



Utah Climate and Water Report

September 1, 2017



Colorado Plateau Wildflowers

Near GBRC Meadows SNOTEL, above Ephraim, Utah

Photo by Casey Sutcliffe

Report Contents

1) Statewide Hydrologic Summary

- a) Utah General Summary
 - Supporting Documents

2) Climate and Water Information – SCAN

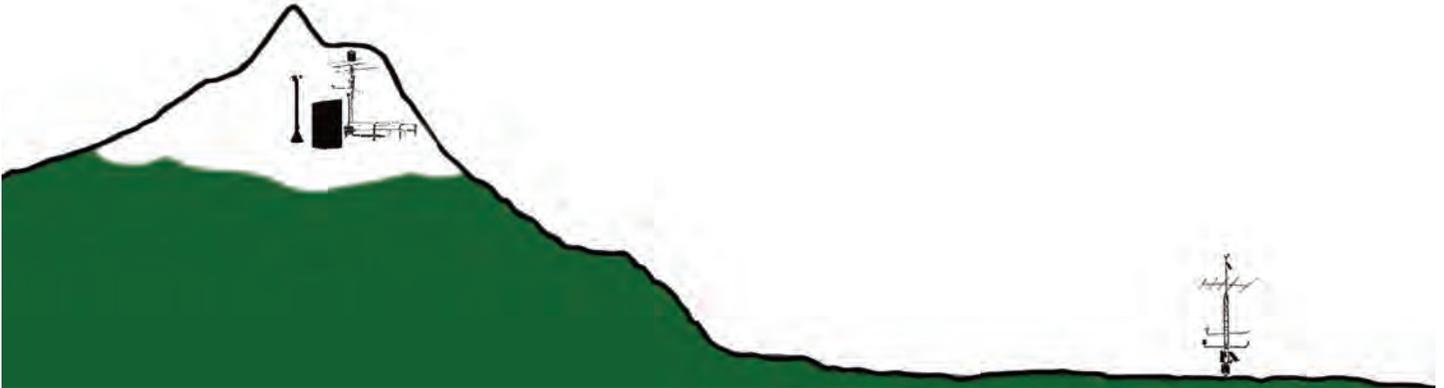
- a) Statewide SCAN
- b) Southeast
- c) South Central
- d) Western and Dixie
- e) Uinta Basin
- f) North Central
- g) Northern Mountains

3) Climate and Water Information – SNOTEL

- a) Statewide SNOTEL
- b) Bear River Basin
 - Water Availability Indices
- c) Weber & Ogden River Basins
 - Water Availability Indices
- d) Provo & Jordan River Basins
 - Water Availability Index
- e) Tooele Valley & West Desert Basins
- f) Northeastern Uinta Basin
 - Water Availability Indices
- g) Duchesne River Basins
 - Water Availability Indices
- h) San Pitch River Basin
 - Water Availability Index
- i) Price & San Rafael Basins
 - Water Availability Indices
- j) Lower Sevier Basin
 - Water Availability Index
- k) Upper Sevier Basin
 - Water Availability Index
- l) Southeastern Utah
 - Water Availability Index
- m) Dirty Devil
- n) Escalante River Basin
 - Water Availability Index
- o) Beaver River Basin
 - Water Availability Index
- p) Southwestern Utah
 - Water Availability Index

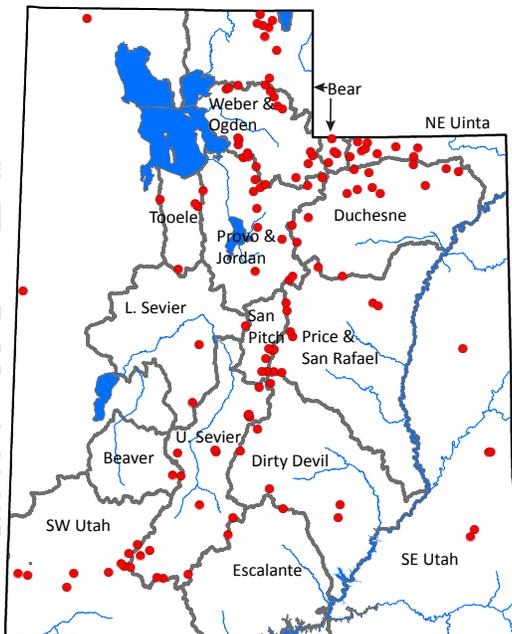
Utah Climate and Water Report

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.



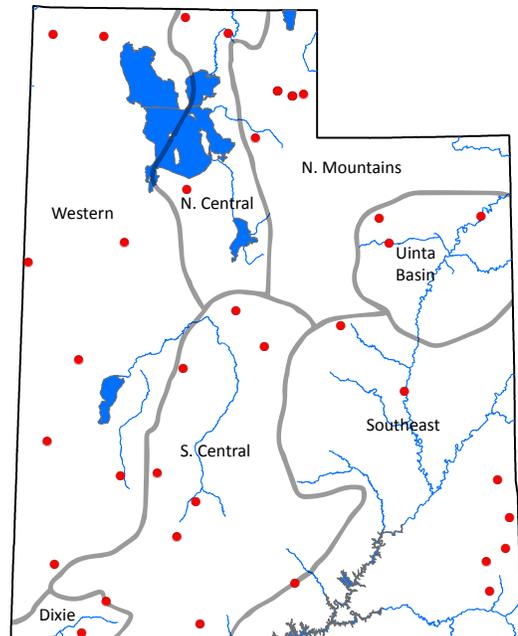
SNOTEL

- 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 September 1, 2017

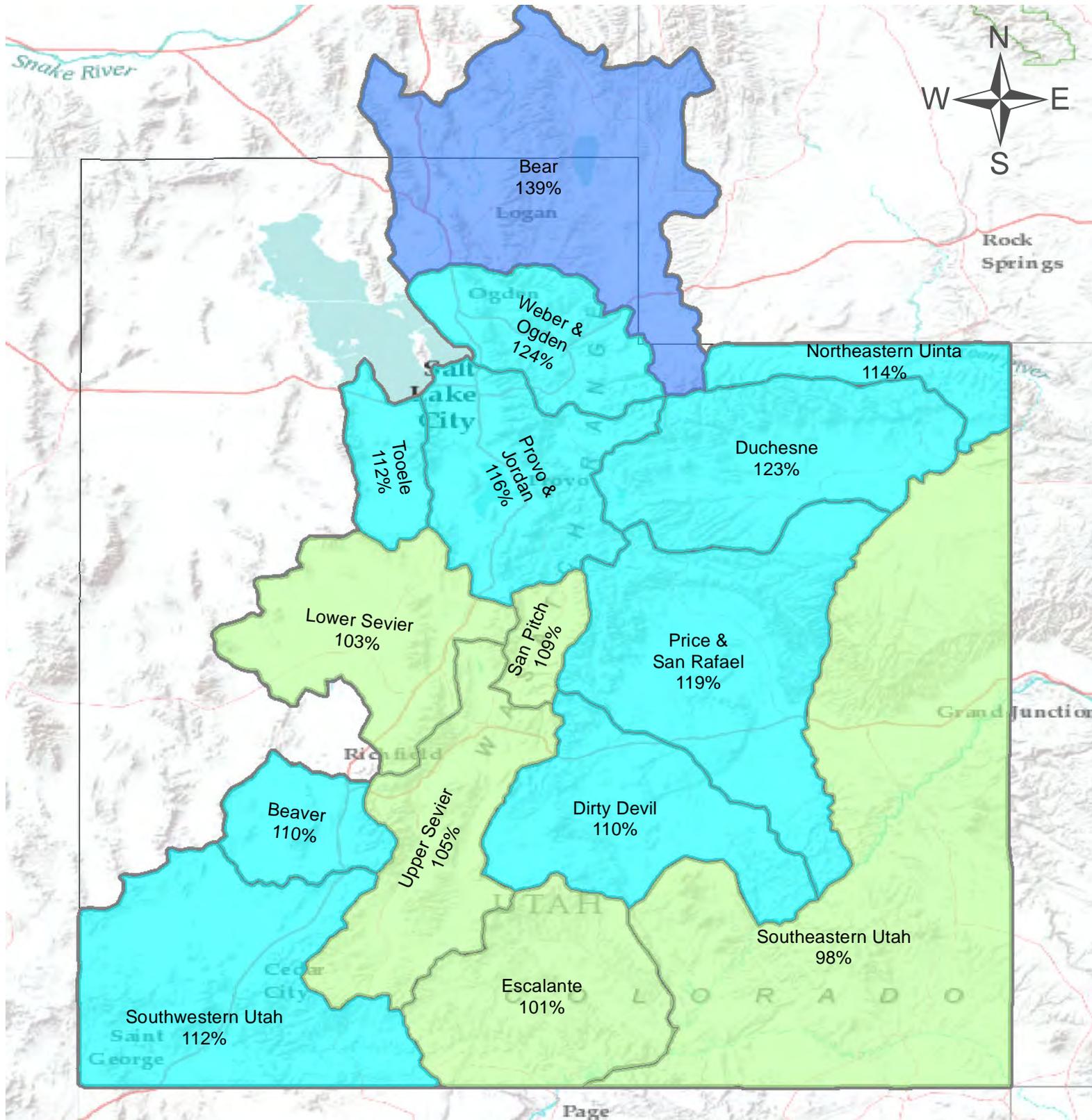
This report has been reorganized to better reflect two distinct geographic areas being monitored – the low elevation valley sites (Soil Climate Analysis Network) that are critical for agricultural production and operations, and the high elevation mountainous areas where water supply is generated (SNOWTElemetry).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

On average, August brought a light 0.9 inches of precipitation to Utah's valley locations, bringing the 2017 water year total to 11.2 inches. Soil moisture is about the same as last year, at 34 percent. Soil temperatures are primarily above normal, reflecting the record and near-record air temperatures of the last month. The North Central region was the driest in August with only 0.4 inches of rain, while a couple of strong monsoonal storms were able to bump the Southeast Region to a monthly total of 1.1 inches. On average, most sites in valley locations are still above average for the water year, but may drop to below average if September remains as dry as August.

Current Mountain Conditions (SNOTEL)

August was warm and dry. Precipitation statewide was 87% of average with southern Utah ranging from 105% to 115% and getting much drier in the north. Of the basins in northern Utah, the Weber basin was the driest at 51% of average, while, at 83%, the Duchesne basin received the most moisture for the region. Average temperatures across the state have been exceptionally warm. Soil moisture—which had been well above normal—has been in a steep decline in response to below average precipitation and well above-normal temperatures, yet statewide soil moisture values remain near average for this time of year. However, if this weather pattern continues through September and early October, the state could go into the snow accumulation season with a substantial soil moisture deficit. Streamflow remains near average for the vast majority of gaged locations across the state, which reflects the ongoing effects of last winter's excellent snowpack. Reservoir storage is at 74% of capacity compared to 48% last year and 79% last month. Given the lack of rainfall and the warm temperatures, there has been a rather modest decline in reservoir storage overall.



