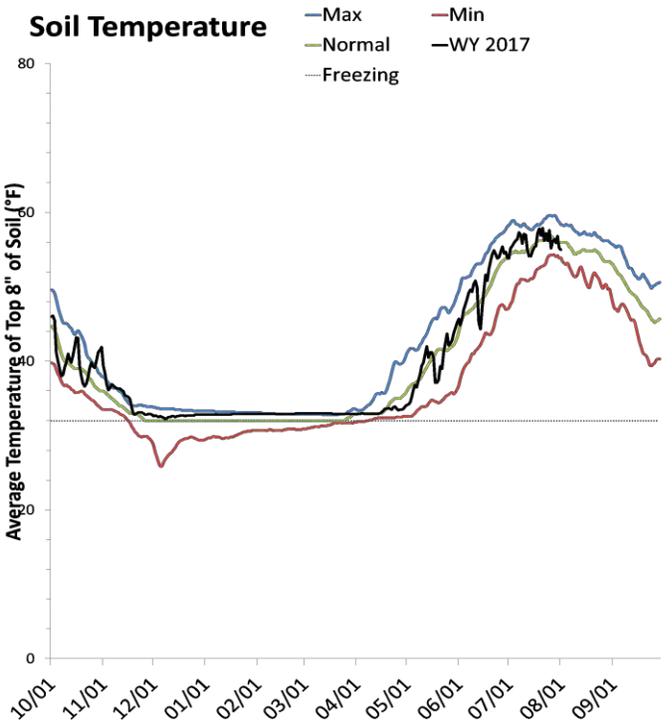
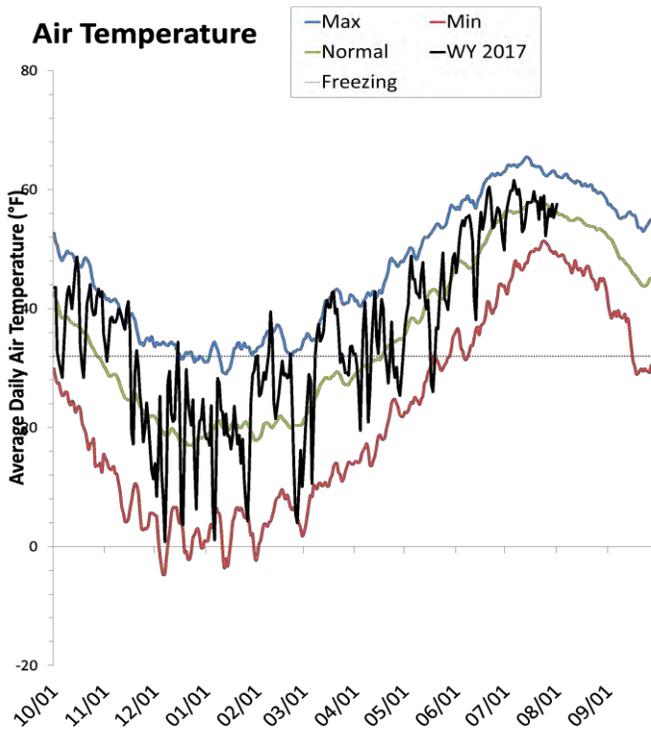
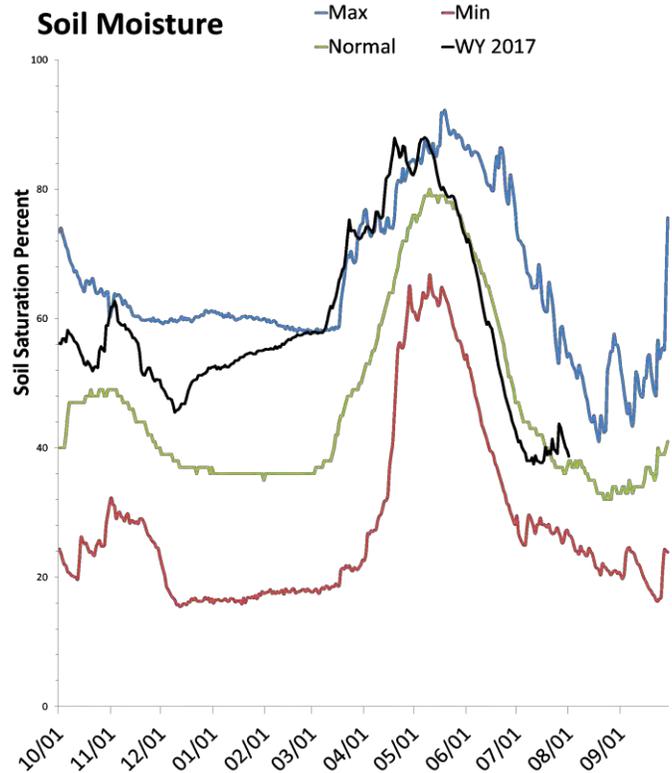
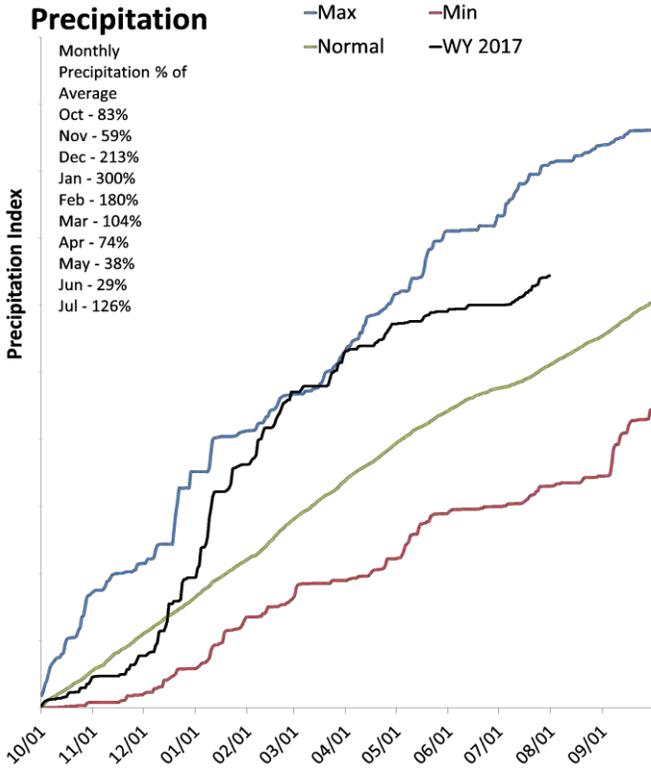
^{*}EOM, end of month; [#]WAI, Water Availability Index; [^]KAF, thousand acre-feet.



Duchesne River Basin

August 1, 2017

Precipitation in July was above average at 125%, which brings the seasonal accumulation (Oct-Jul) to 126% of average. Soil moisture is at 39% compared to 30% last year. Reservoir storage is at 85% of capacity, compared to 74% last year. The water availability index for the Western Uintas is 71% and 26% for the Eastern Uintas.



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

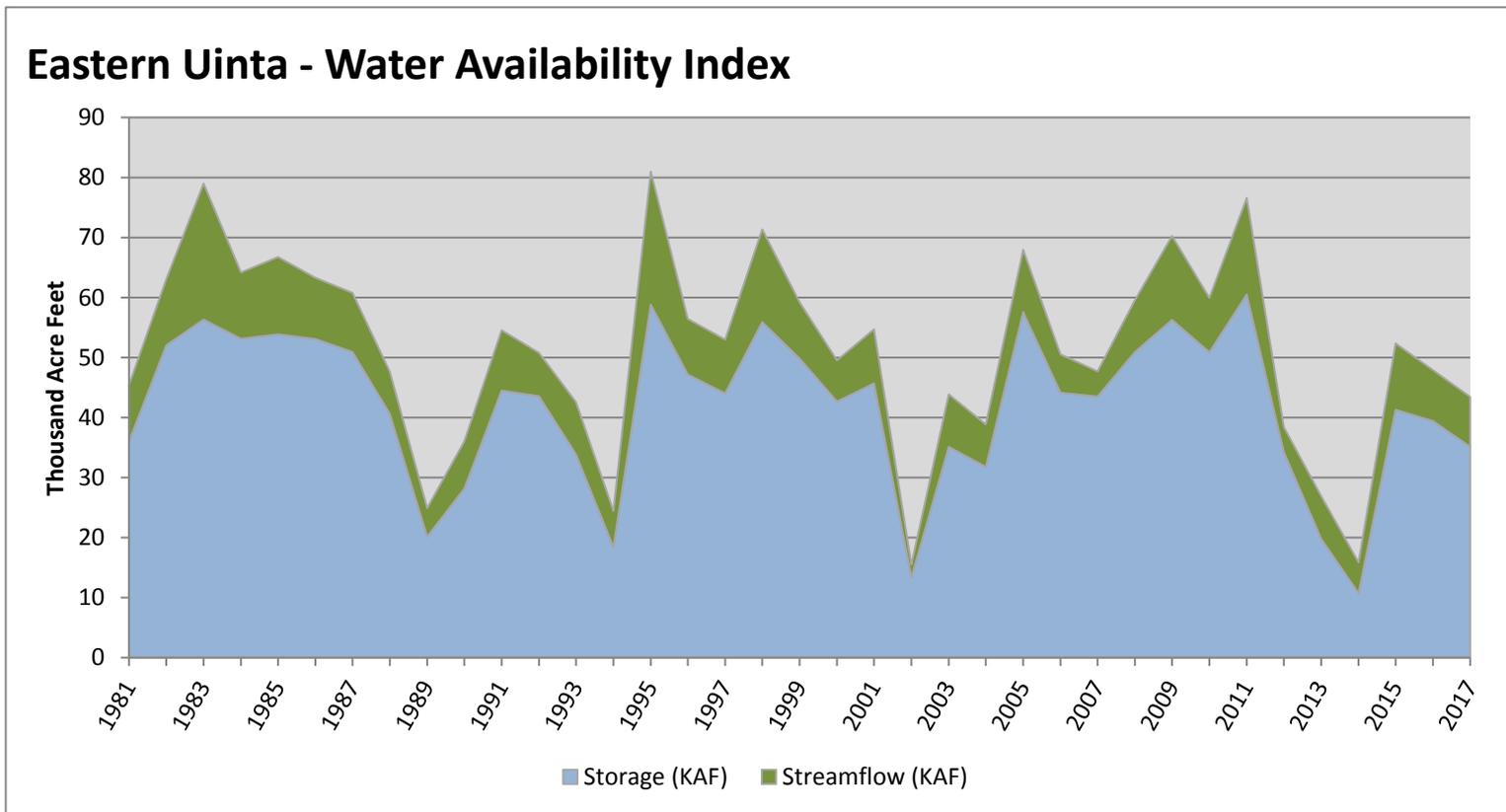
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

August 1, 2017

Water Availability Index

Basin or Region	Jul EOM [*] Storage	July Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Eastern Uinta	35.14	8.29	43.43	26	-1.97	04, 93, 03, 81

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

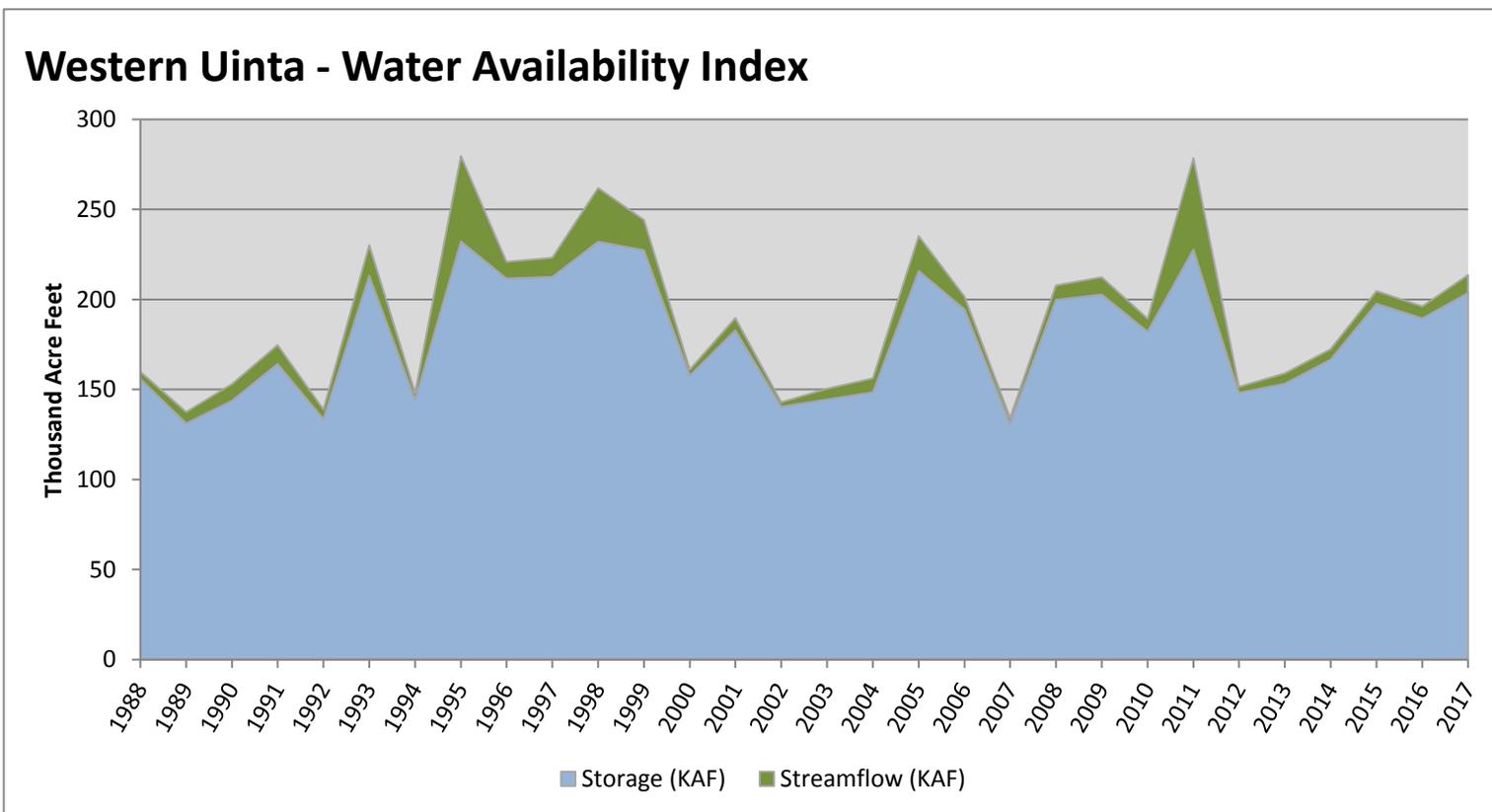


August 1, 2017

Water Availability Index

Basin or Region	Jul EOM [*] Storage	July Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Western Uinta	203.65	10.00	213.65	71	1.75	08, 09, 96, 97

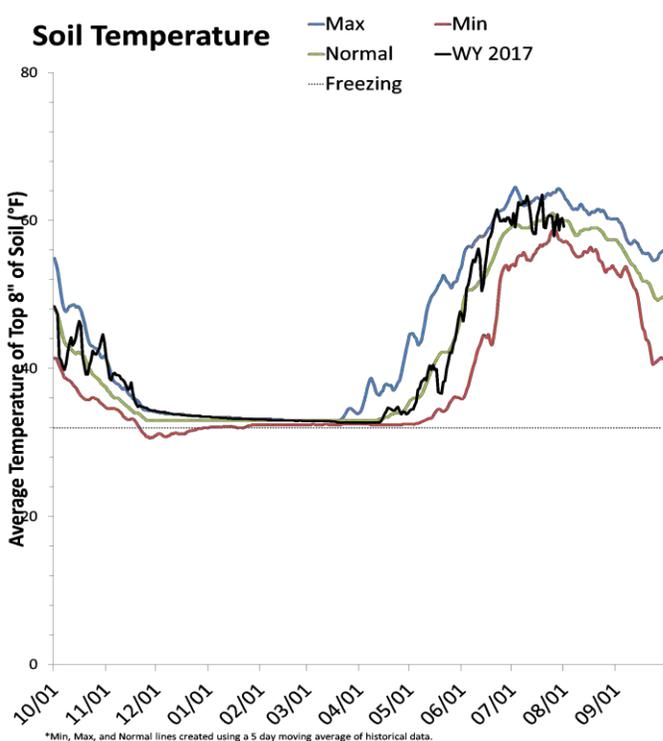
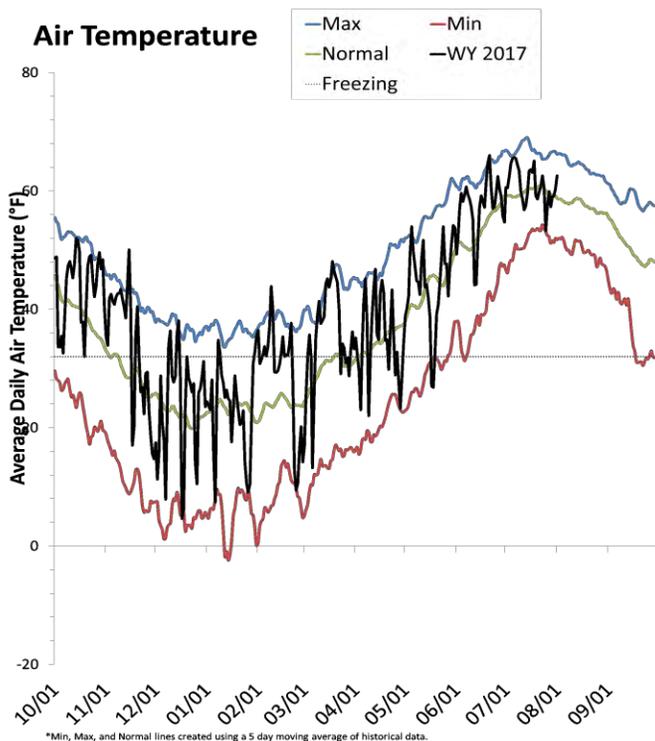
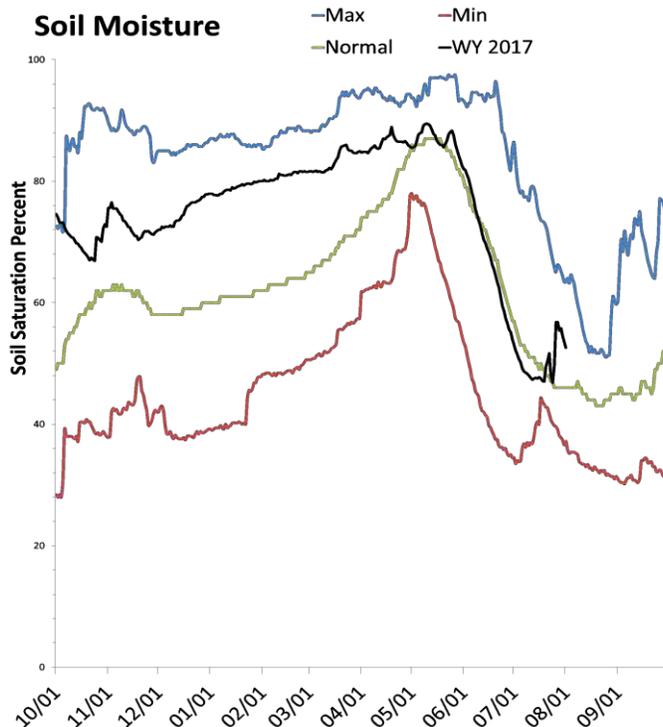
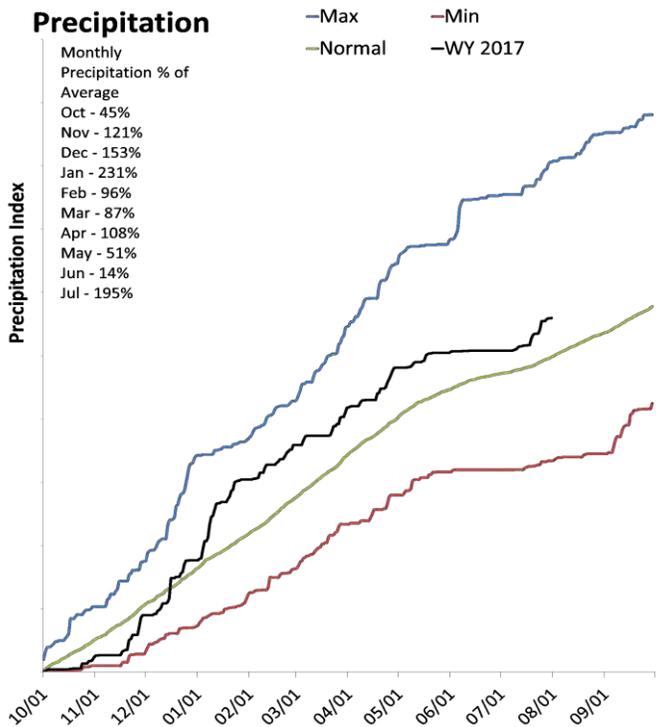
^{*}EOM, end of month; [#]WAI, Water Availability Index; [^]KAF, thousand acre-feet.



San Pitch River Basin

August 1, 2017

Precipitation in July was much above average at 195%, which brings the seasonal accumulation (Oct-Jul) to 112% of average. Soil Moisture is at 53% compared to 44% last year. Reservoir storage is at 44% of capacity, compared to 0% last year. The water availability index for the San Pitch is 53%.



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

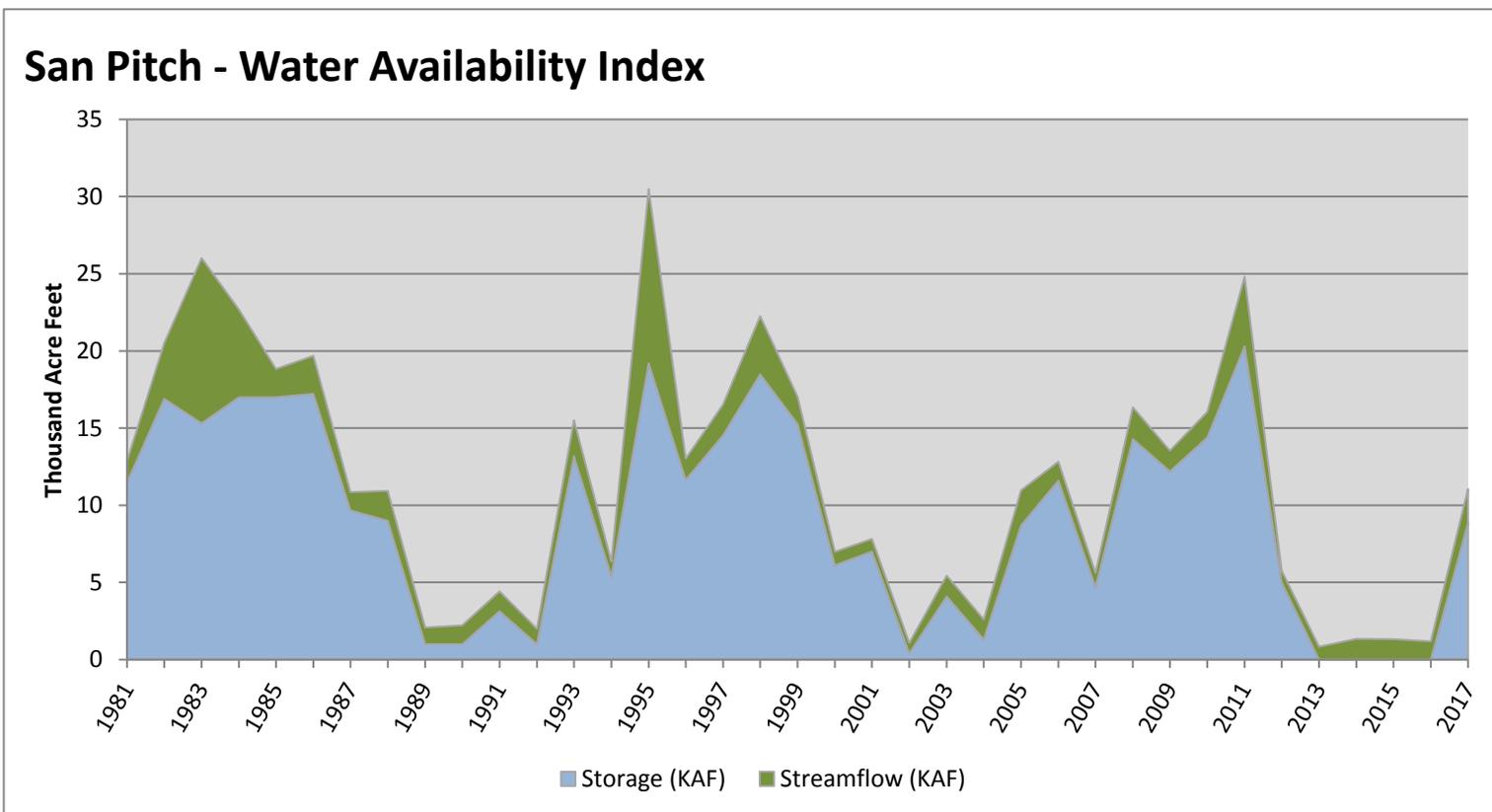
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

August 1, 2017

Water Availability Index

Basin or Region	Jul EOM [*] Storage	July Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
San Pitch	8.85	2.20	11.05	53	0.22	88, 05, 06, 81

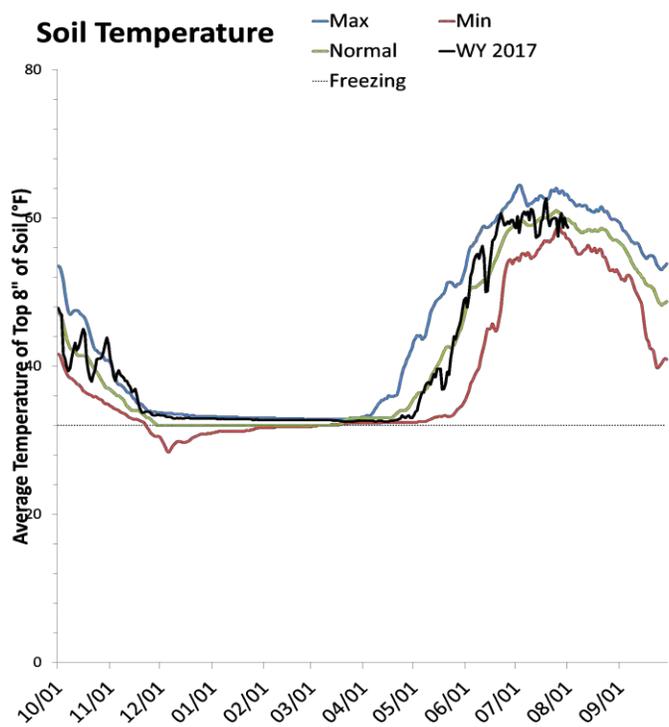
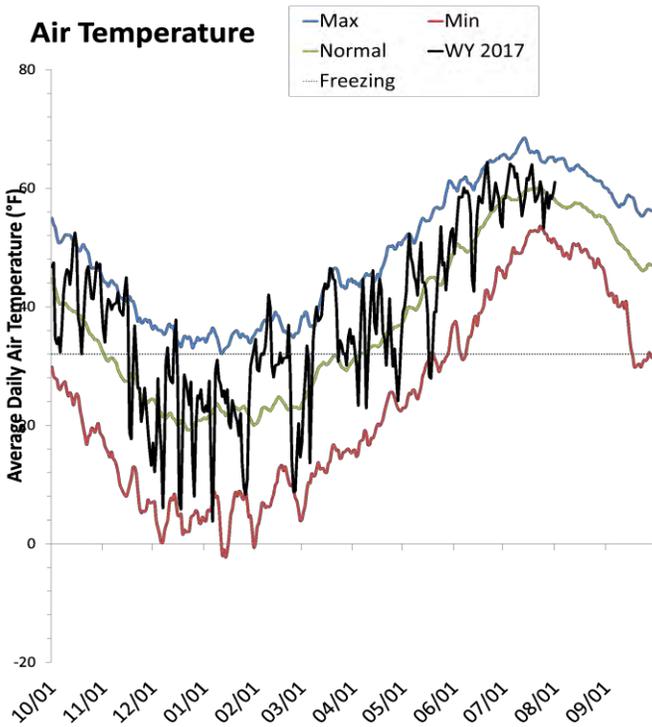
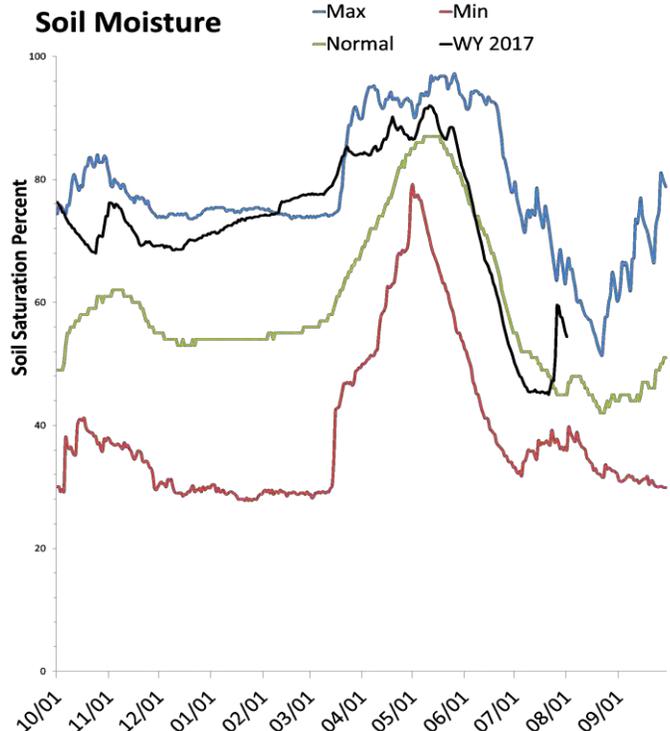
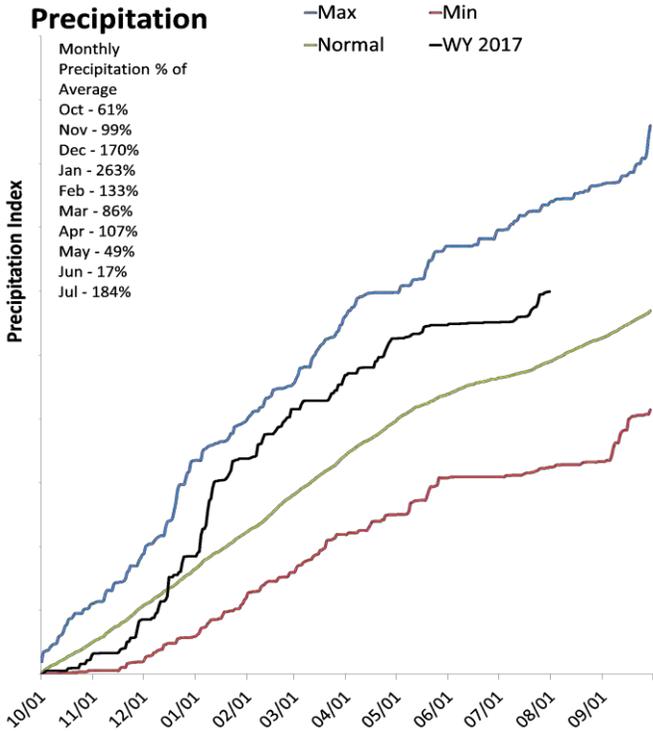
^{*}EOM, end of month; [#]WAI, Water Availability Index; [^]KAF, thousand acre-feet.