Statewide Precipitation

As of September 1, 2017:

120% of Normal Precipitation

87% of Normal Precipitation Last Month

% of Normal

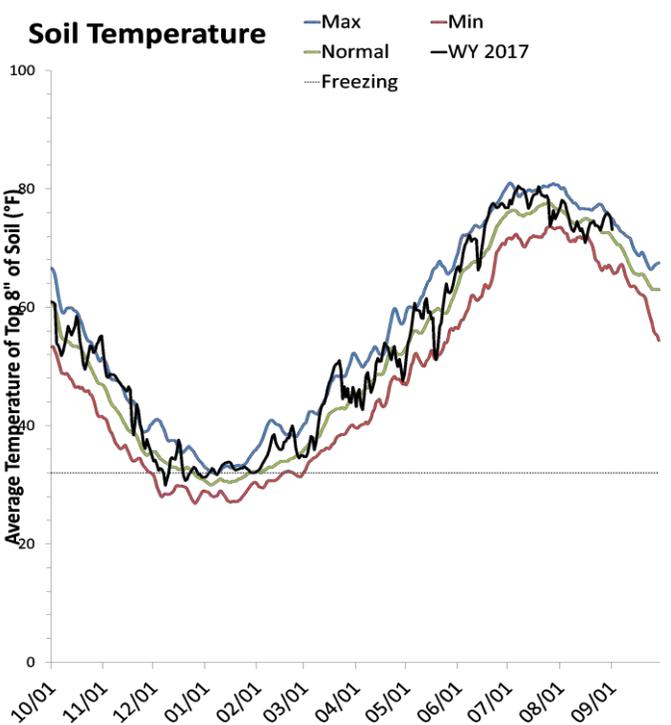
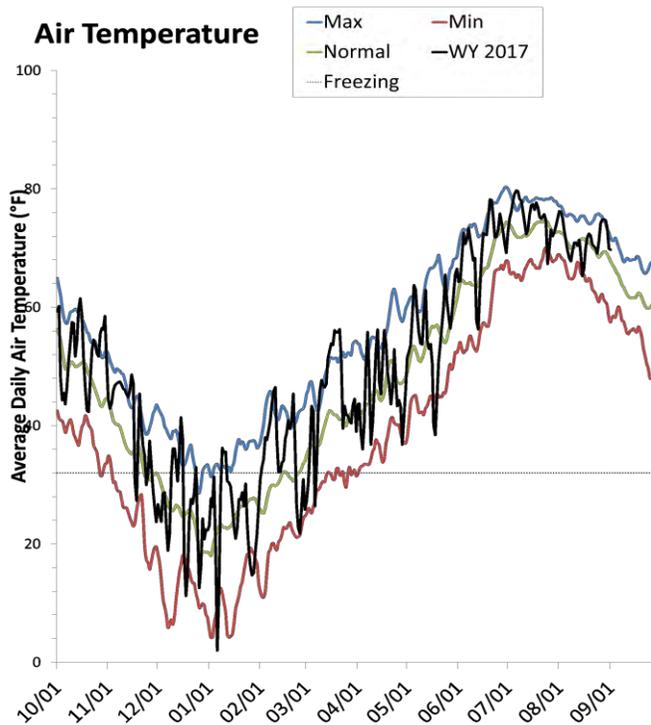
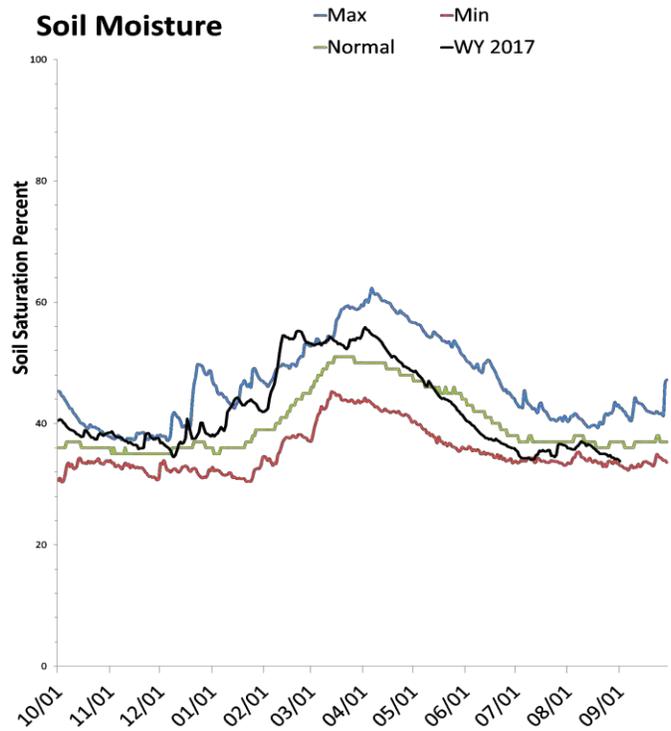
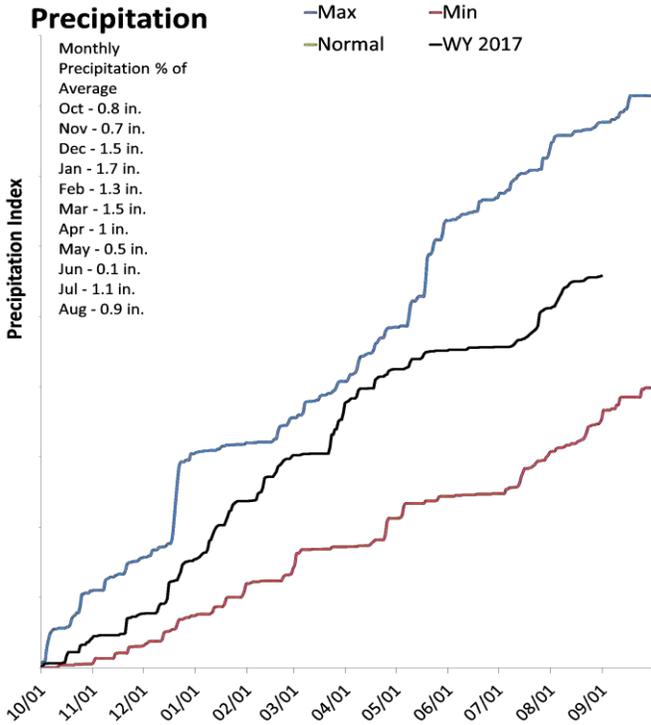
- < 50%
- 50 - 69%
- 70 - 89%
- 90 - 109%
- 110 - 129%
- 130 - 149%
- > 150%

0 10 20 40 60 80 100 Miles

Statewide SCAN

September 1, 2017

The average precipitation at SCAN sites within Utah was 0.9 inches in August, which brings the seasonal accumulation (Oct-Aug) to 11.2 inches. Soil moisture is at 34% compared to 35% last year.



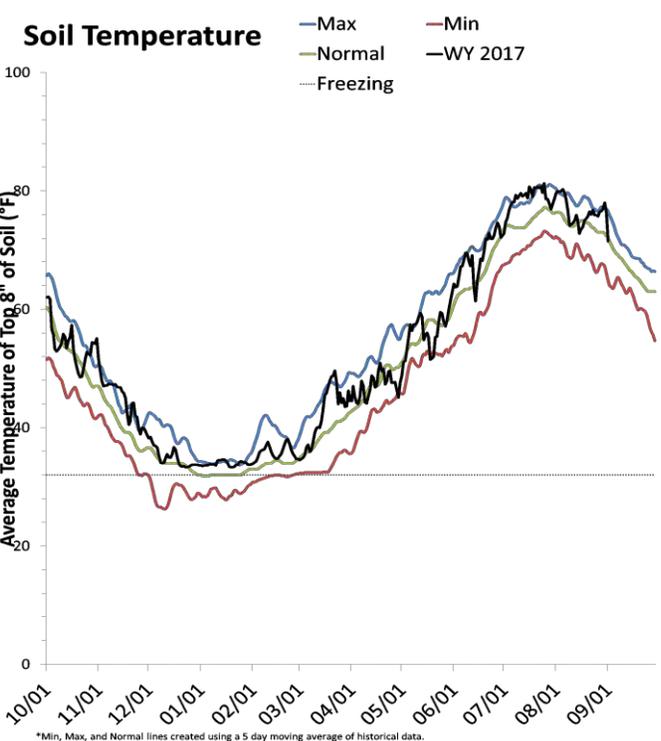
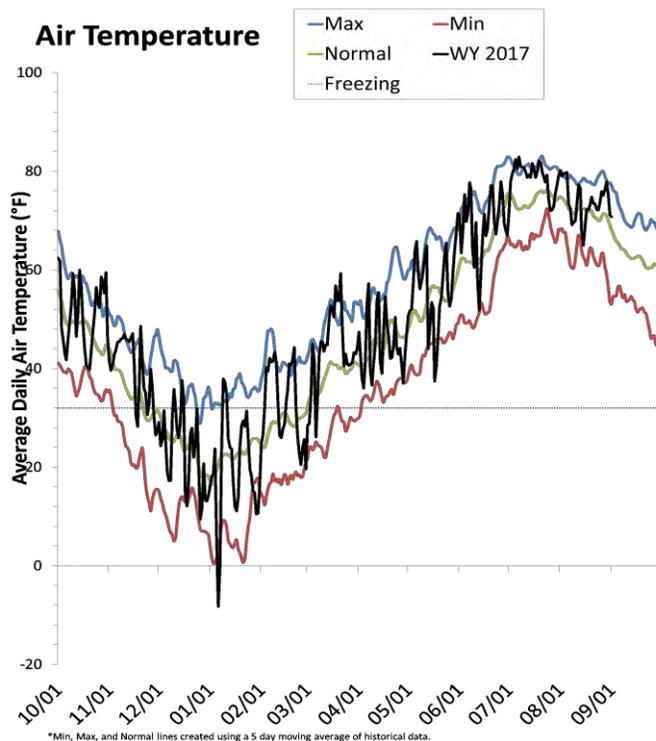
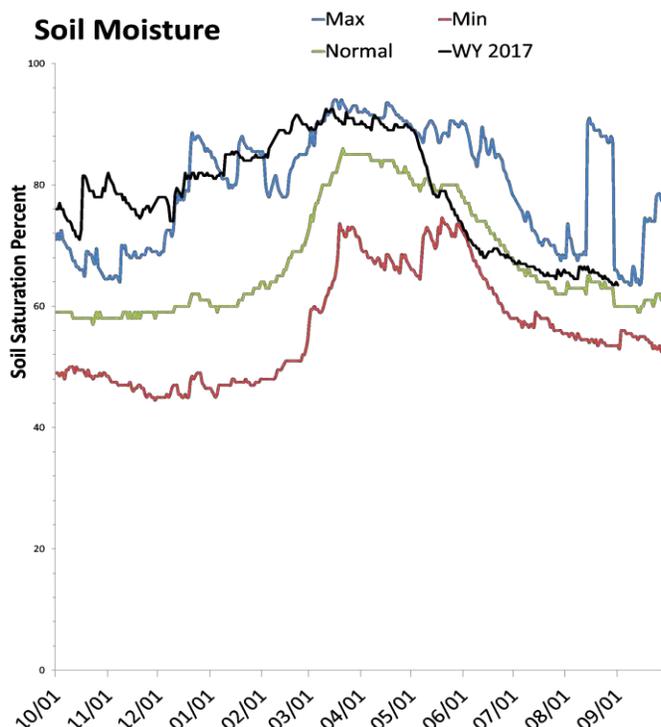
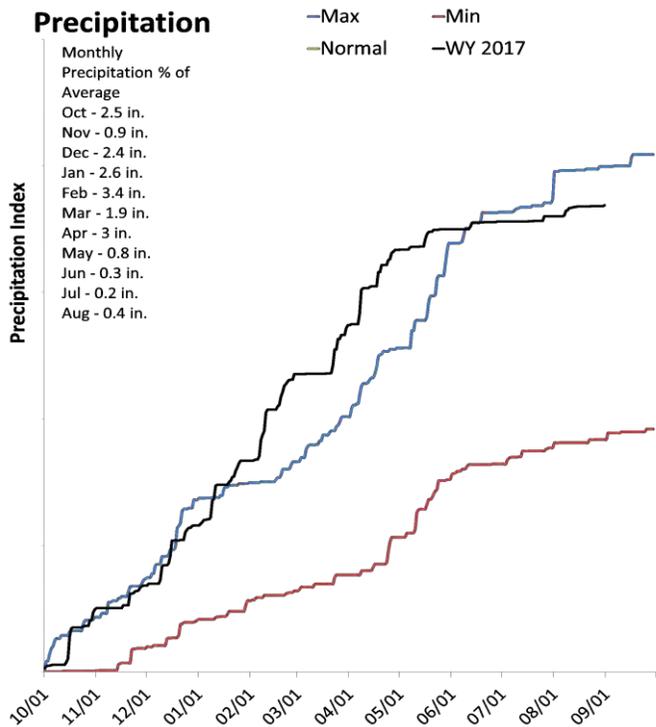
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

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North Central

September 1, 2017

The average precipitation in August at SCAN sites within the basin was 0.4 inches, which brings the seasonal accumulation (Oct-Aug) to 18.5 inches. Soil moisture is at 64% compared to 62% last year.