Price & San Rafael Basins

August 1, 2017

Precipitation in July was much above average at 182%, which brings the seasonal accumulation (Oct-Jul) to 122% of average. Soil moisture is at 55% compared to 43% last year. Reservoir storage is at 89% of capacity, compared to 50% last year. The water availability index for the Price River is 82%, and 68% for Joe's Valley.



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

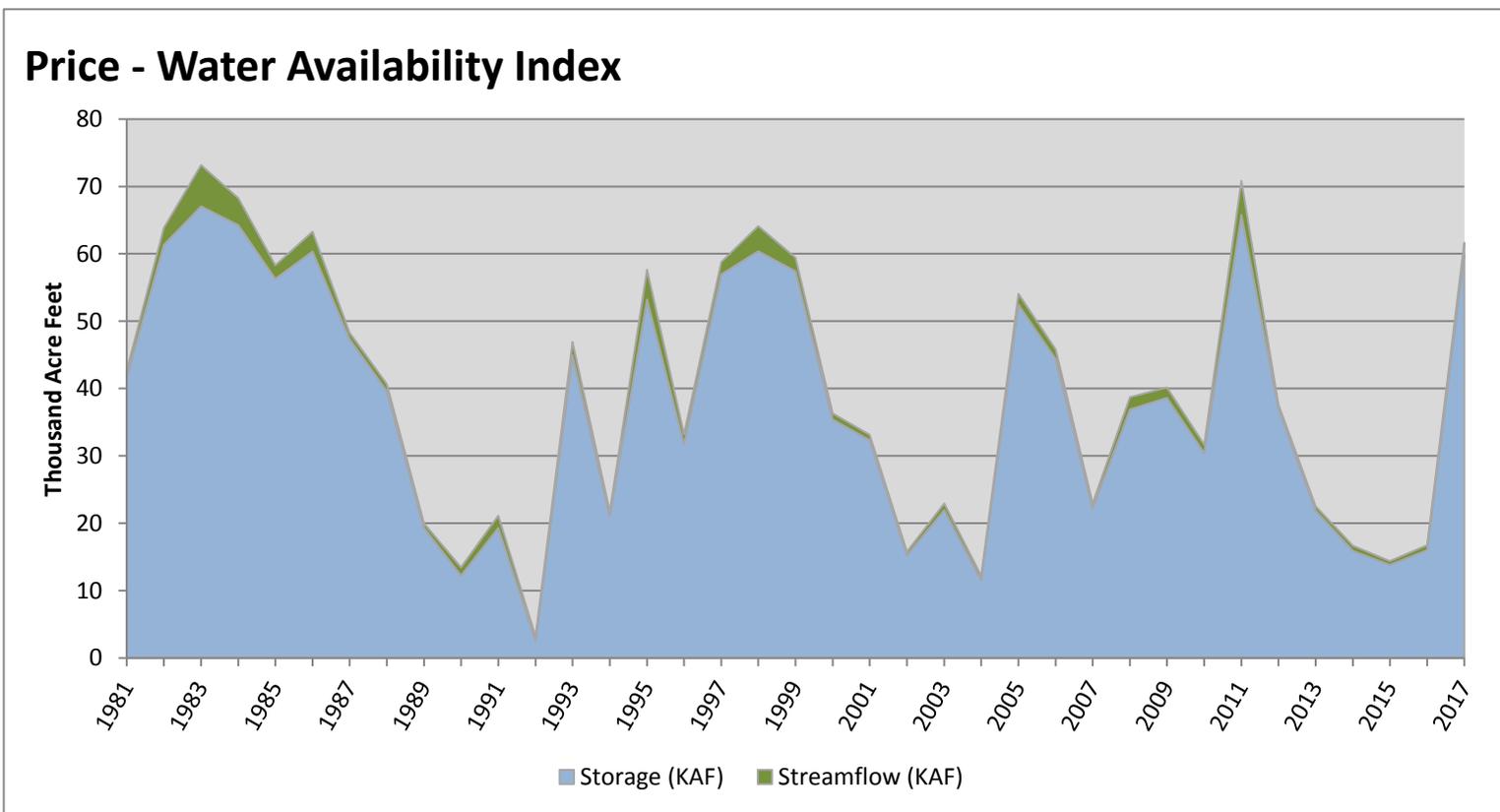
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

August 1, 2017

Water Availability Index

Basin or Region	Jul EOM [*] Storage	July Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Price	59.95	1.71	61.66	82	2.63	97, 99, 86, 82

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

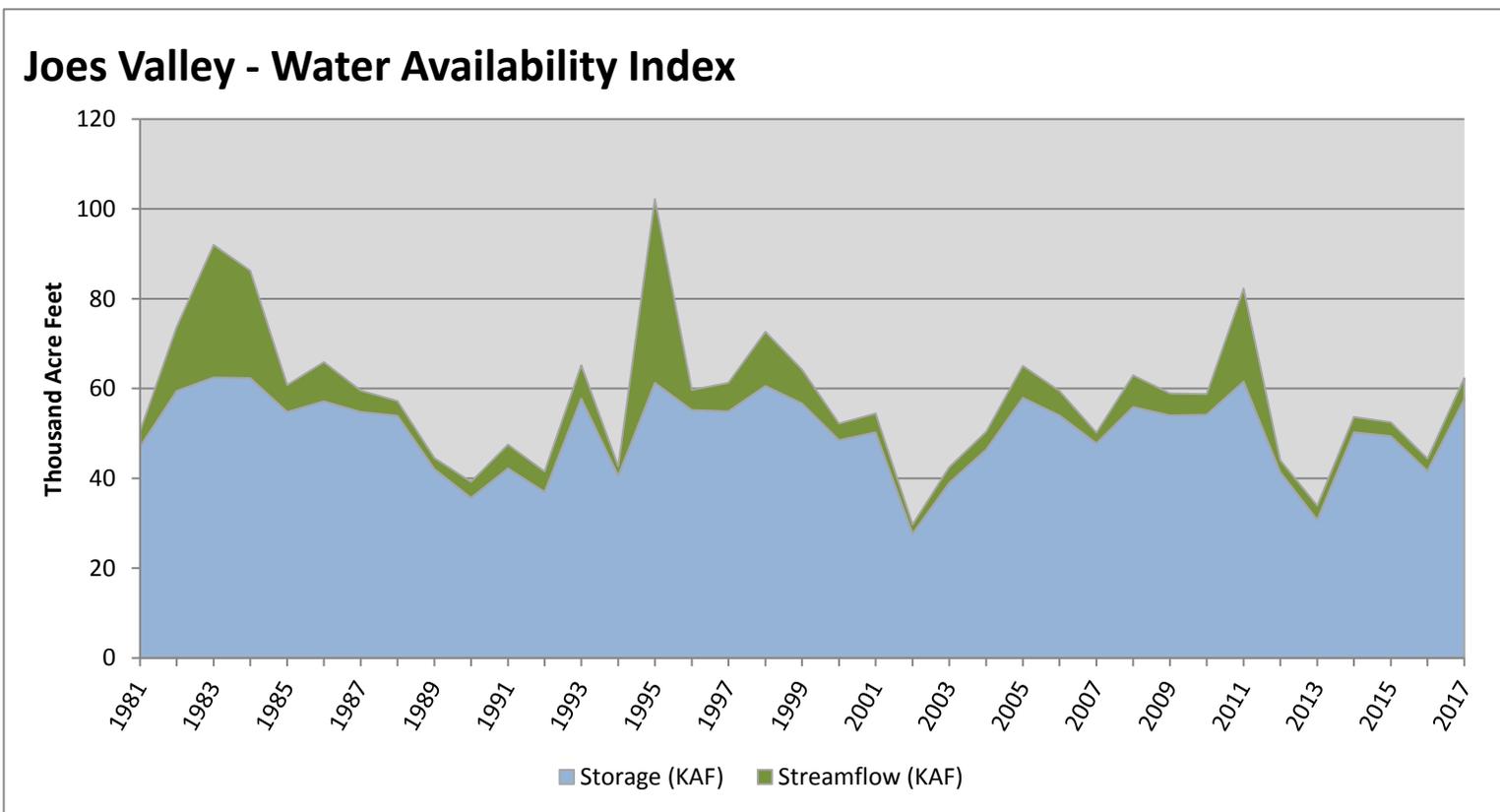


August 1, 2017

Water Availability Index

Basin or Region	Jul EOM [*] Storage	July Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Joes Valley	57.58	4.72	62.30	68	1.54	85, 97, 08, 99

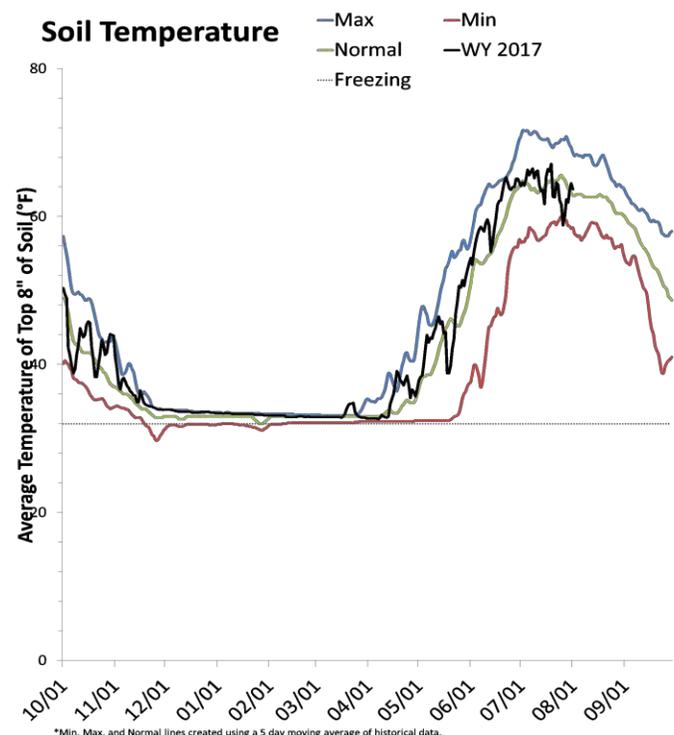
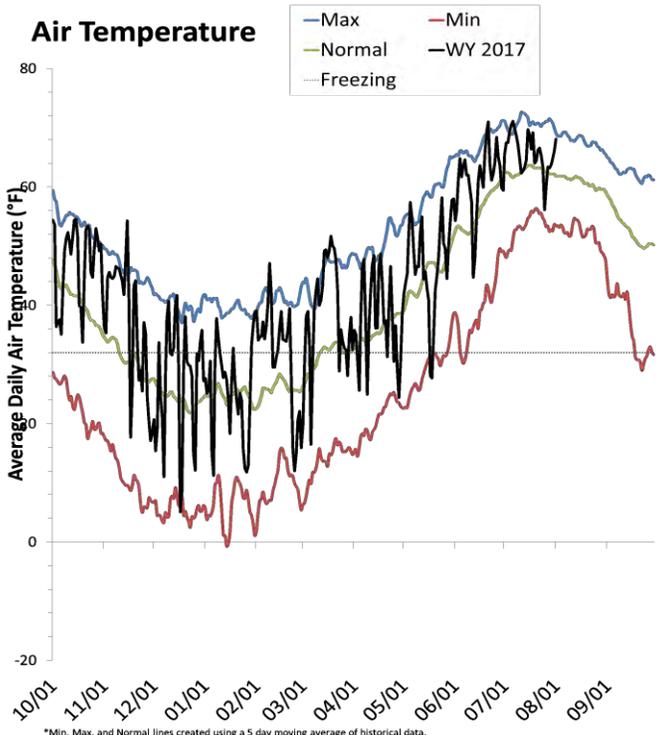
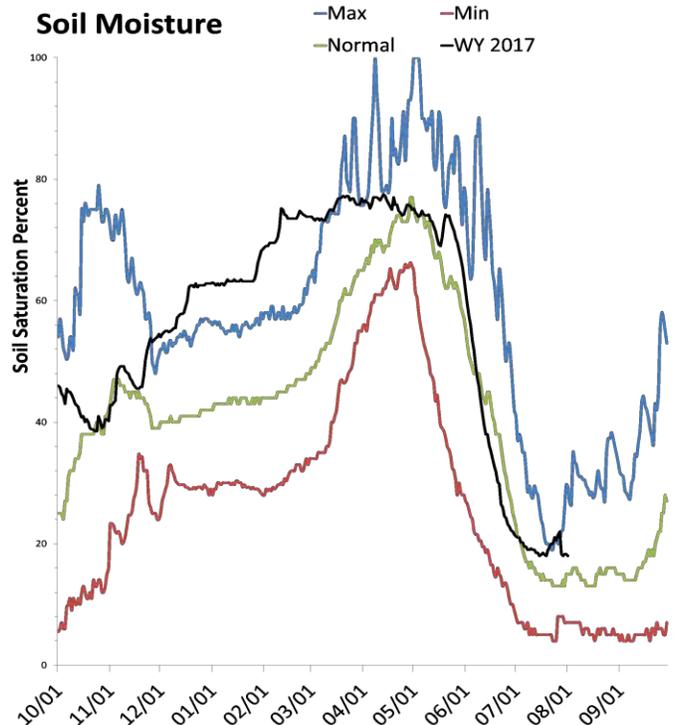
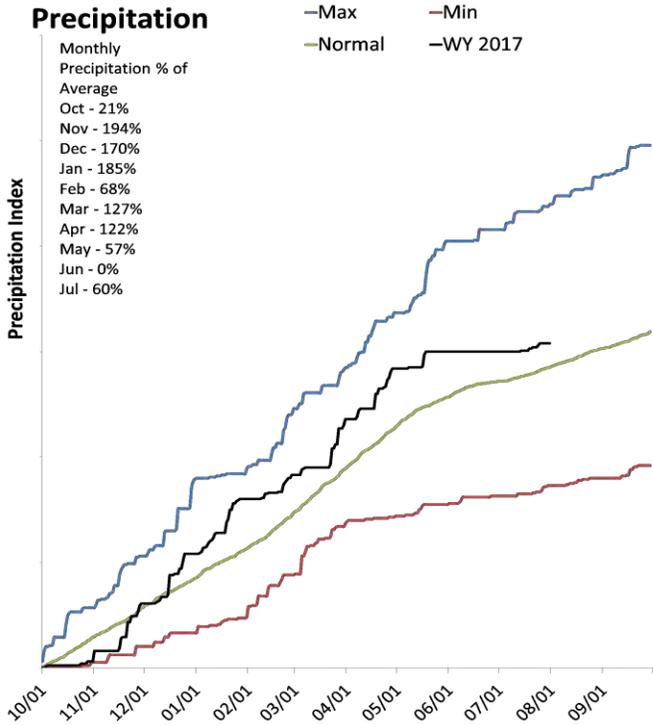
^{*}EOM, end of month; [#]WAI, Water Availability Index; [^]KAF, thousand acre-feet.



Lower Sevier Basin

August 1, 2017

Precipitation in July was much below average at 62%, which brings the seasonal accumulation (Oct-Jul) to 108% of average. Soil moisture is at 21% compared to 17% last year. Reservoir storage is at 11% of capacity, compared to 11% 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.

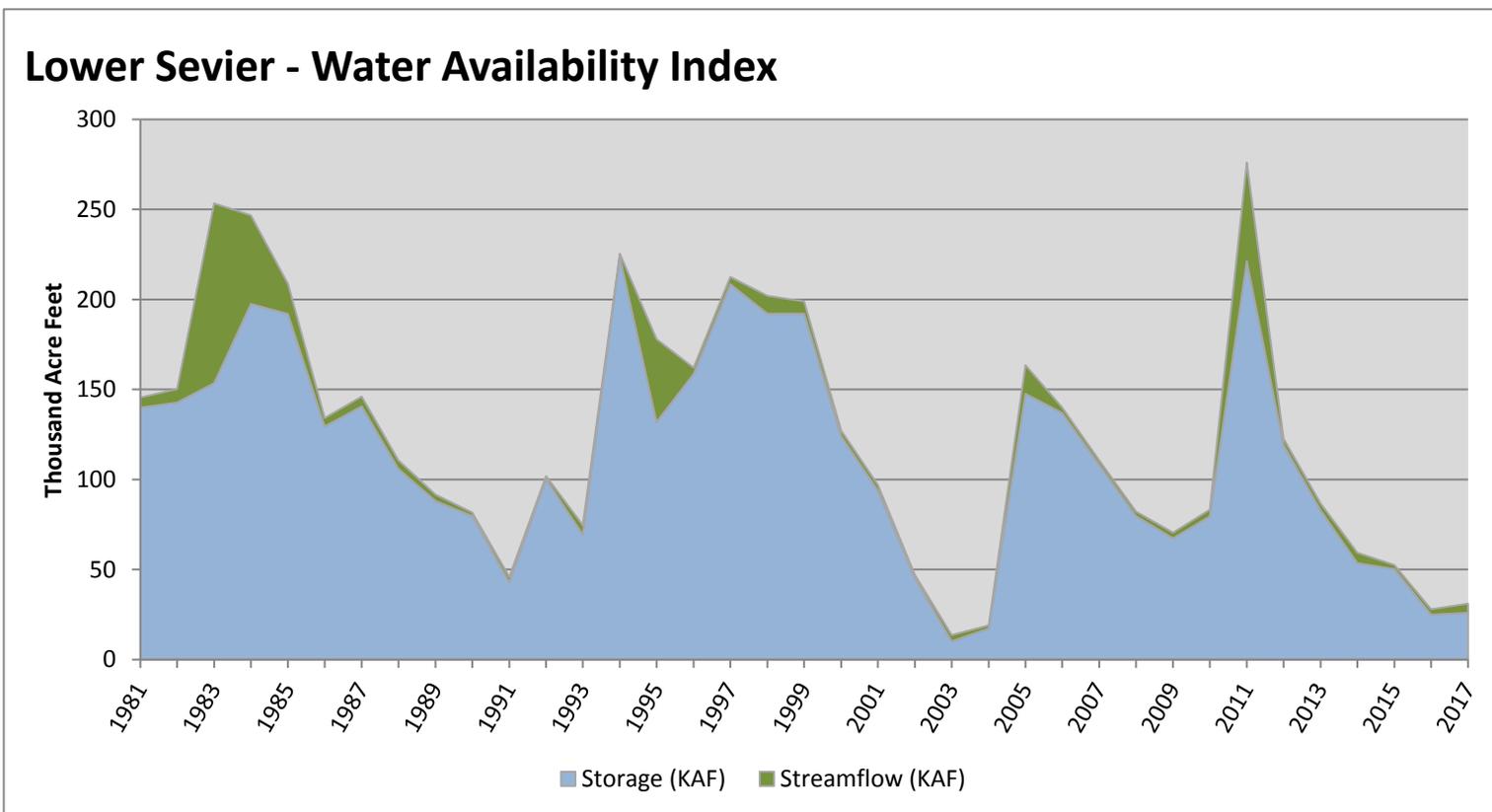
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

August 1, 2017

Water Availability Index

Basin or Region	Jul EOM [*] Storage	July Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Lower Sevier	26.08	5.07	31.15	11	-3.29	04, 16, 91, 02

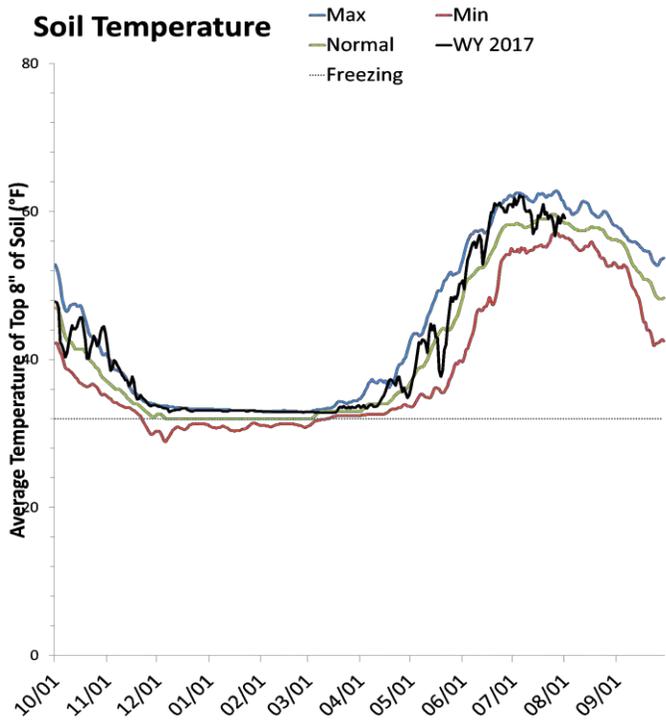
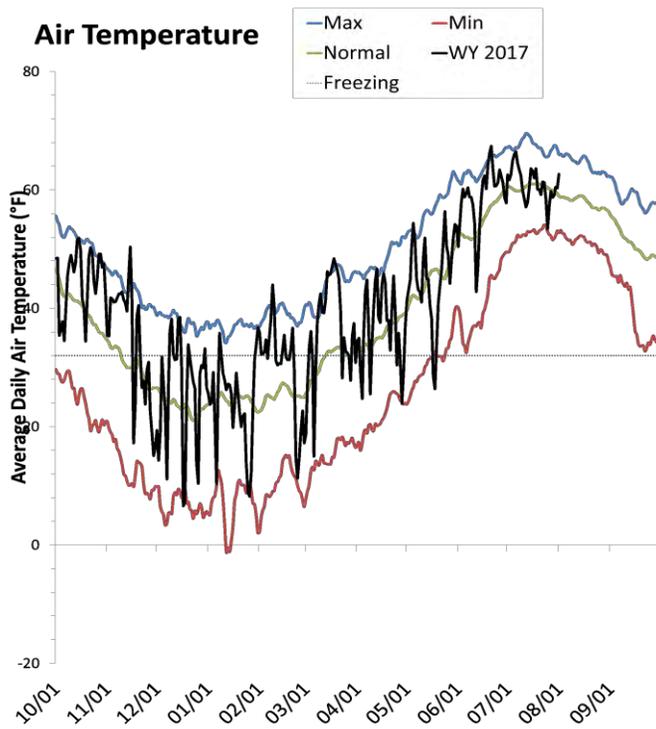
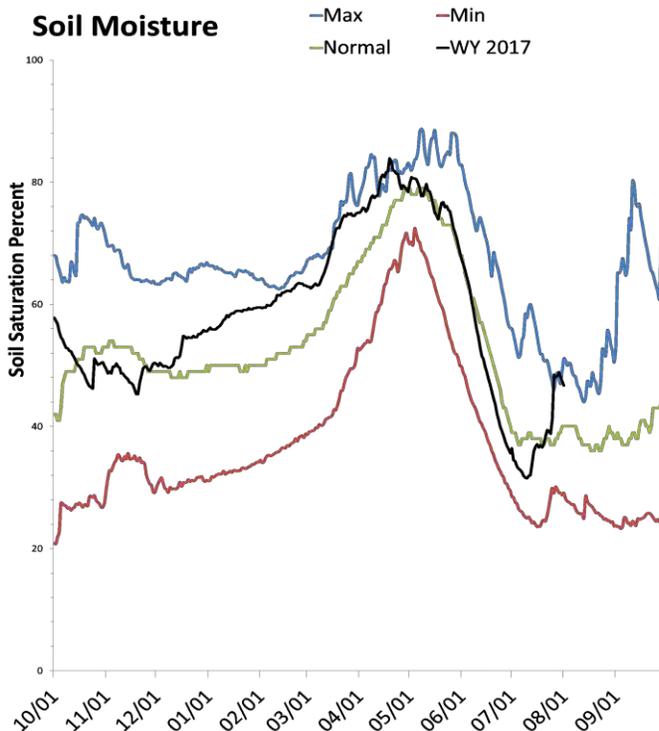
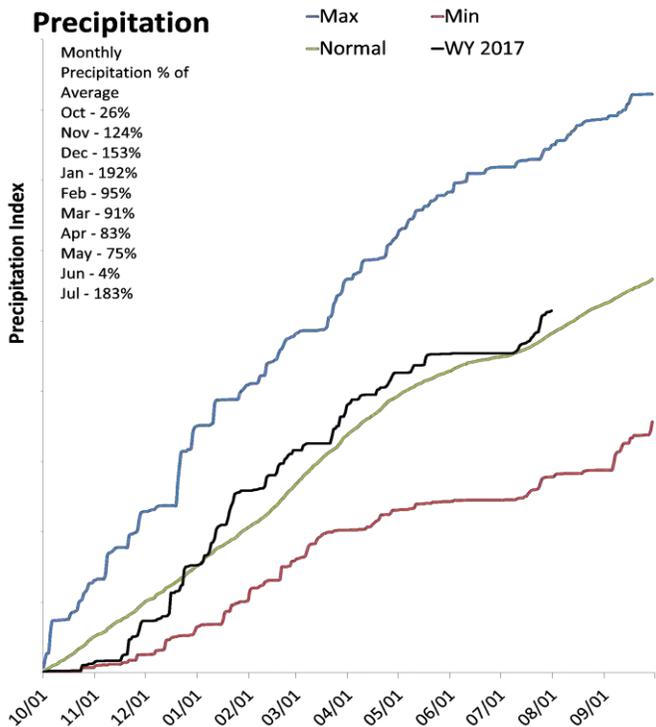
^{*}EOM, end of month; [#]WAI, Water Availability Index; [^]KAF, thousand acre-feet.



Upper Sevier Basin

August 1, 2017

Precipitation in July was much above average at 181%, which brings the seasonal accumulation (Oct-Jul) to 106% of average. Soil moisture is at 46% compared to 32% last year. Reservoir storage is at 42% of capacity, compared to 44% last year. The water availability index for the Upper Sevier is 37%.