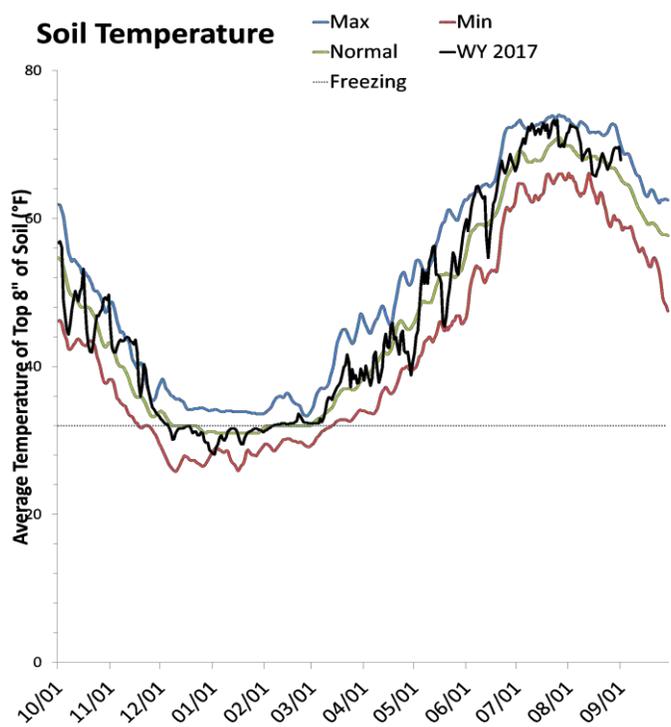
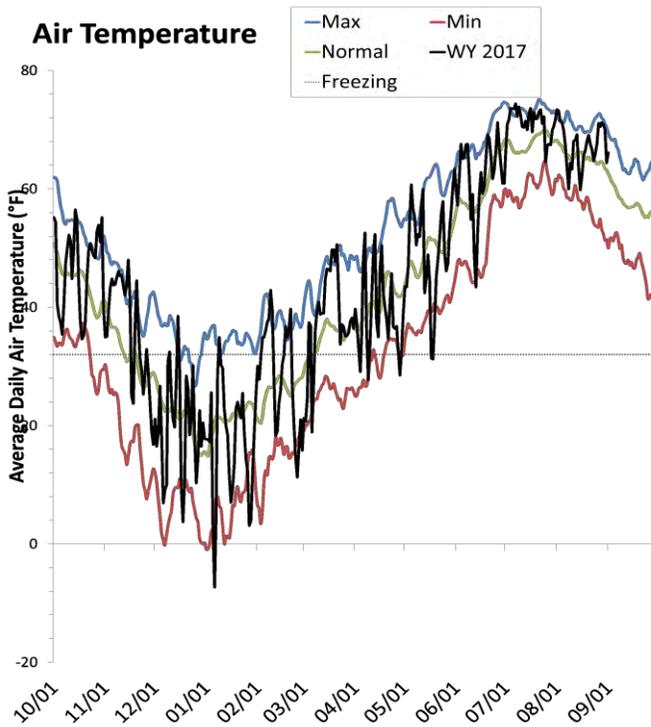
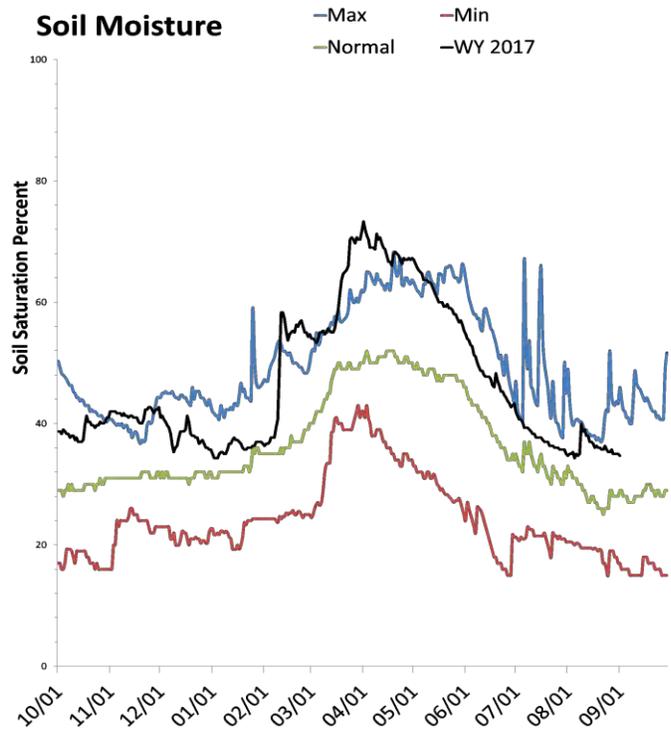
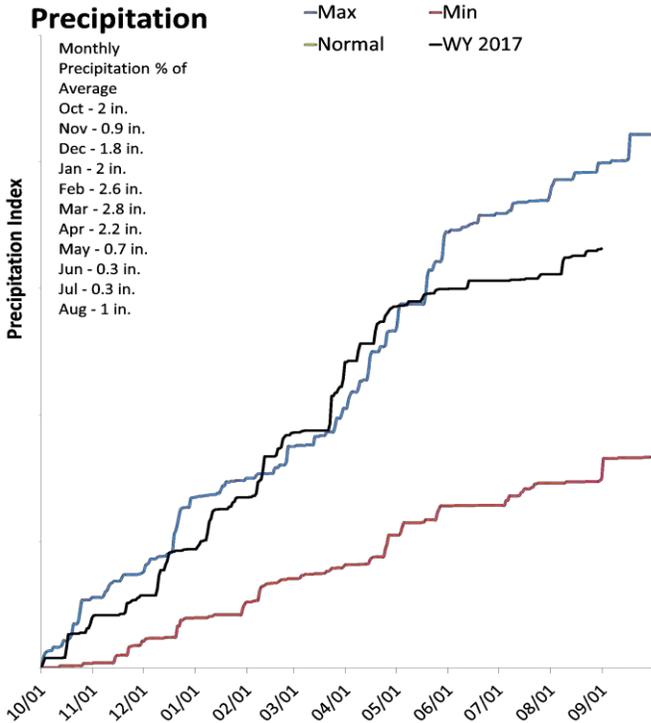
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

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Northern Mountains

September 1, 2017

The average precipitation in August at SCAN sites within the basin was 1 inches, which brings the seasonal accumulation (Oct-Aug) to 16.6 inches. Soil moisture is at 35% compared to 33% last year.



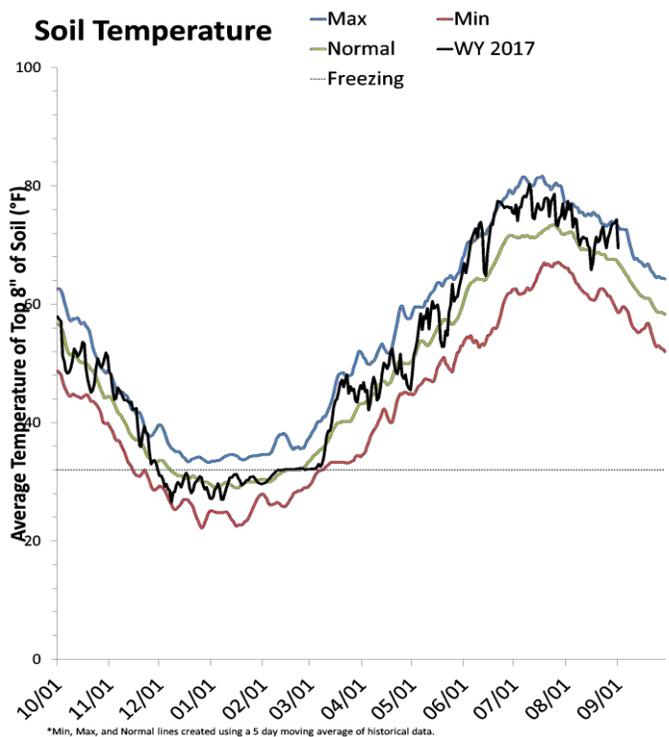
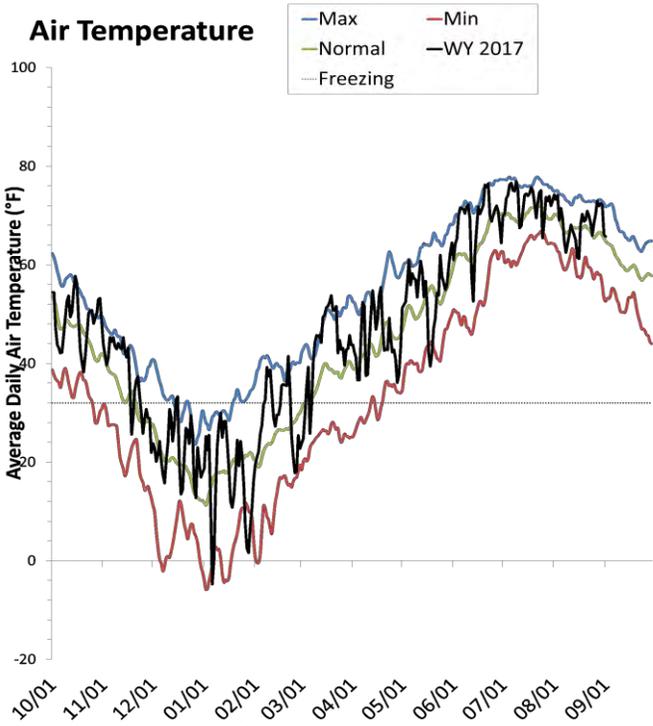
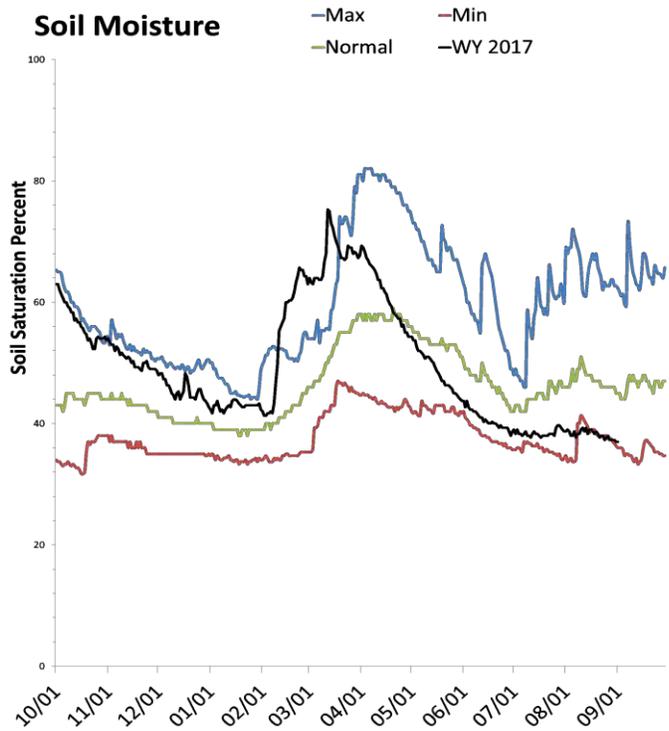
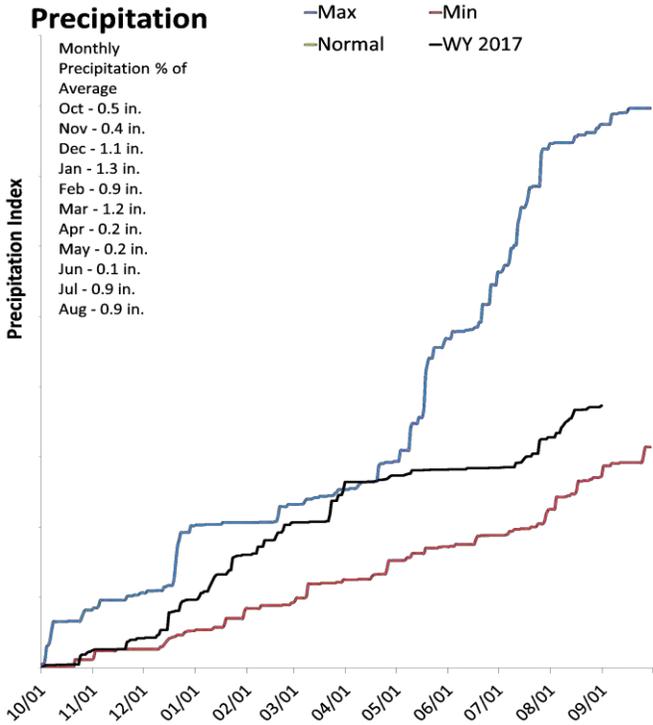
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

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Uinta Basin

September 1, 2017

The average precipitation in August at SCAN sites within the basin was 0.9 inches, which brings the seasonal accumulation (Oct-Aug) to 7.5 inches. Soil moisture is at 37% compared to 49% last year.