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

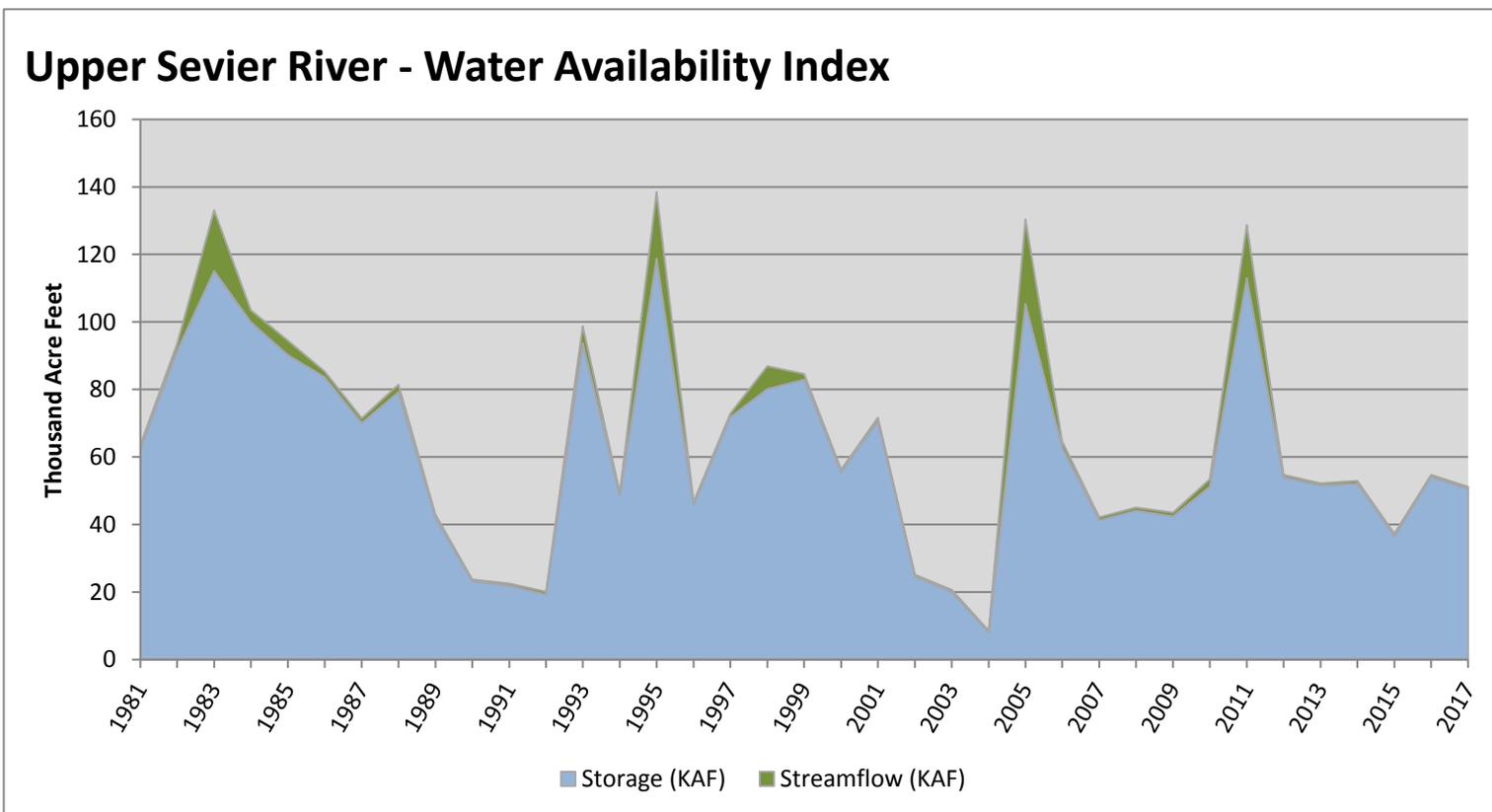
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

August 1, 2017

Water Availability Index

Basin or Region	Jul EOM [*] Storage	July Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Upper Sevier River	50.49	0.71	51.20	37	-1.1	96, 94, 13, 14

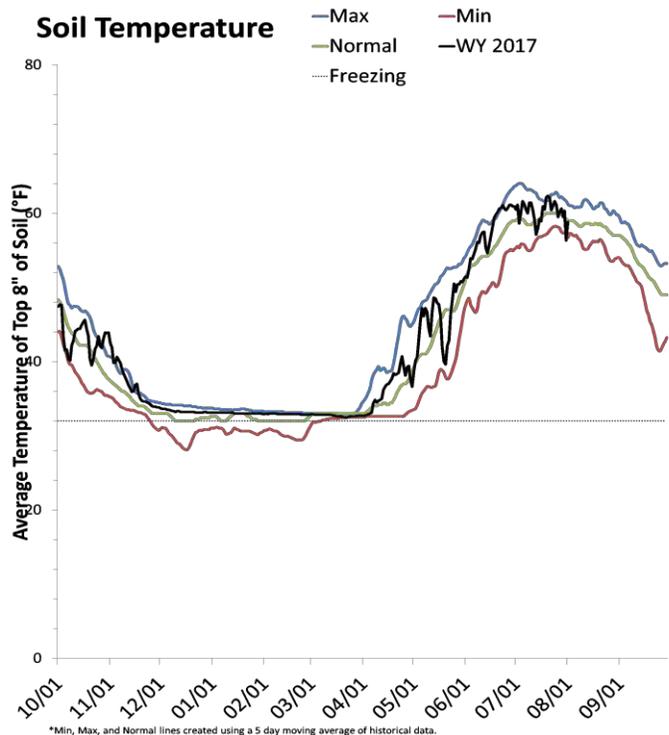
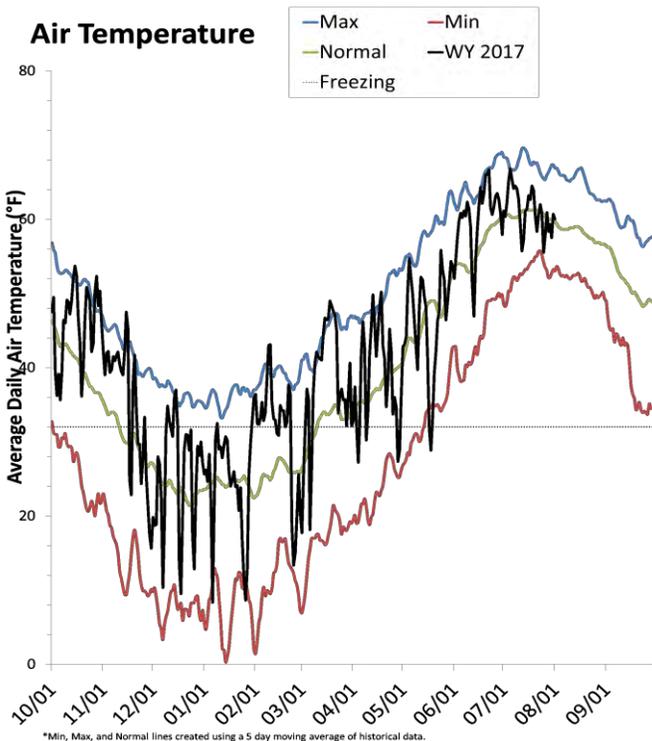
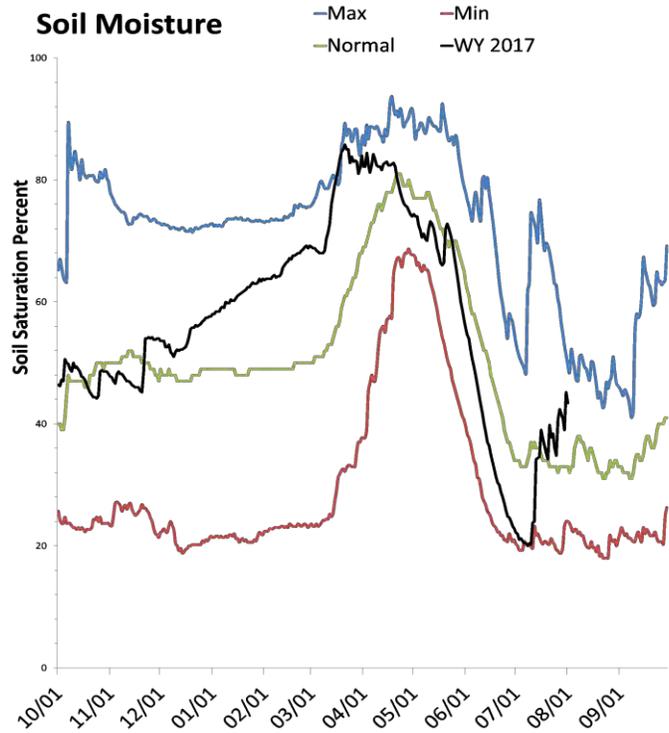
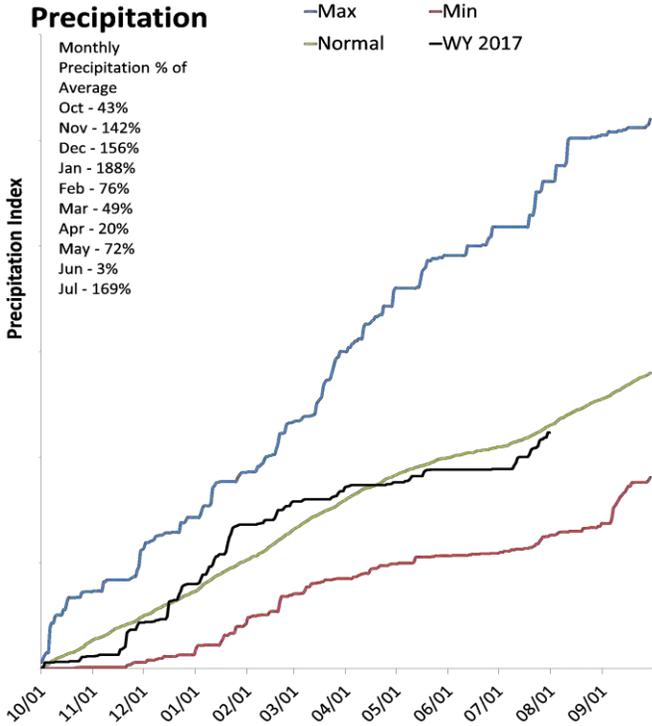
^{*}EOM, end of month; [#]WAI, Water Availability Index; [^]KAF, thousand acre-feet.



Southeastern Utah

August 1, 2017

Precipitation in July was much above average at 168%, which brings the seasonal accumulation (Oct-Jul) to 97% of average. Soil moisture is at 45% compared to 32% last year. Reservoir storage is at 86% of capacity, compared to 99% last year. The water availability index for Moab is 68%.



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

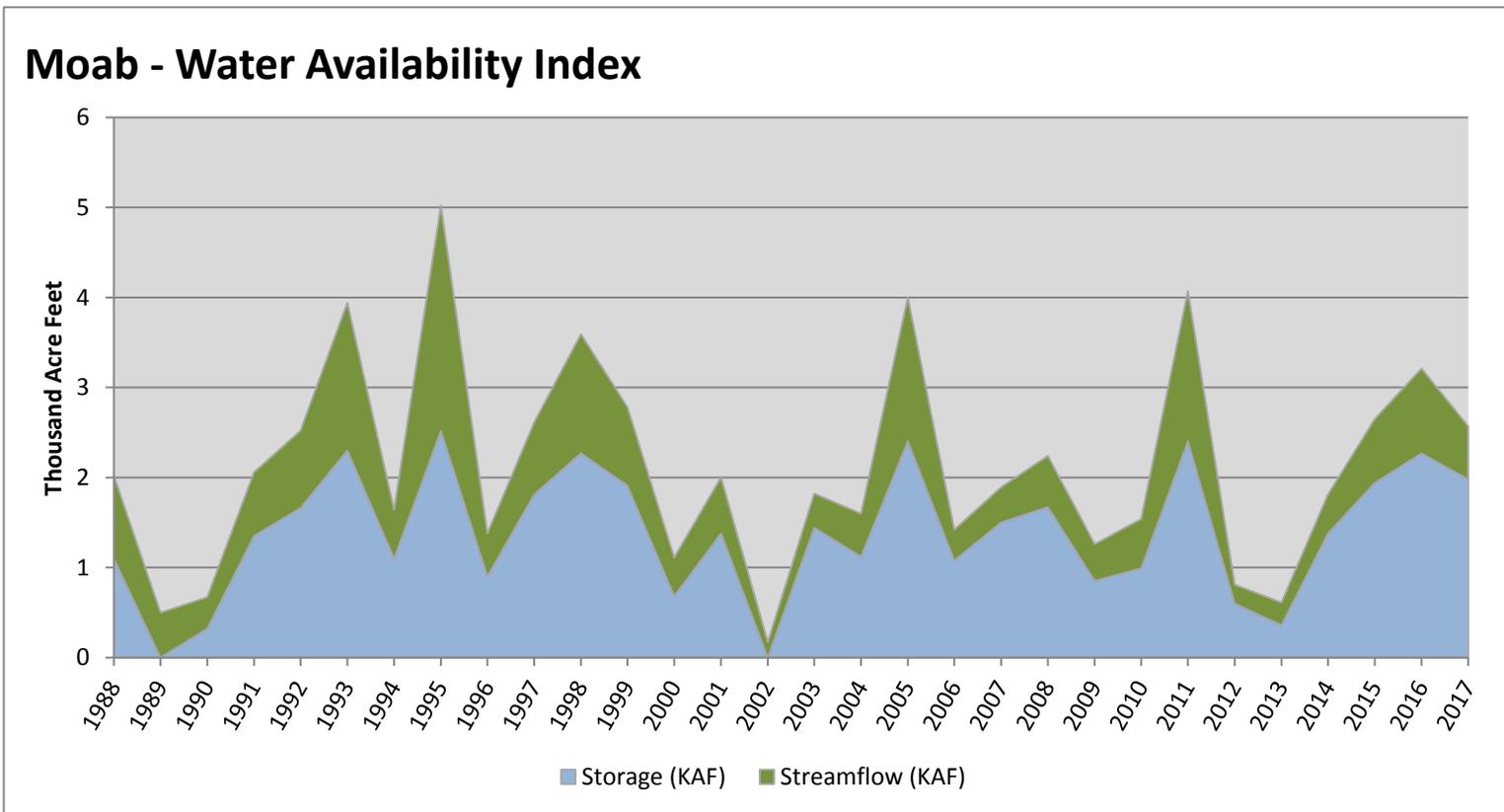
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

August 1, 2017

Water Availability Index

Basin or Region	Jul EOM [*] Storage	July Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Moab	1.98	0.59	2.57	68	1.48	08, 92, 97, 15