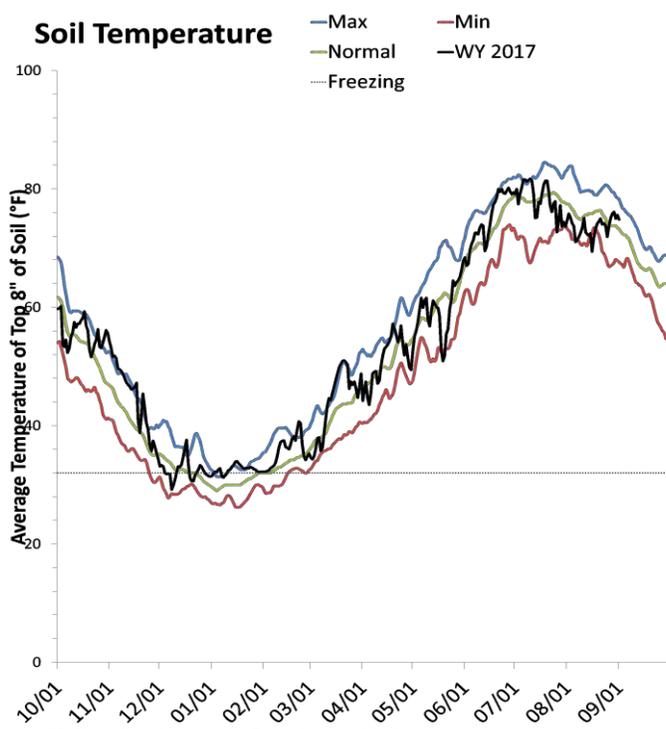
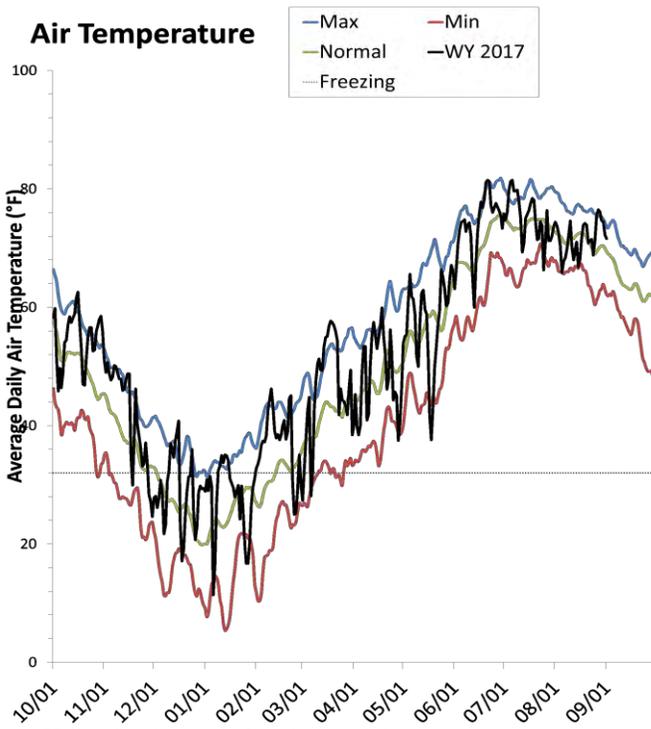
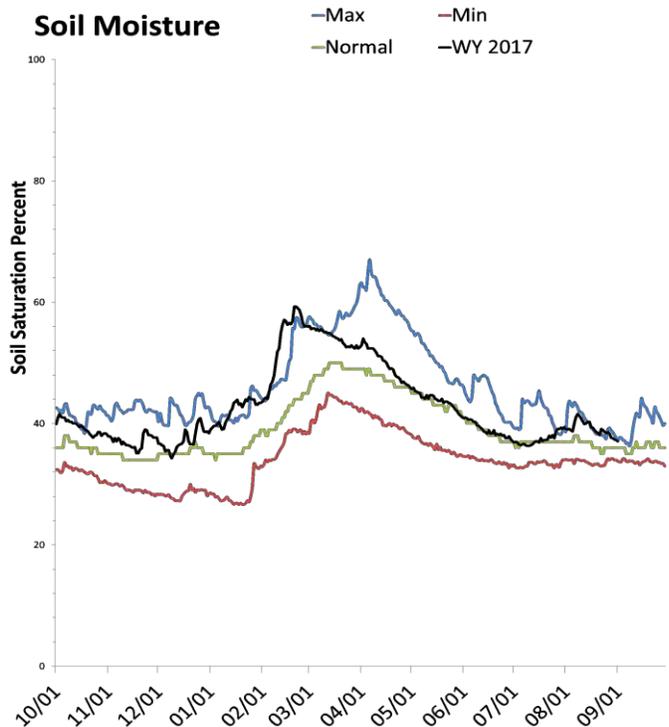
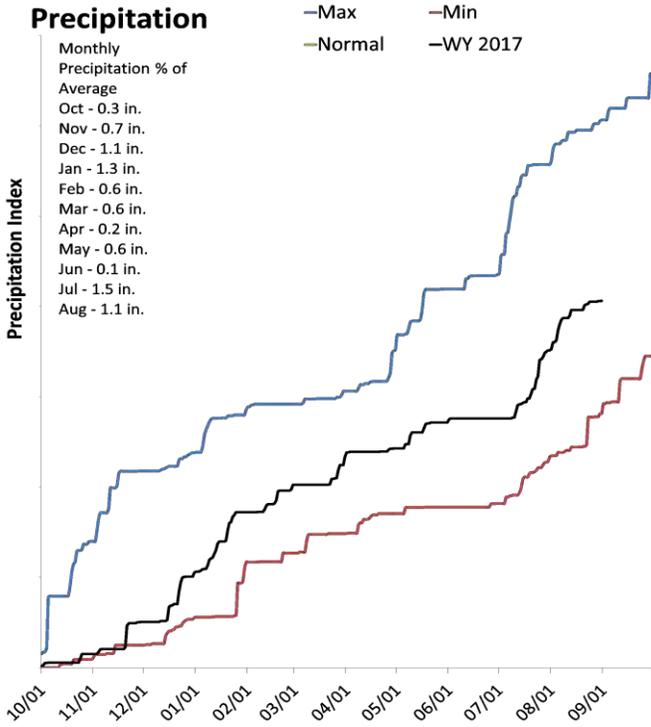
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

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Southeast

September 1, 2017

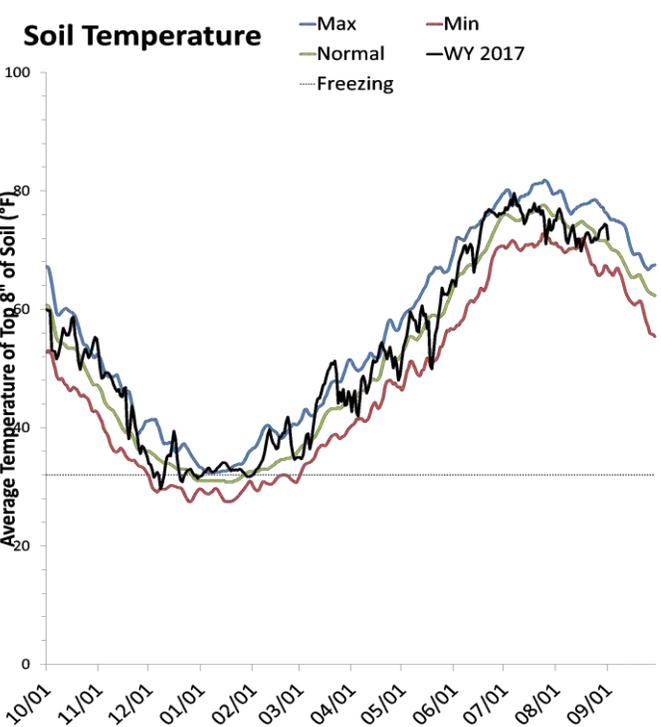
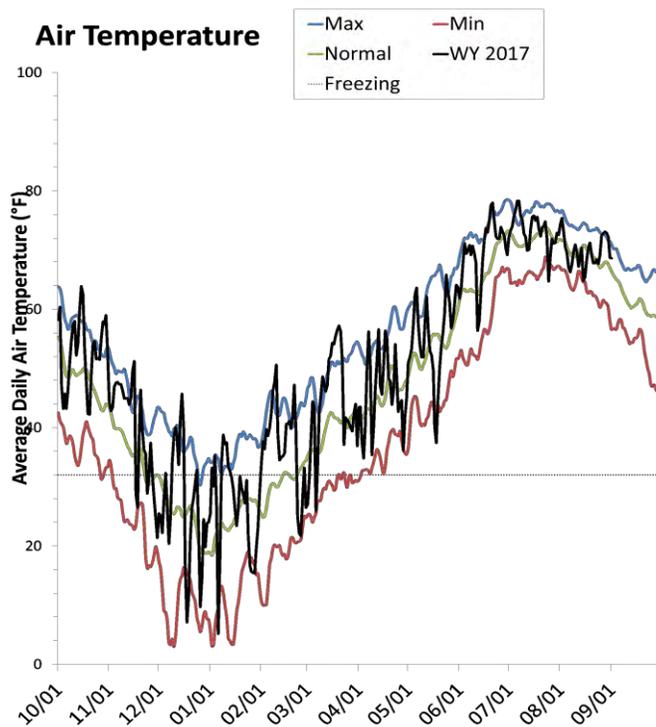
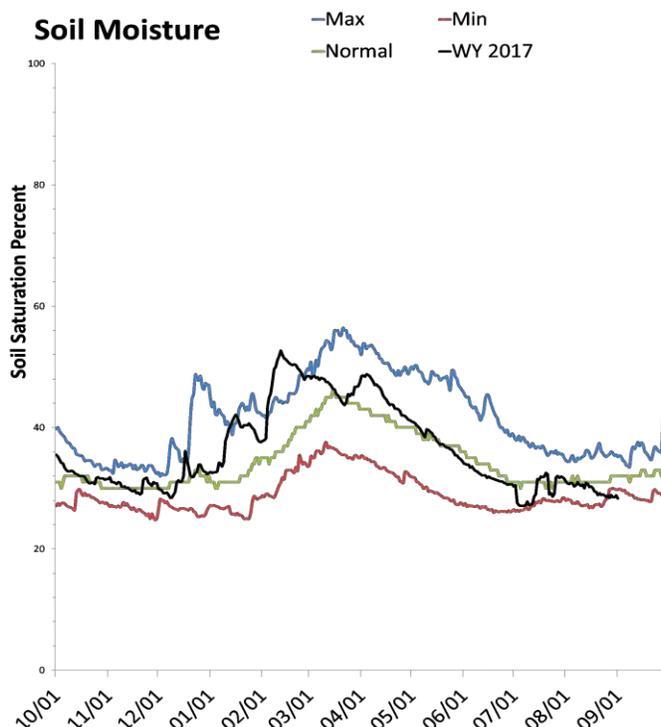
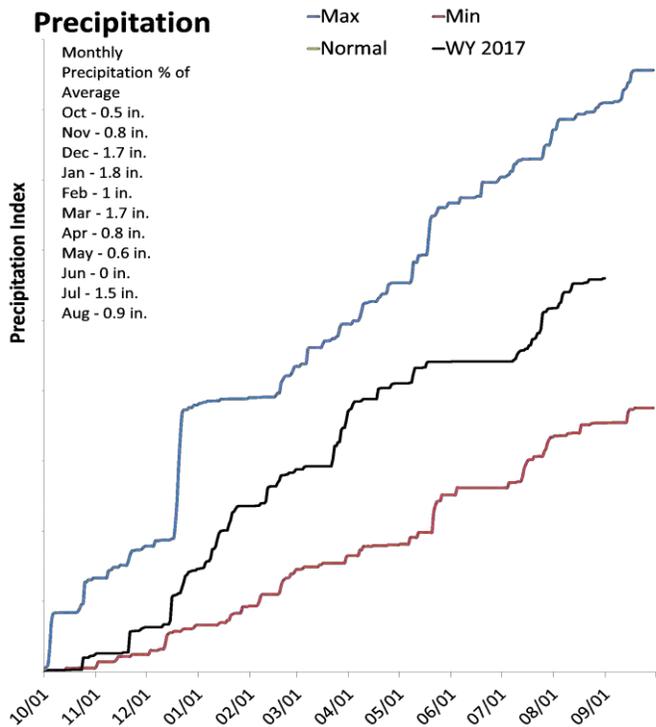
The average precipitation in August at SCAN sites within the basin was 1.1 inches, which brings the seasonal accumulation (Oct-Aug) to 8.1 inches. Soil moisture is at 37% compared to 37% last year.



South Central

September 1, 2017

The average precipitation in August at SCAN sites within the basin was 0.9 inches, which brings the seasonal accumulation (Oct-Aug) to 11.2 inches. Soil moisture is at 28% compared to 31% last year.