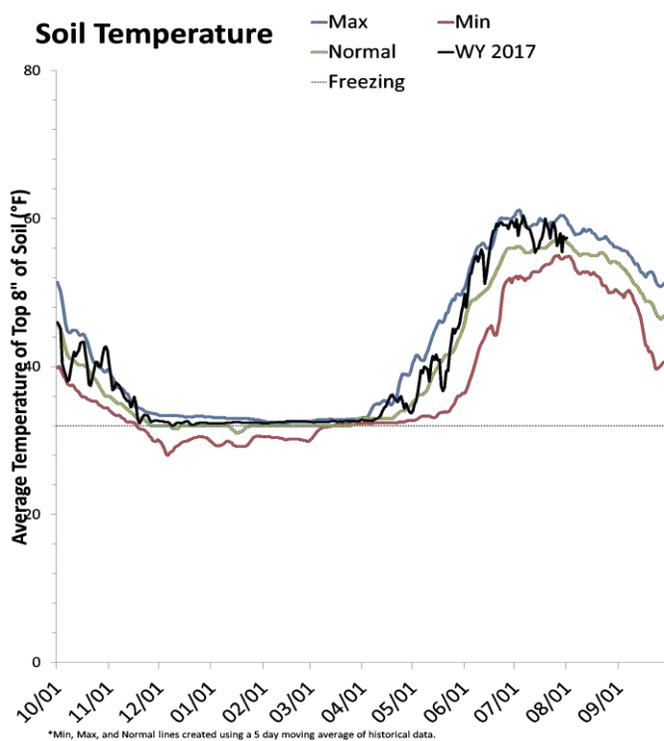
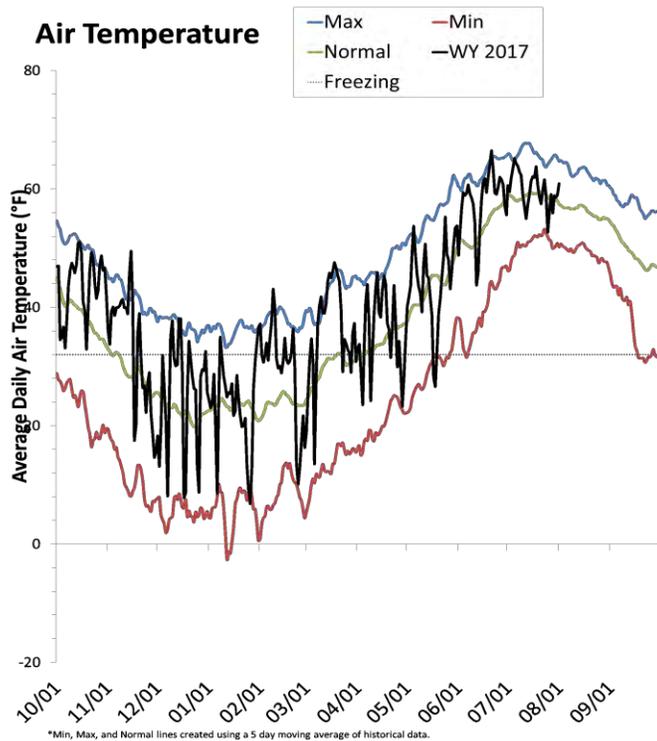
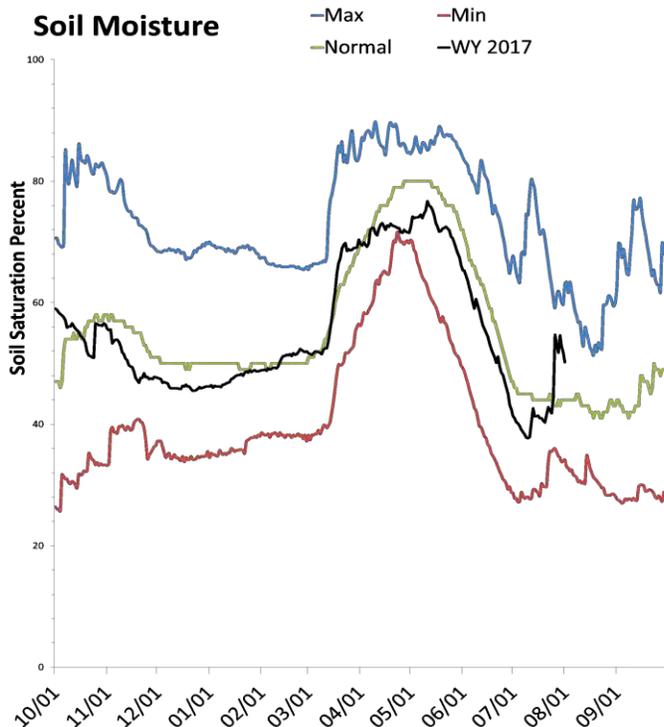
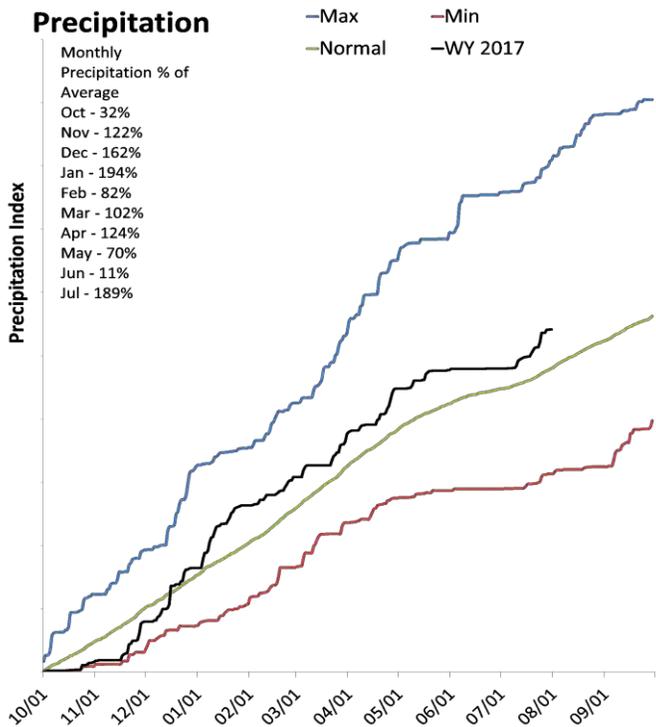
^{*}EOM, end of month; [#]WAI, Water Availability Index; [^]KAF, thousand acre-feet.



Dirty Devil Basin

August 1, 2017

Precipitation in July was much above average at 192%, which brings the seasonal accumulation (Oct-Jul) to 113% of average. Soil moisture is at 52% compared to 28% last year.



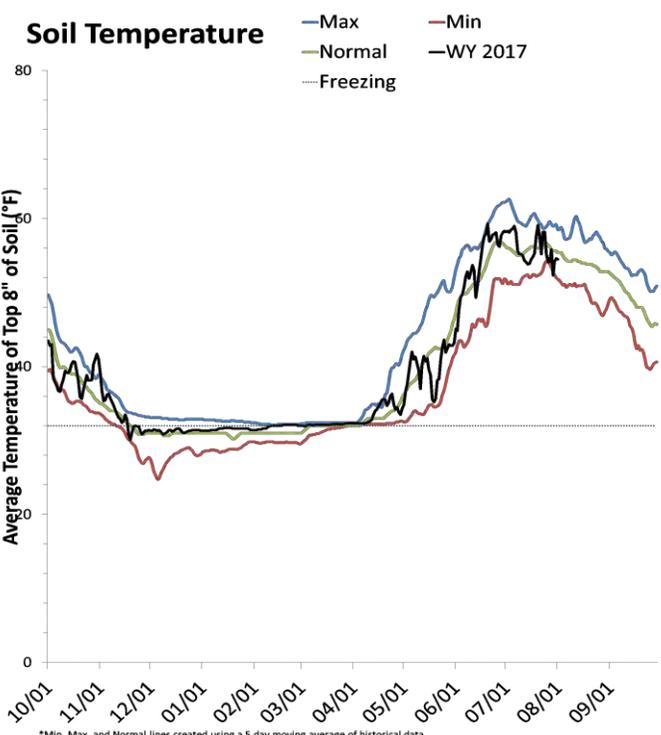
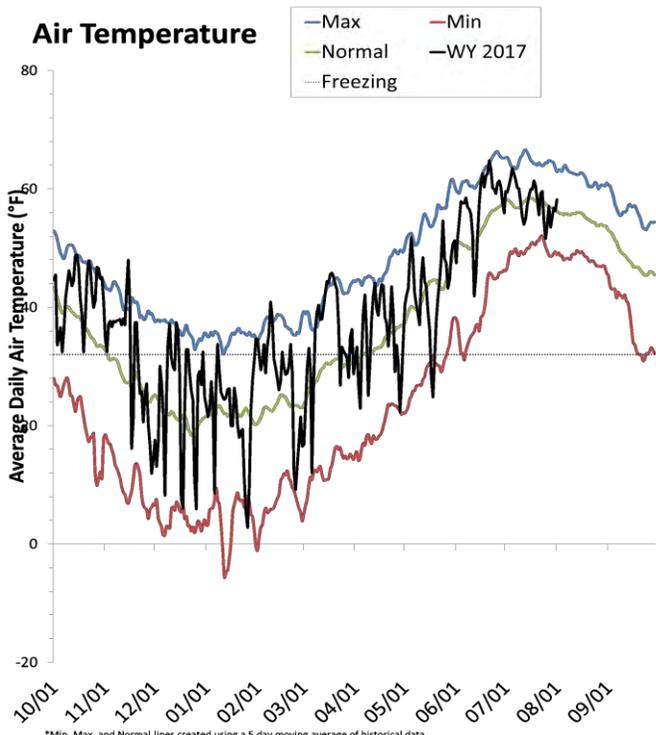
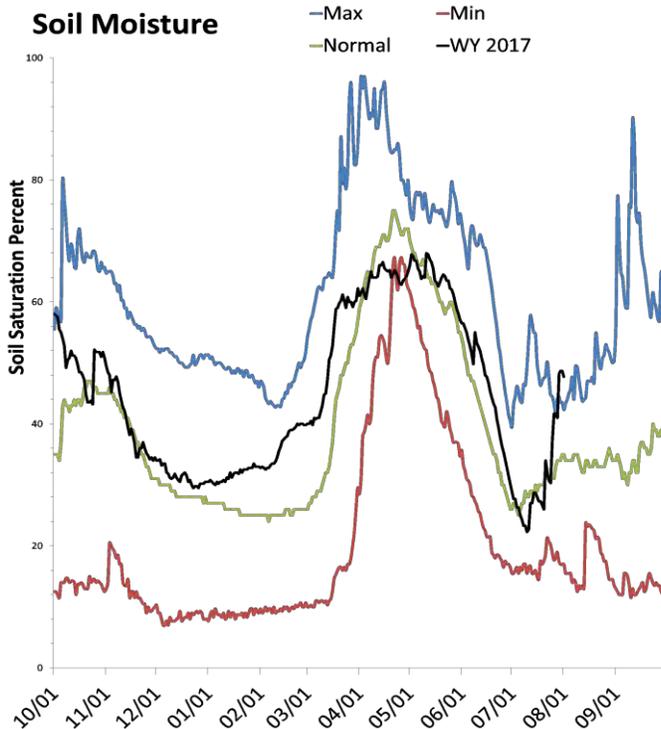
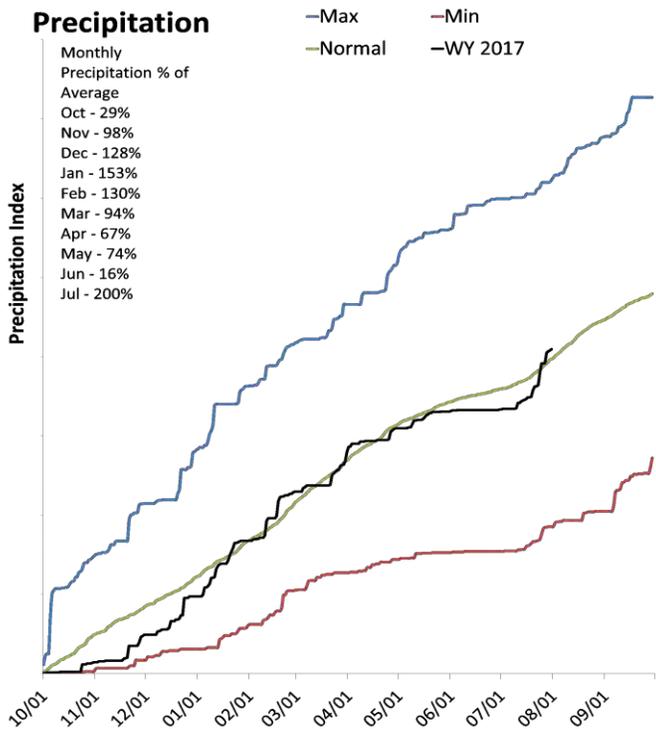
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

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

Escalante River Basin

August 1, 2017

Precipitation in July was much above average at 200%, which brings the seasonal accumulation (Oct-Jul) to 103% of average. Soil moisture is at 48% compared to 29% last year.