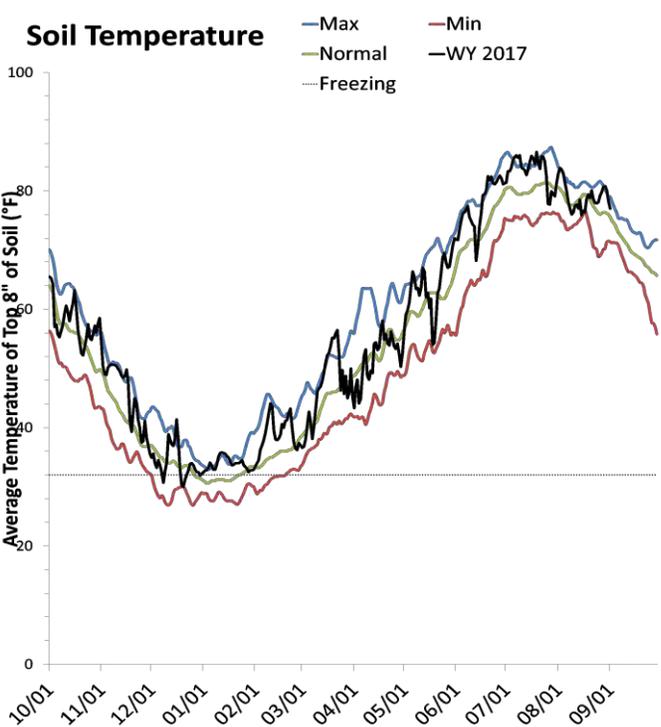
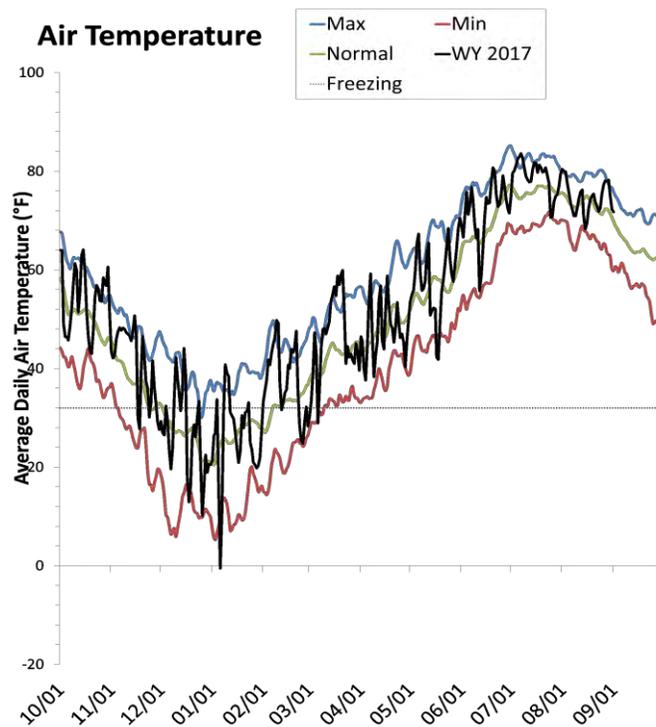
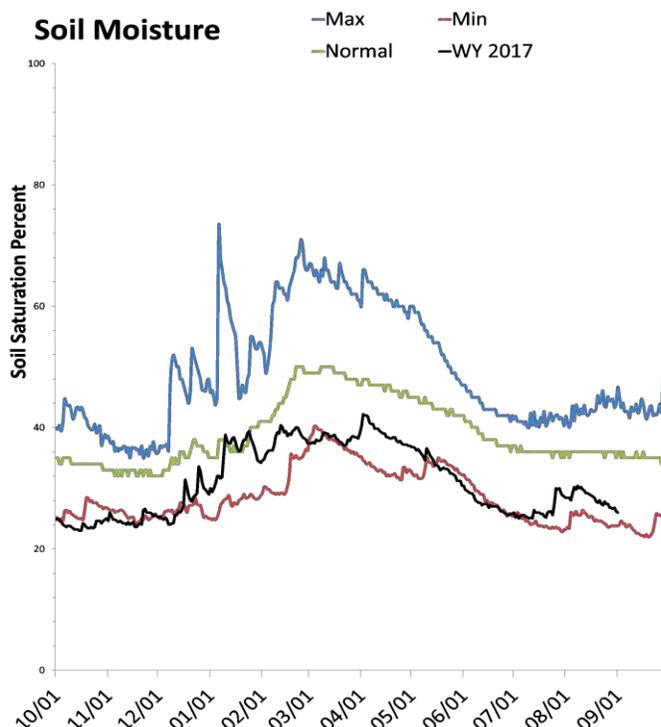
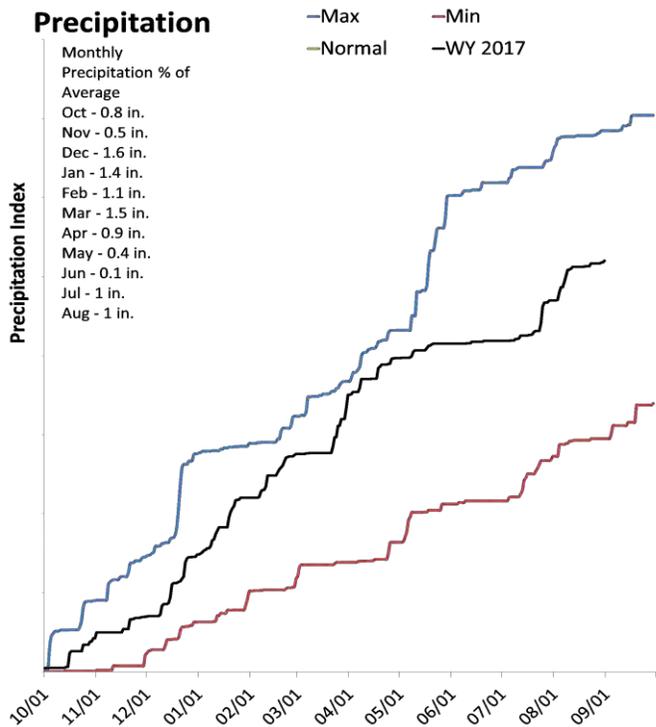
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

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Western and Dixie

September 1, 2017

The average precipitation in August at SCAN sites within the basin was 1 inches, which brings the seasonal accumulation (Oct-Aug) to 10.4 inches. Soil moisture is at 26% compared to 24% last year.



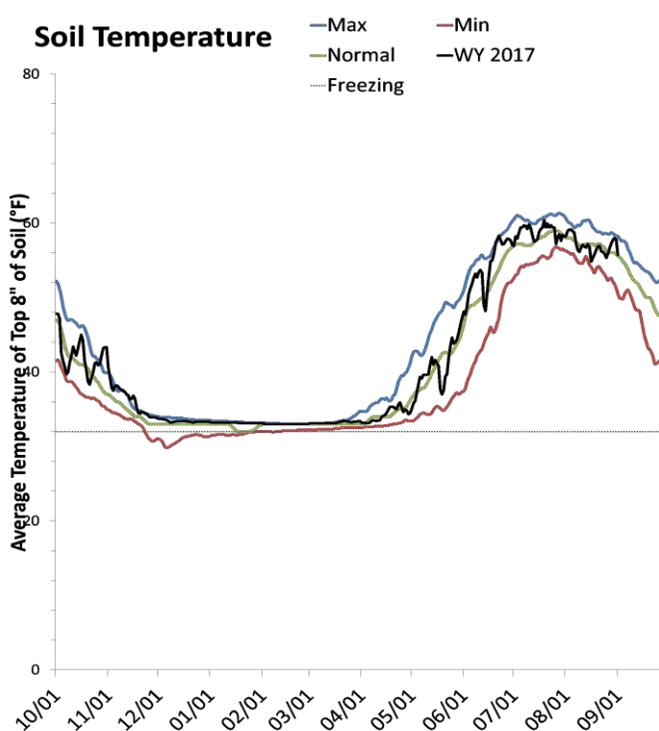
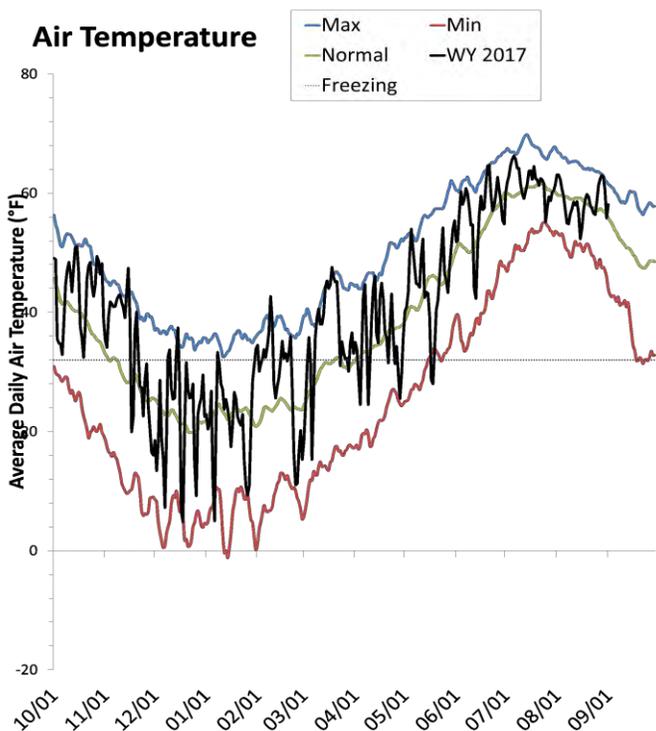
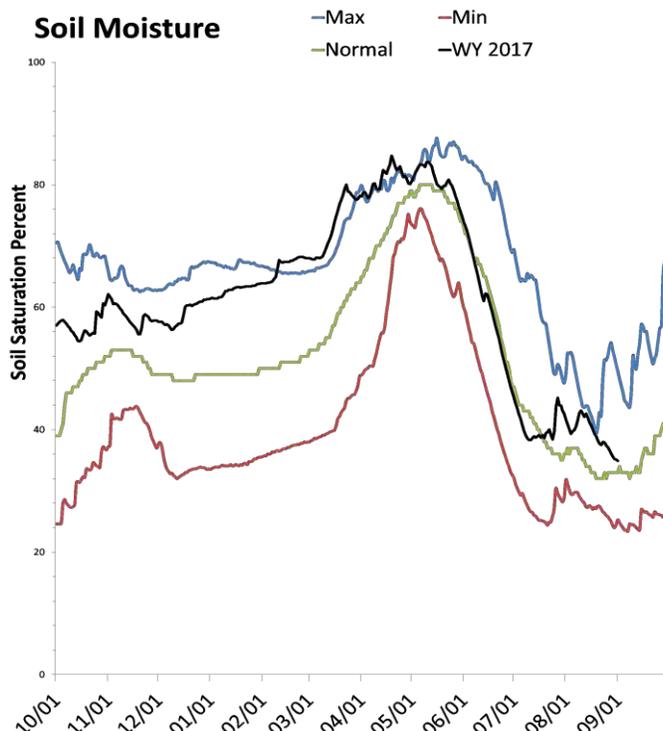
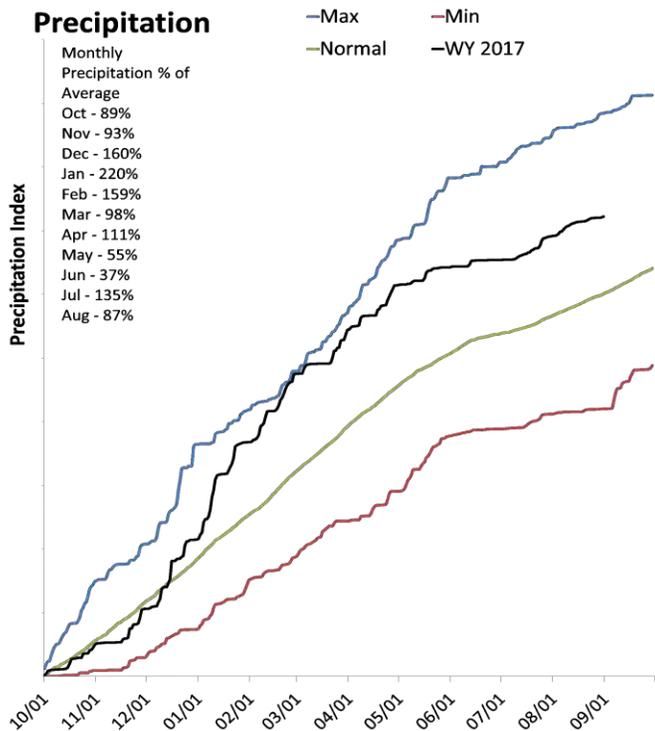
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

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Statewide SNOTEL

September 1, 2017

Precipitation at SNOTEL sites during August was below average at 87%, which brings the seasonal accumulation (Oct-Aug) to 120% of average. Soil moisture is at 35% compared to 28% last year. Reservoir storage is at 74% of capacity, compared to 48% last year.



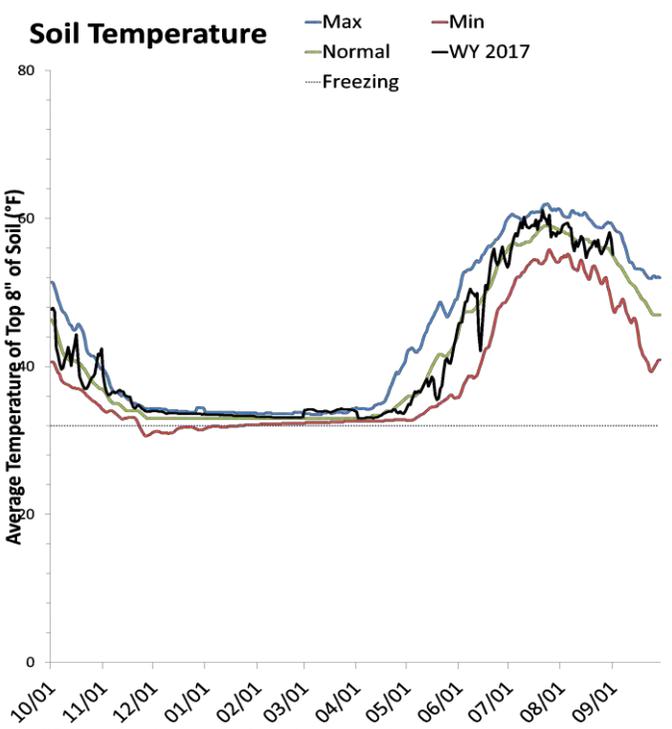
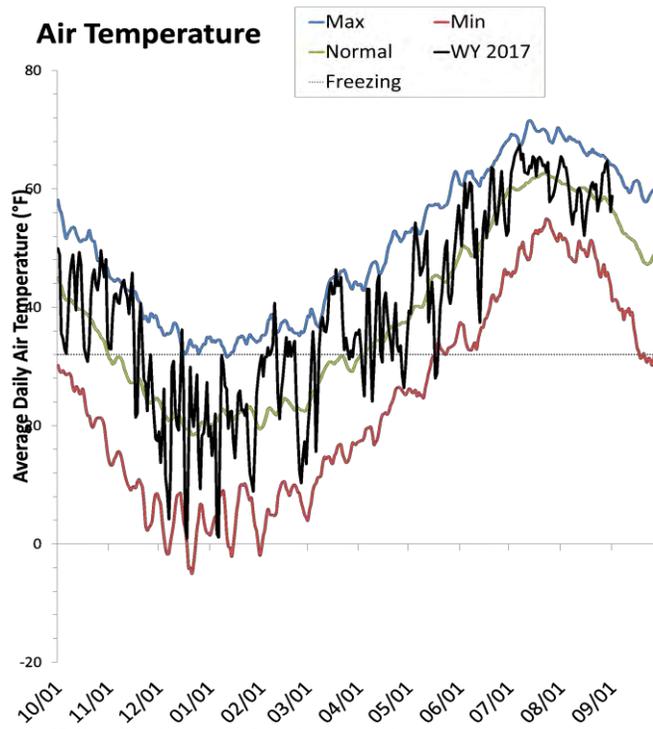
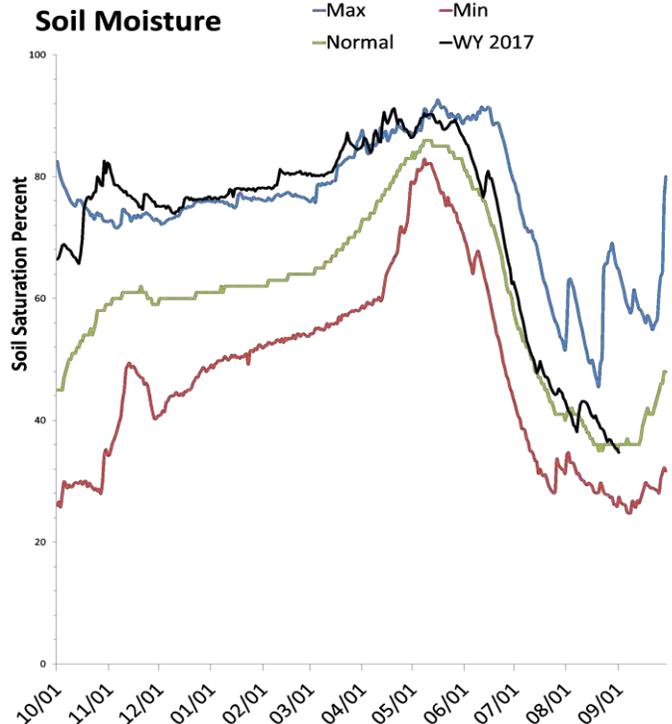
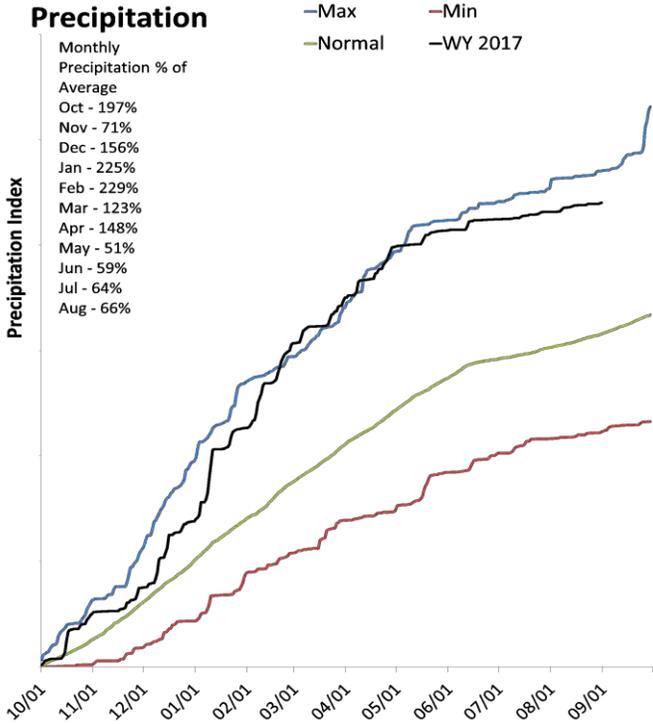
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

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

Bear River Basin

September 1, 2017

Precipitation in August was much below average at 66%, which brings the seasonal accumulation (Oct-Aug) to 139% of average. Soil moisture is at 33% compared to 27% last year. Reservoir storage is at 87% of capacity, compared to 37% last year. The water availability index for the Bear River is 79%, 68% for Woodruff Narrows and 88% for the Little Bear.



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

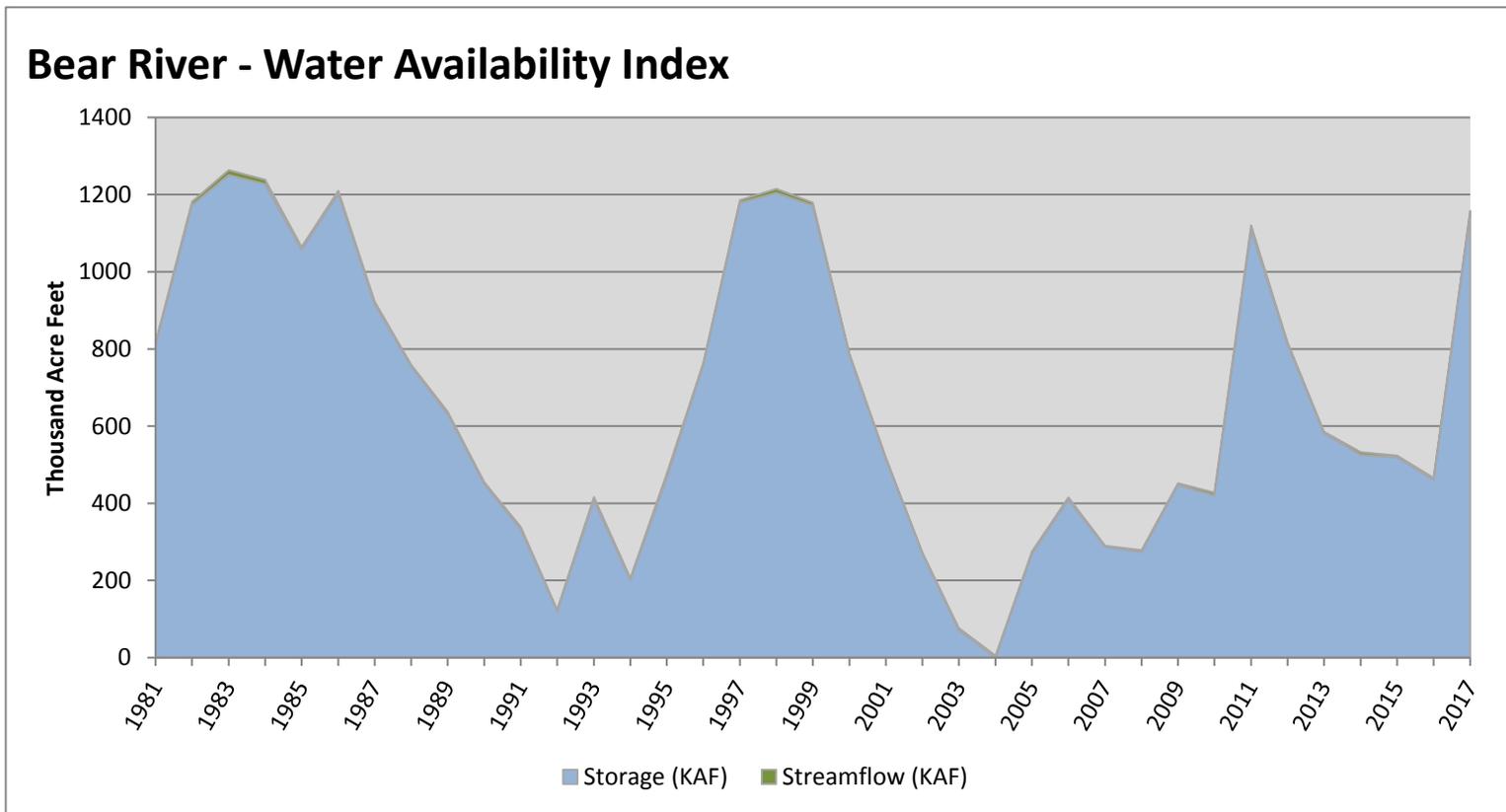
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

September 1, 2017

Water Availability Index

Basin or Region	Aug EOM [^] Storage	August Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Bear River	1151.61	5.90	1157.51	79	2.41	85, 11, 99, 82

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

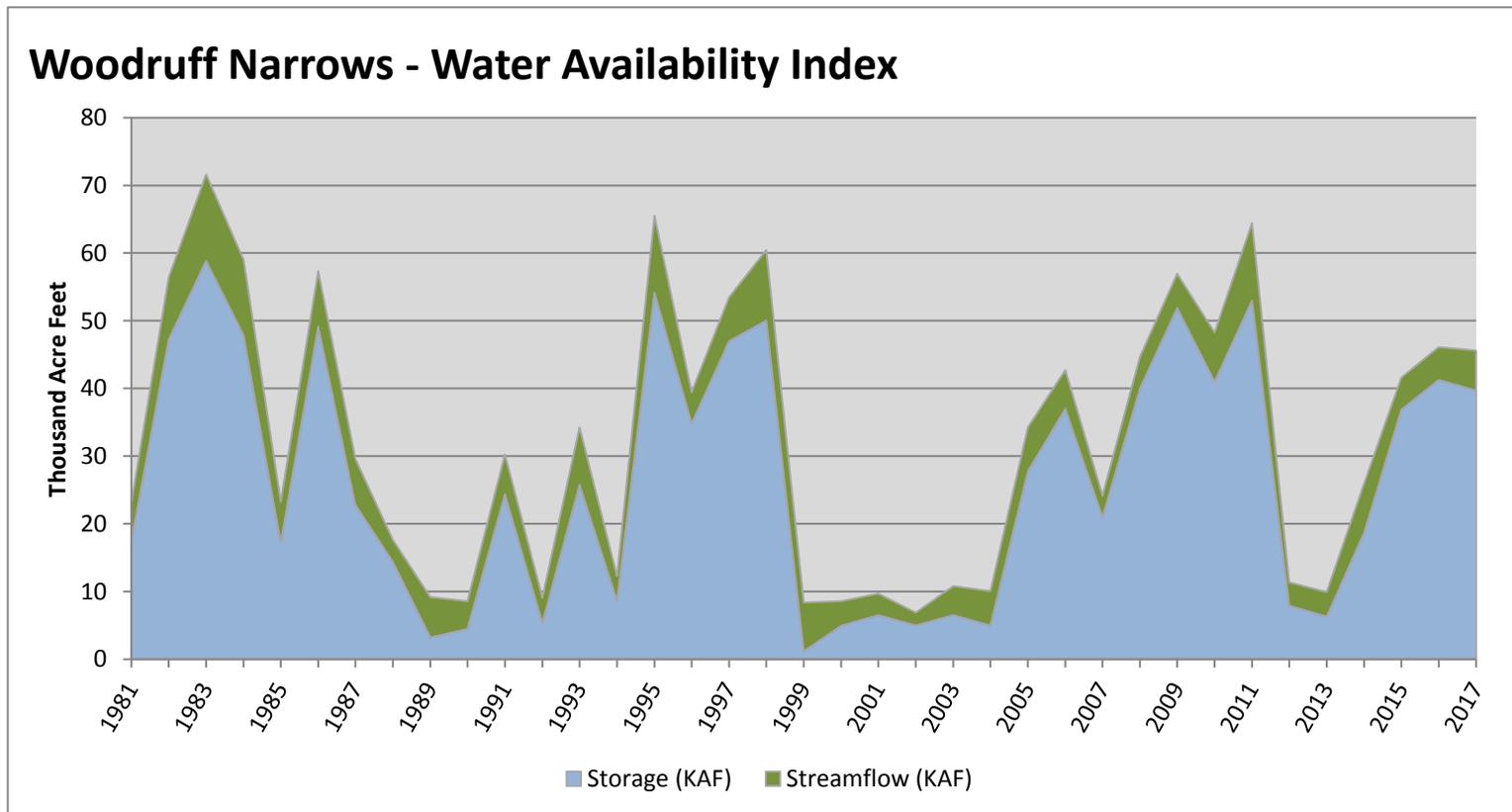


September 1, 2017

Water Availability Index

Basin or Region	Aug EOM [^] Storage	August Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Woodruff Narrows	39.68	5.90	45.58	68	1.54	06, 08, 16, 10