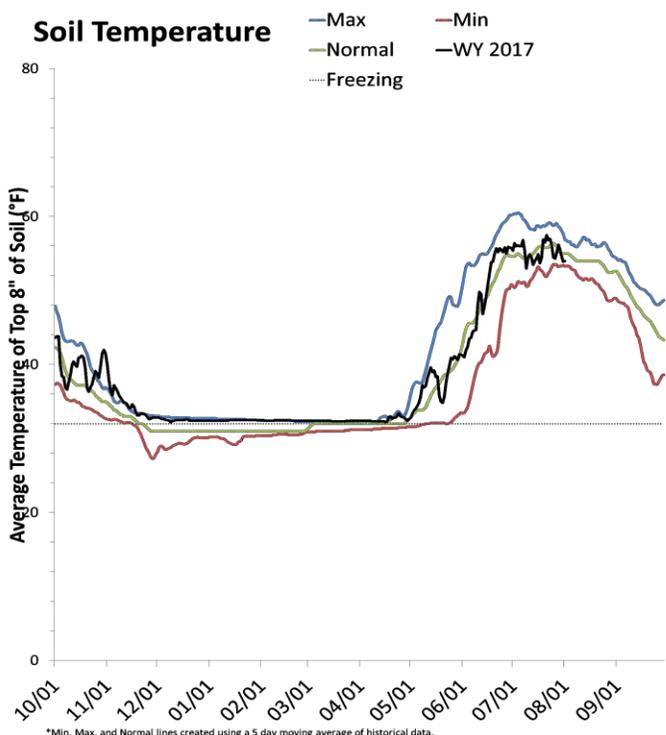
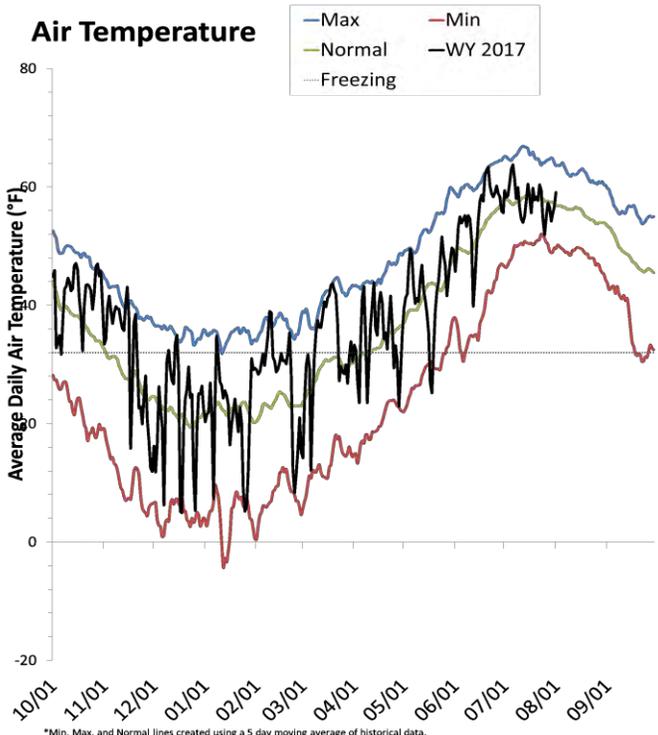
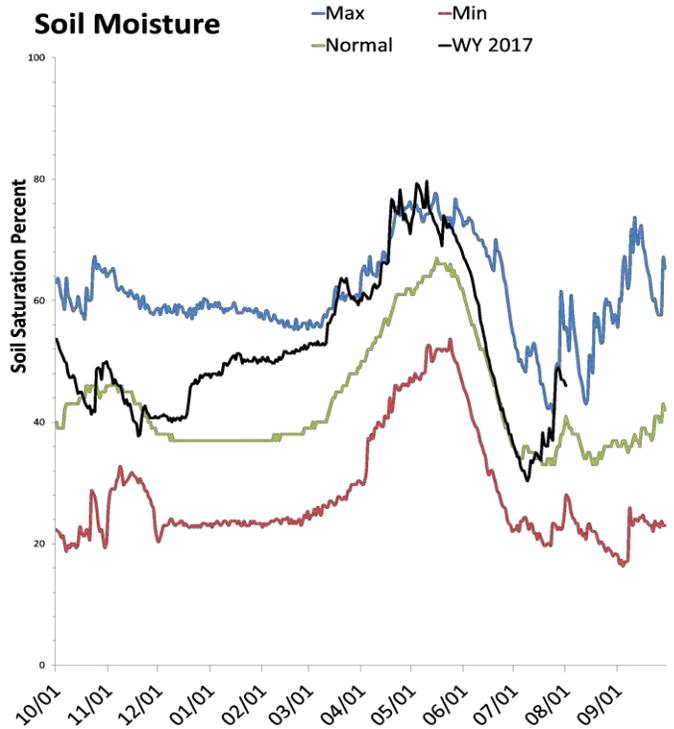
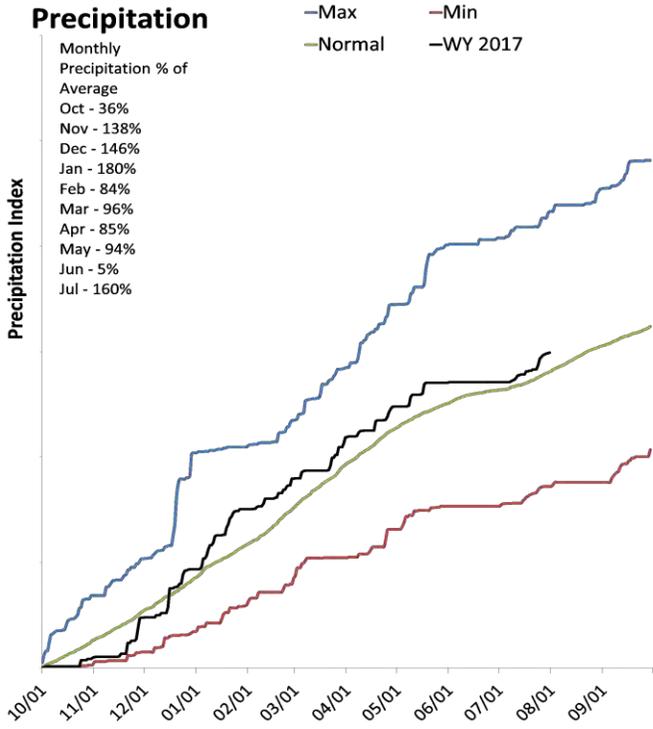
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

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

Beaver River Basin

August 1, 2017

Precipitation in July was much above average at 162%, which brings the seasonal accumulation (Oct-Jul) to 106% of average. Soil moisture is at 46% compared to 32% last year. Reservoir storage is at 36% of capacity, compared to 21% last year. The water availability index for the Beaver River is 53%.



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

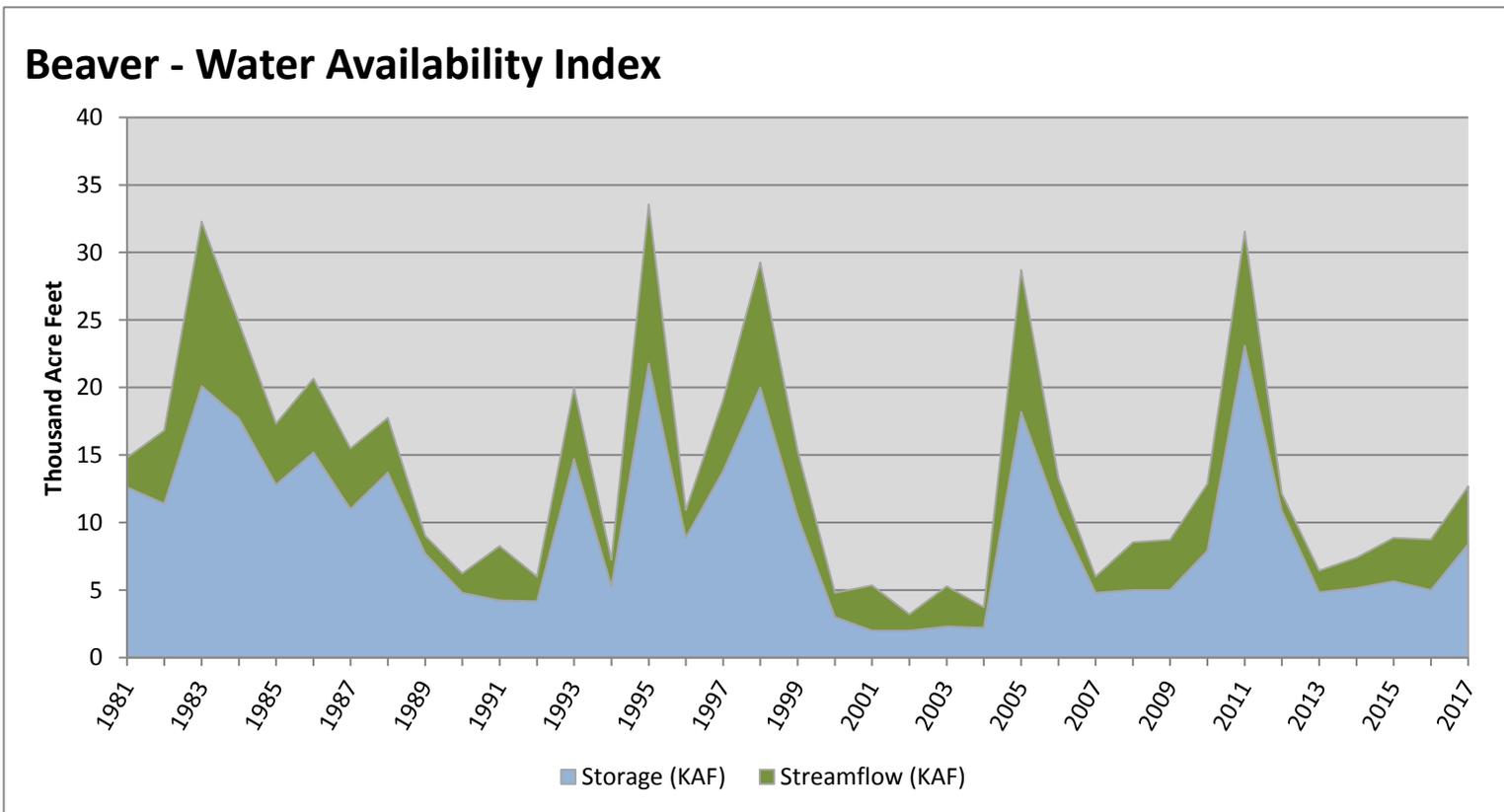
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

August 1, 2017

Water Availability Index

Basin or Region	Jul EOM [*] Storage	July Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Beaver	8.40	4.27	12.67	53	0.22	96, 12, 10, 06

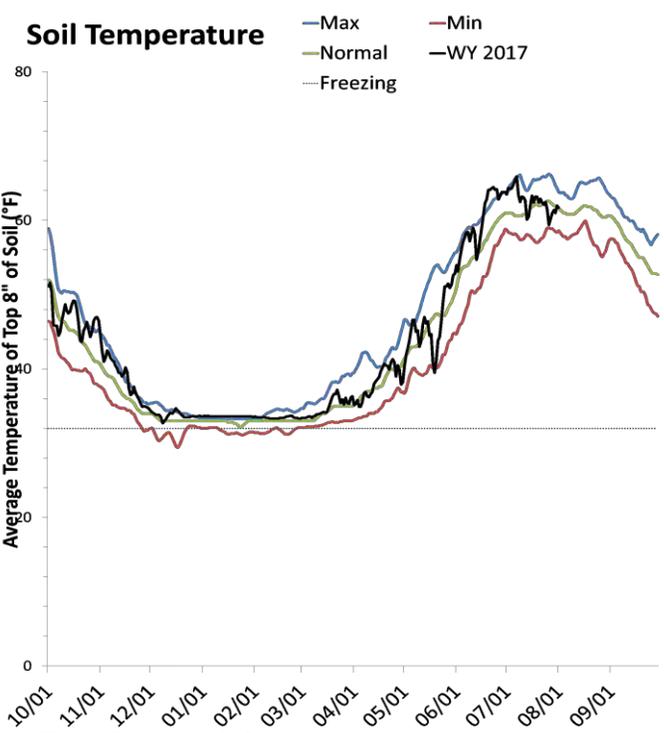
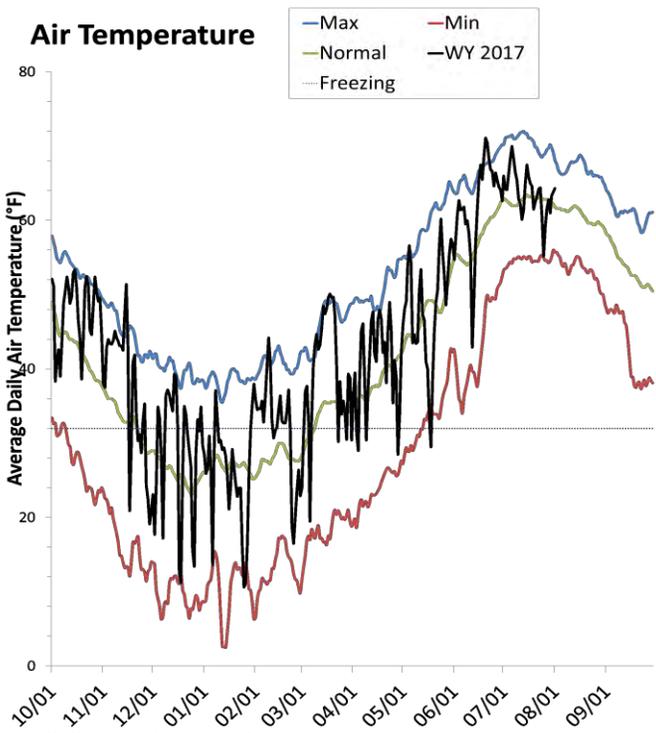
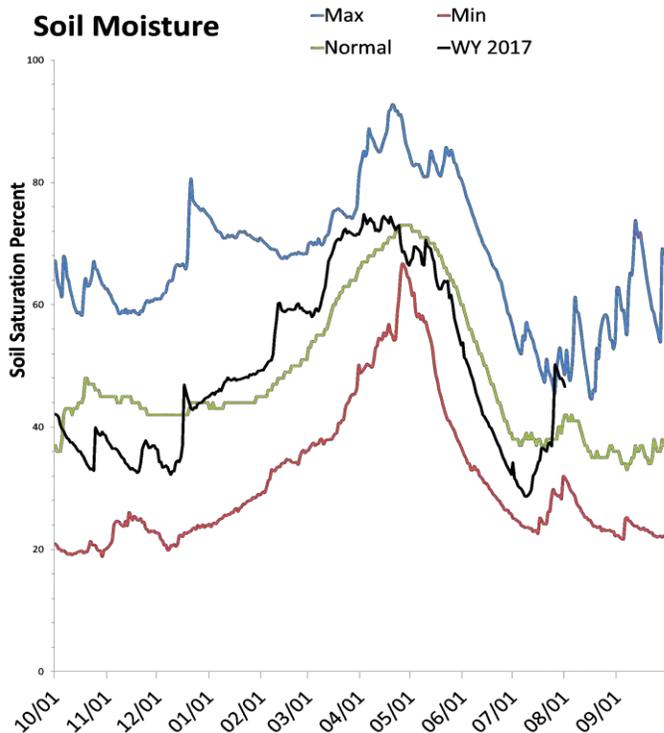
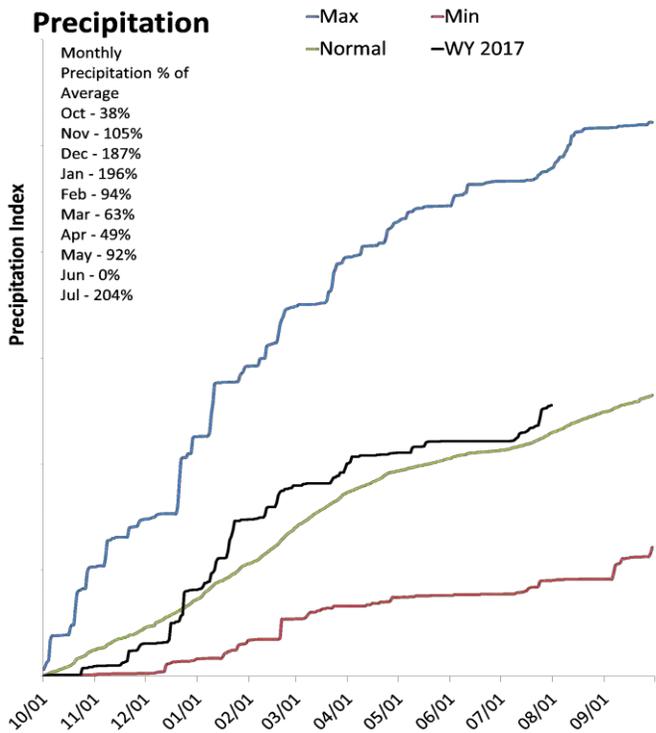
^{*}EOM, end of month; [#]WAI, Water Availability Index; [^]KAF, thousand acre-feet.



Southwestern Utah

August 1, 2017

Precipitation in July was much above average at 202%, which brings the seasonal accumulation (Oct-Jul) to 111% of average. Soil moisture is at 47% compared to 32% last year. Reservoir storage is at 63% of capacity, compared to 56% last year. The water availability index for the Virgin River is 57%.



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

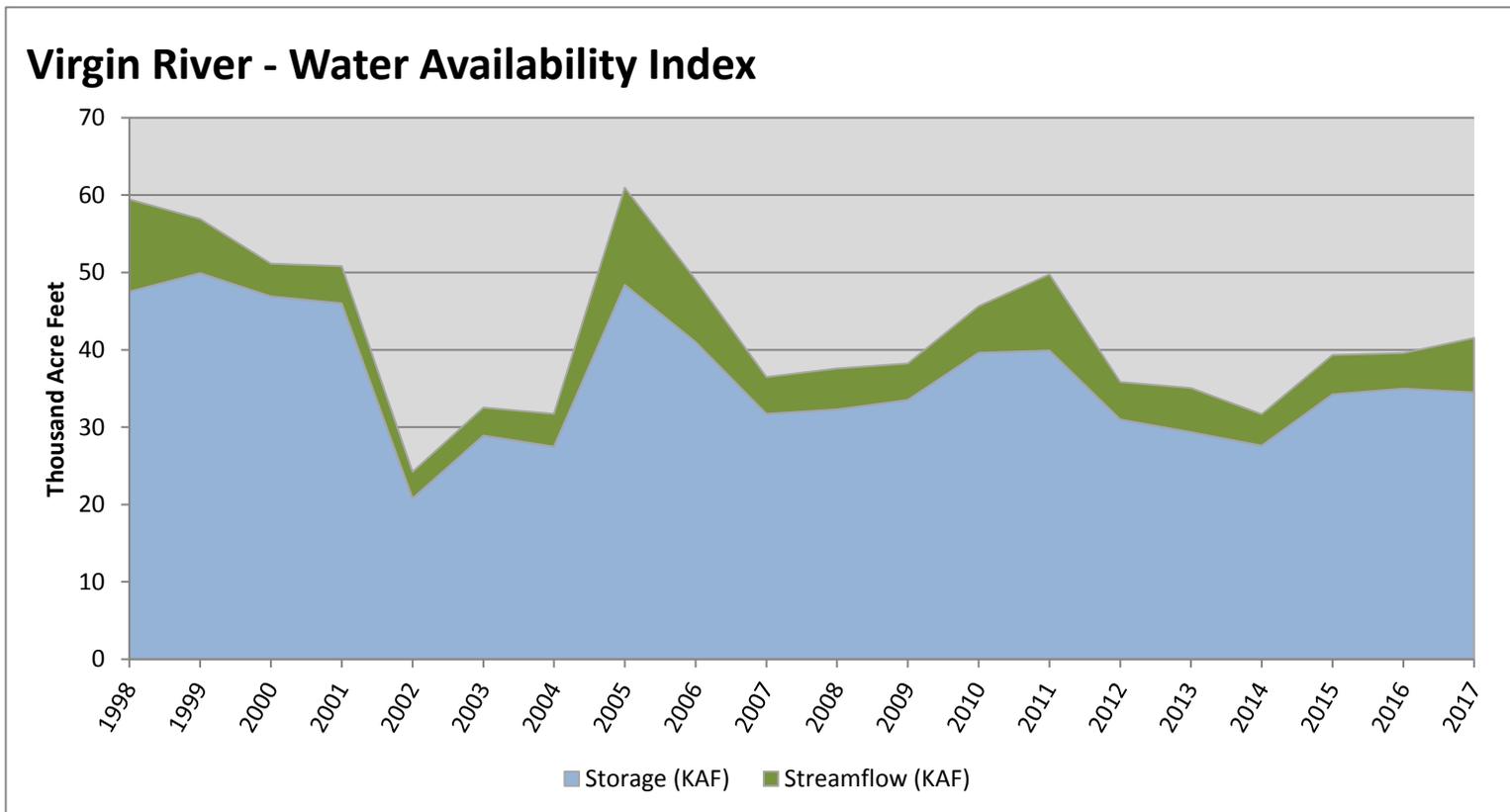
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

August 1, 2017

Water Availability Index

Basin or Region	Jul EOM [*] Storage	July Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Virgin River	34.47	7.04	41.51	57	0.6	15, 16, 10, 06

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



August 1, 2017

Water Availability Index

Basin or Region	Jul EOM* Storage	July Flow	Storage + Flow	Percentile	WAI#	Years with similiar WAI
	KAF^	KAF^	KAF^	%		
Bear River	1201	13.1	1215	76	2.2	87, 85, 11, 82
Woodruff Narrows	42.0	13.1	55.0	68	1.5	05, 16, 08, 10
Little Bear	12.5	4.1	16.6	85	2.9	95, 99, 97, 98
Ogden	105.1	4.9	110.0	79	2.4	93, 09, 82, 95
Weber	184.4	16.7	201.1	68	1.5	97, 08, 96, 99
Provo River	431.5	10.8	442.3	83	2.7	96, 97, 05, 98
Western Uinta	203.7	10.0	213.7	71	1.8	08, 09, 96, 97
Eastern Uinta	35.1	8.3	43.4	26	-2.0	04, 93, 03, 81
Blacks Fork	19.4	14.7	34.1	66	1.3	85, 10, 08, 96
Price	60.0	1.7	61.7	82	2.6	97, 99, 86, 82
Smiths Creek	10.2	12.3	22.5	88	3.2	99, 86, 98, 95
Joes Valley	57.6	4.7	62.3	68	1.5	85, 97, 08, 99
Moab	2.0	0.6	2.6	68	1.5	08, 92, 97, 15
Upper Sevier River	50.5	0.7	51.2	37	-1.1	96, 94, 13, 14
San Pitch	8.9	2.2	11.1	53	0.2	88, 05, 06, 81
Lower Sevier	26.1	5.1	31.2	11	-3.3	04, 16, 91, 02
Beaver	8.4	4.3	12.7	53	0.2	96, 12, 10, 06
Virgin River	34.5	7.0	41.5	57	0.6	15, 16, 10, 06

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

What is a Water Availability Index?

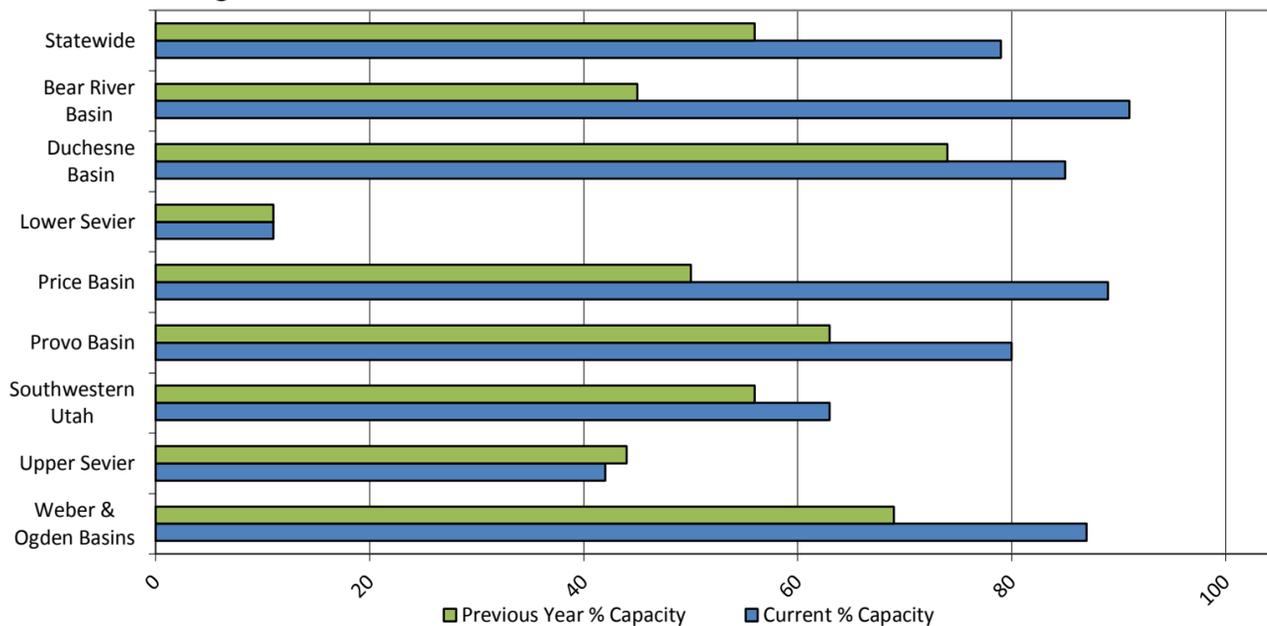
The Water Availability Index (WAI) is an observed hydrologic indicator of current surface water availability within a watershed. The index is calculated by combining current reservoir storage with the previous months streamflow. WAI values are scaled from +4.1 (abundant supply) to -4.1 (extremely dry) 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 July 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	19.1	17.2		25.7	74%	67%			
Causey Reservoir	6.9	5.5	5.2	7.1	98%	77%	73%	133%	105%
Cleveland Lake	3.8	3.1		5.4	71%	57%			
Currant Creek Reservoir	14.8	15.1	15.2	15.5	95%	97%	98%	97%	99%
Deer Creek Reservoir	143.9	113.1	123.4	149.7	96%	76%	82%	117%	92%
East Canyon Reservoir	45.4	29.2	40.9	49.5	92%	59%	83%	111%	71%
Echo Reservoir	54.3	37.3	49.0	73.9	73%	50%	66%	111%	76%
Grantsville Reservoir	1.8	1.2	1.7	3.3	55%	36%	51%	107%	70%
Gunlock	5.5	4.6	7.2	10.4	53%	44%	69%	76%	64%
Gunnison Reservoir	8.9	0.0	10.4	20.3	44%	0%	51%	85%	0%
Huntington North Reservoir	3.4	3.0	2.6	4.2	81%	71%	62%	131%	115%
Hyrum Reservoir	12.5	6.8	9.5	15.3	82%	44%	62%	132%	71%
Joes Valley Reservoir	57.6	41.6	51.0	61.6	93%	68%	83%	113%	82%
Jordanelle Reservoir	287.6	259.0	288.4	320.0	90%	81%	90%	100%	90%
Ken's Lake	2.0	2.3	1.4	2.3	86%	99%	62%	138%	159%
Kolob Reservoir	4.7	5.4		5.6	84%	97%			
Lost Creek Reservoir	20.4	17.3	16.0	22.5	90%	77%	71%	127%	108%
Lower Enterprise	1.5	0.5	0.4	2.6	58%	19%	16%	366%	122%
Miller Flat Reservoir	4.3	2.7		5.2	83%	51%			
Millsite	11.7	13.4	14.5	16.7	70%	80%	87%	81%	92%
Minersville Reservoir	8.4	5.0	10.0	23.3	36%	21%	43%	84%	50%
Moon Lake Reservoir	31.7	24.5	26.1	35.8	89%	68%	73%	121%	94%
Otter Creek Reservoir	38.2	39.0	29.4	52.5	73%	74%	56%	130%	133%
Panguitch Lake	10.7	11.1	14.6	22.3	48%	50%	65%	73%	76%
Pineview Reservoir	98.2	84.0	77.0	110.1	89%	76%	70%	128%	109%
Piute Reservoir	12.3	15.1	32.1	71.8	17%	21%	45%	38%	47%
Porcupine Reservoir	8.0	9.0	8.5	11.3	71%	80%	75%	94%	106%
Quail Creek	29.0	30.4	26.1	40.0	73%	76%	65%	111%	116%
Red Fleet Reservoir	21.7	22.7	21.2	25.7	84%	88%	82%	102%	107%
Rockport Reservoir	56.8	41.0	51.5	60.9	93%	67%	85%	110%	80%
Sand Hollow Reservoir	27.9	45.5		50.0	56%	91%			
Scofield Reservoir	59.9	16.0	39.7	65.8	91%	24%	60%	151%	40%
Settlement Canyon Reservoir	0.7	0.4	0.7	1.0	70%	36%	67%	104%	54%
Sevier Bridge Reservoir	26.1	25.0	120.0	236.0	11%	11%	51%	22%	21%
Smith And Morehouse Reservoir	7.6	6.5	6.5	8.1	94%	80%	80%	117%	100%
Starvation Reservoir	145.3	142.9	143.2	165.3	88%	86%	87%	101%	100%
Stateline Reservoir	10.2	10.2	8.9	12.0	85%	85%	74%	115%	115%
Steinaker Reservoir	13.4	16.8	22.5	33.4	40%	50%	67%	60%	75%
Strawberry Reservoir	950.0	803.4	713.1	1105.9	86%	73%	64%	133%	113%
Upper Enterprise	2.8	0.3	2.8	10.0	28%	3%	28%	100%	11%
Upper Stillwater Reservoir	26.7	22.1	24.5	32.5	82%	68%	75%	109%	90%
Utah Lake	585.5	354.0	756.4	870.9	67%	41%	87%	77%	47%
Vernon Creek Reservoir	0.2	0.2	0.3	0.6	33%	25%	42%	80%	60%
Willard Bay	187.4	155.5	148.3	215.0	87%	72%	69%	126%	105%
Woodruff Creek	2.1	0.3	1.3	4.0	53%	7%	32%	167%	21%
Woodruff Narrows Reservoir	42.0	43.4	25.7	57.3	73%	76%	45%	163%	169%
Meeks Cabin Reservoir	19.4	19.2	16.7	32.5	60%	59%	51%	116%	115%
Bear Lake	1201.5	565.2	696.0	1302.0	92%	43%	53%	173%	81%
Basin-wide Total	4273.7	3012.6	3659.8	5380.9	79%	56%	68%	117%	82%
# of reservoirs	43	43	43	43	43	43	43	43	43

Reservoir Storage



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