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

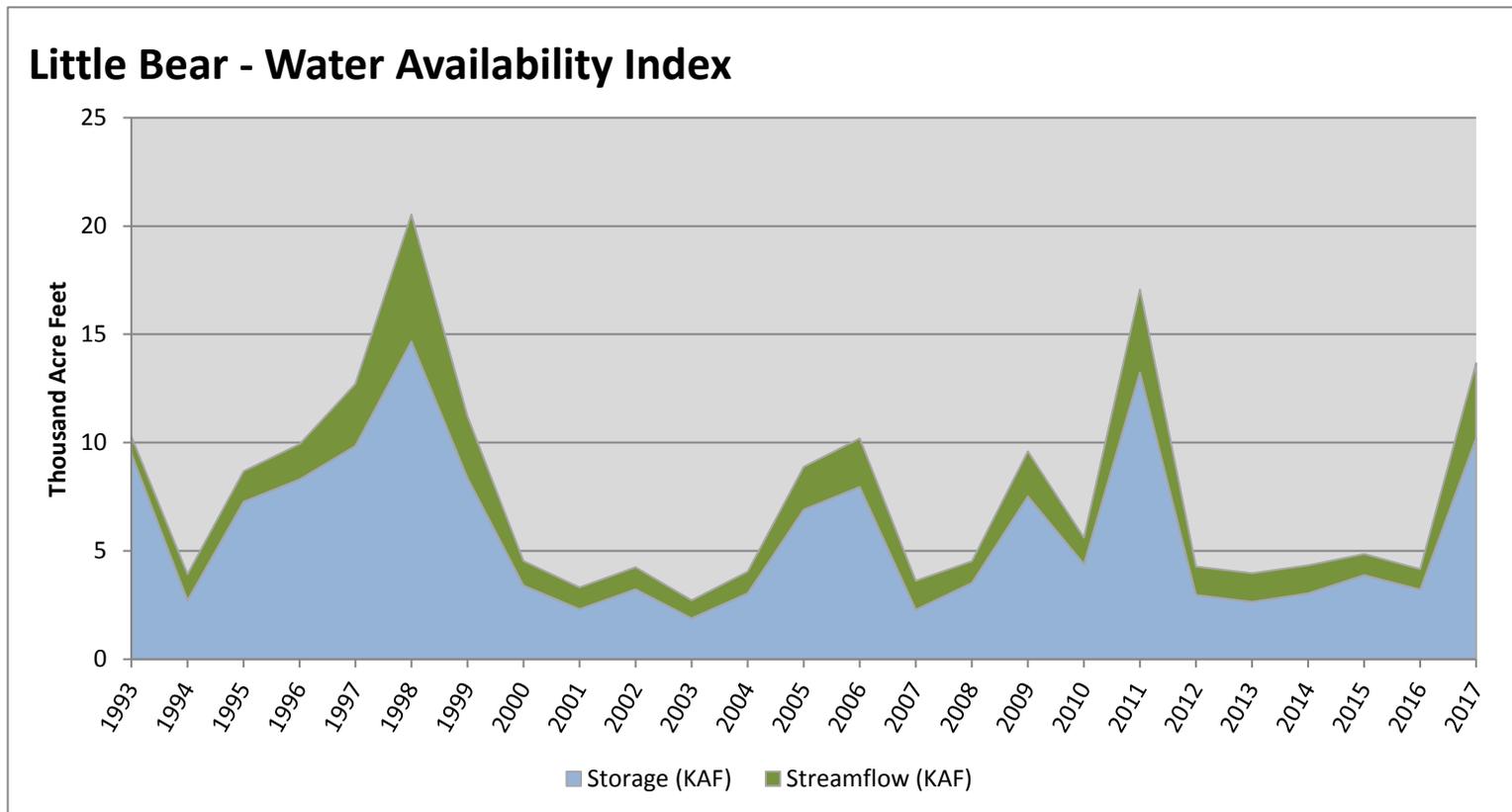


September 1, 2017

Water Availability Index

Basin or Region	Aug EOM [^] Storage	August Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Little Bear	10.21	3.46	13.67	88	3.21	99, 97, 11, 98

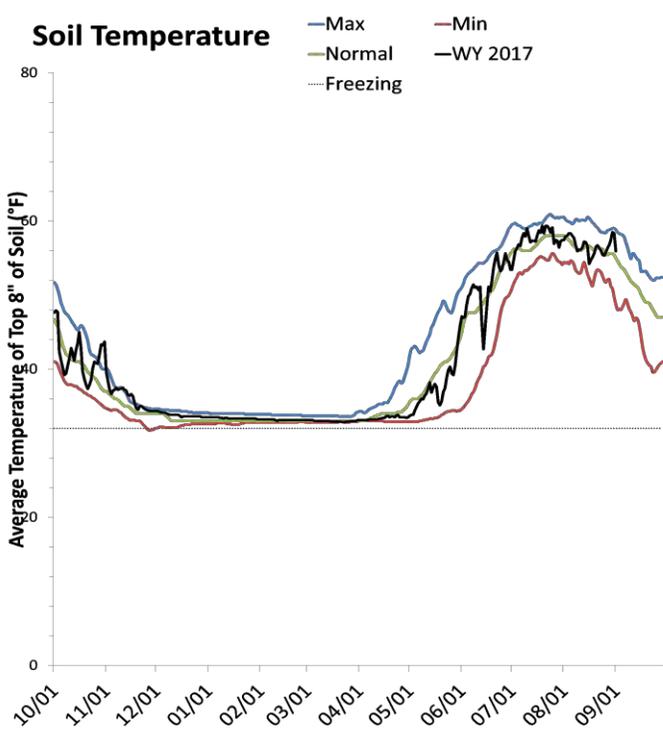
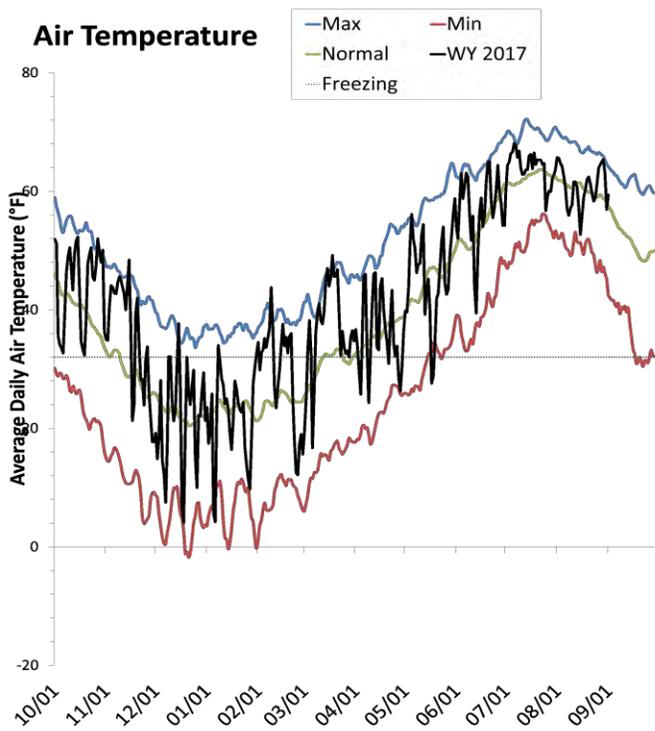
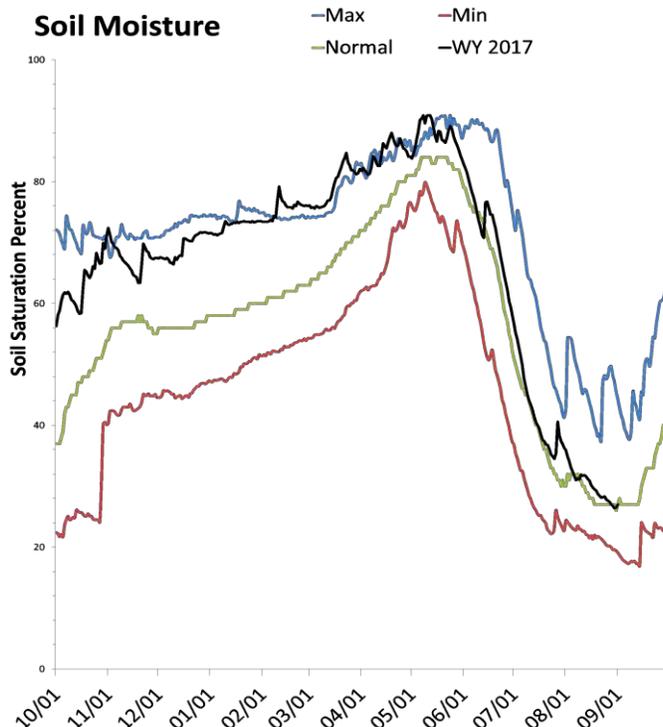
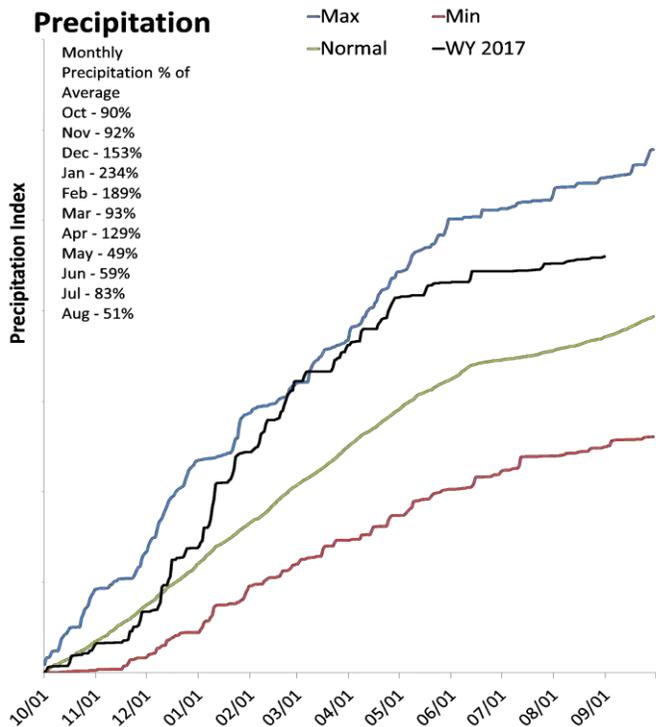
[^]EOM, end of month; [#]WAI, Water Availability Index; [^]KAF, thousand acre-feet.



Weber & Ogden River Basins

September 1, 2017

Precipitation in August was much below average at 51%, which brings the seasonal accumulation (Oct-Aug) to 124% of average. Soil moisture is at 25% compared to 19% last year. Reservoir storage is at 77% of capacity, compared to 56% last year. The water availability index for the Ogden River is 89% and 75% for the Weber River.



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

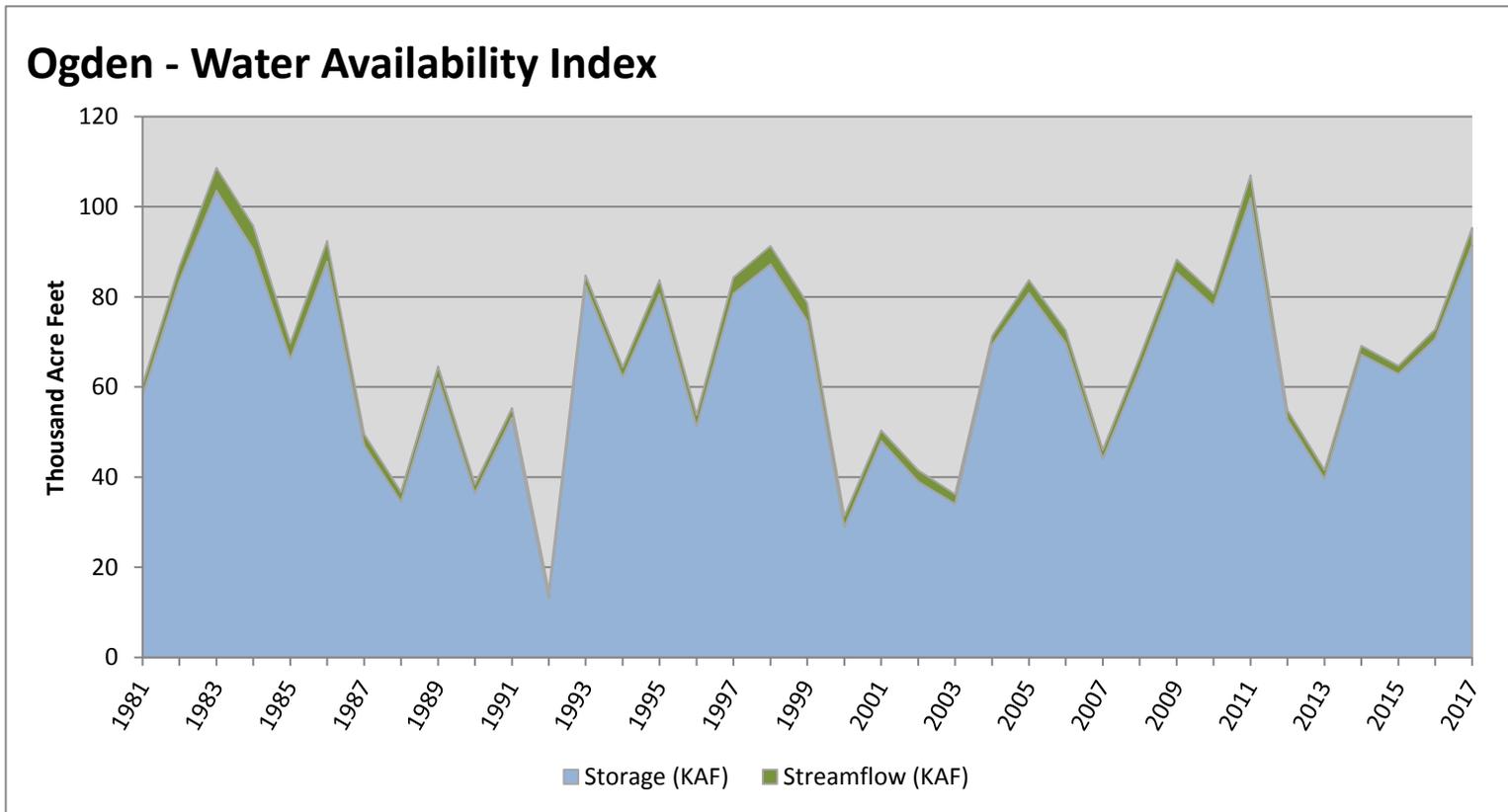
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

September 1, 2017

Water Availability Index

Basin or Region	Aug EOM [^] Storage	August Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Ogden	91.59	3.77	95.36	89	3.29	98, 86, 84, 11

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

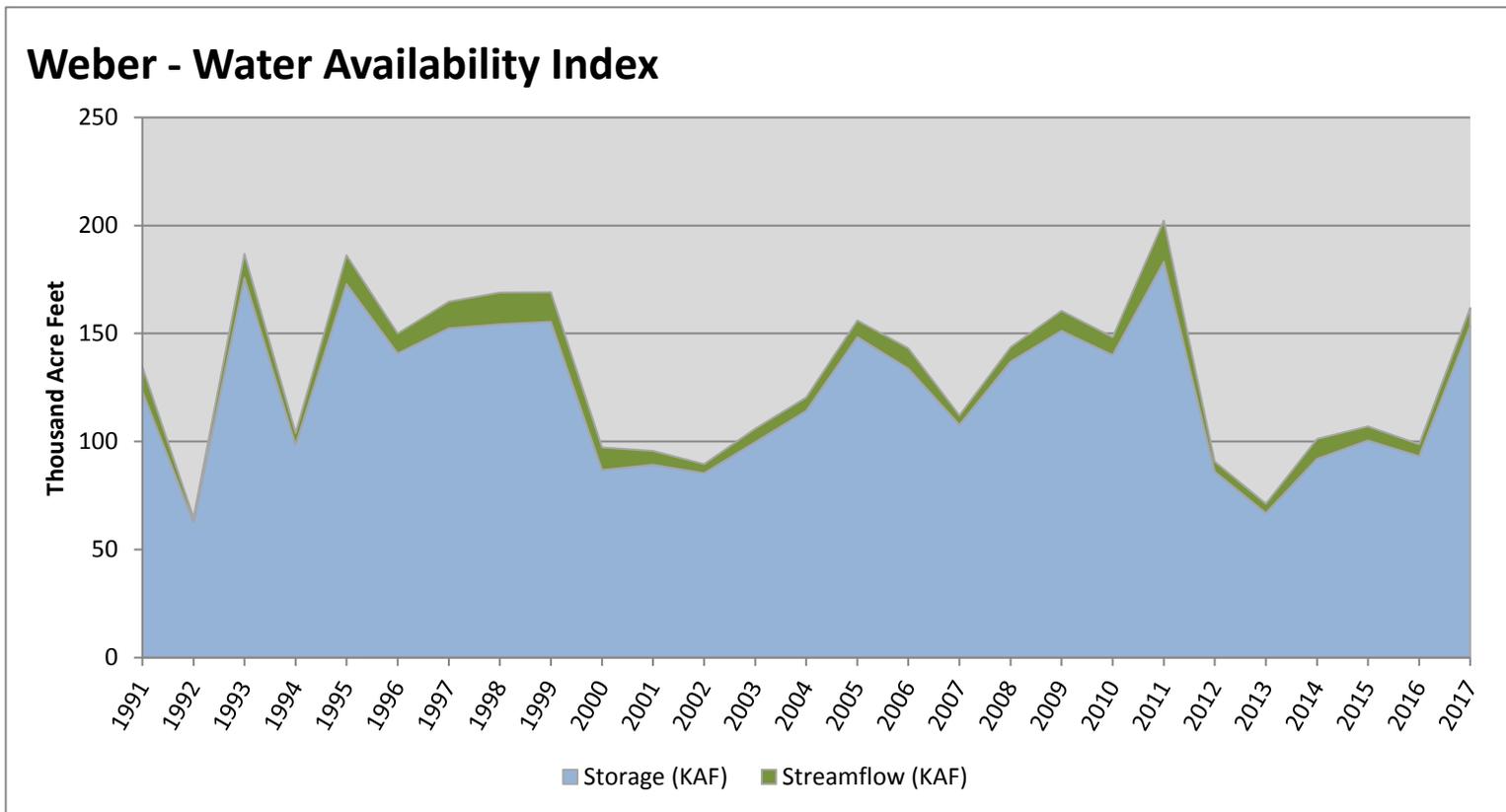


September 1, 2017

Water Availability Index

Basin or Region	Aug EOM [†] Storage	August Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Weber	153.47	8.30	161.77	75	2.08	05, 09, 97, 98

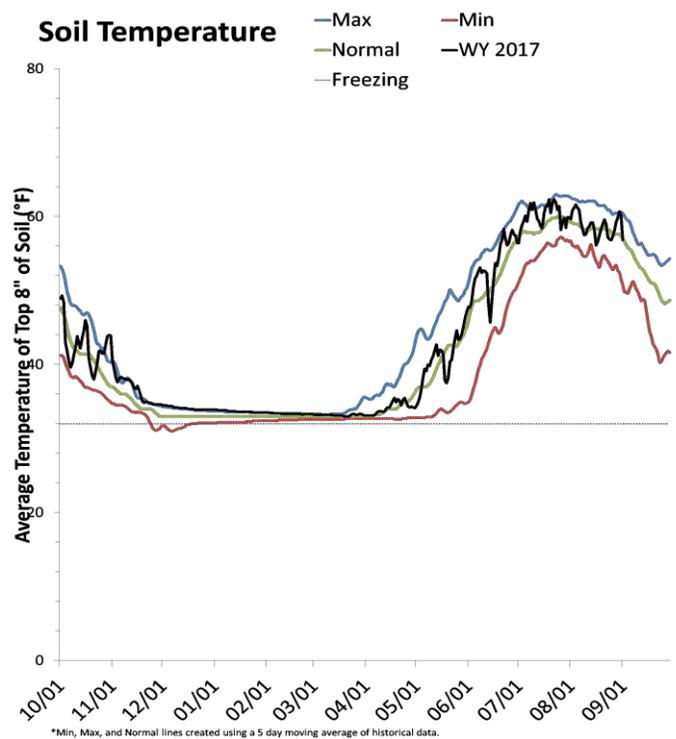
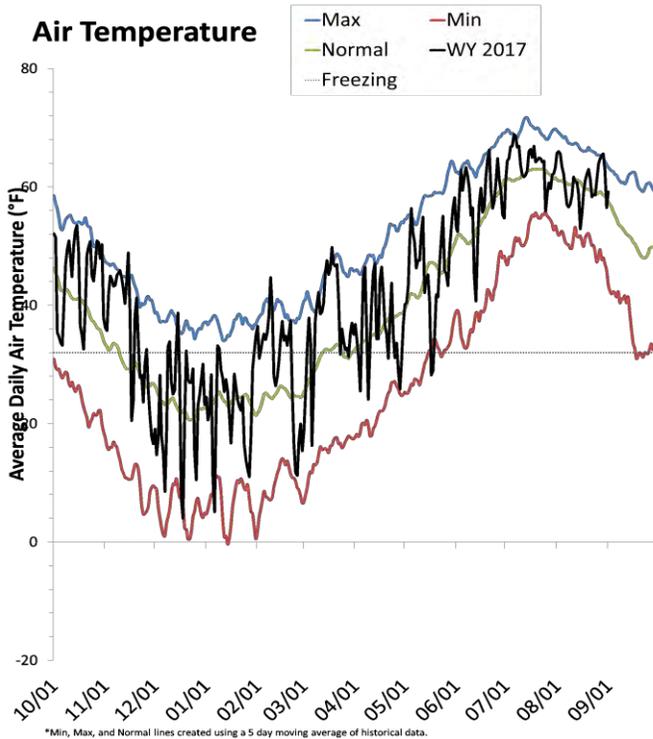
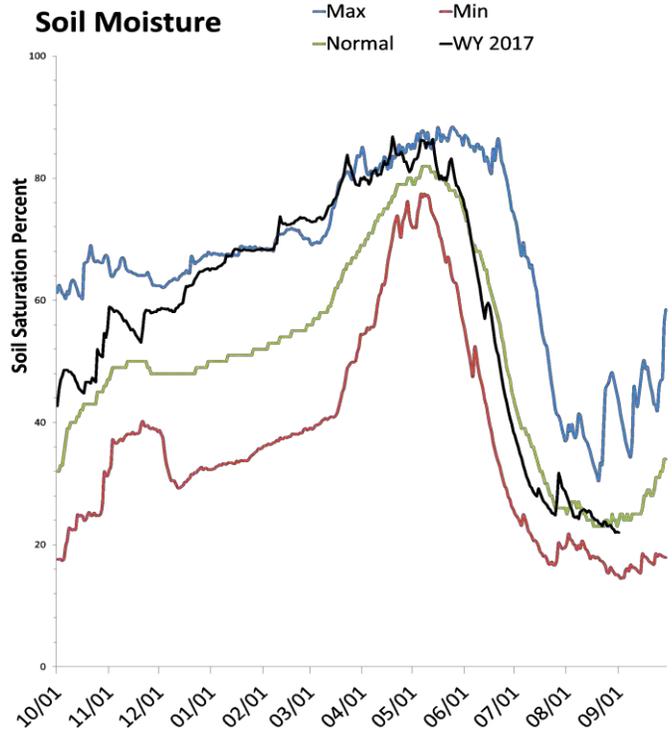
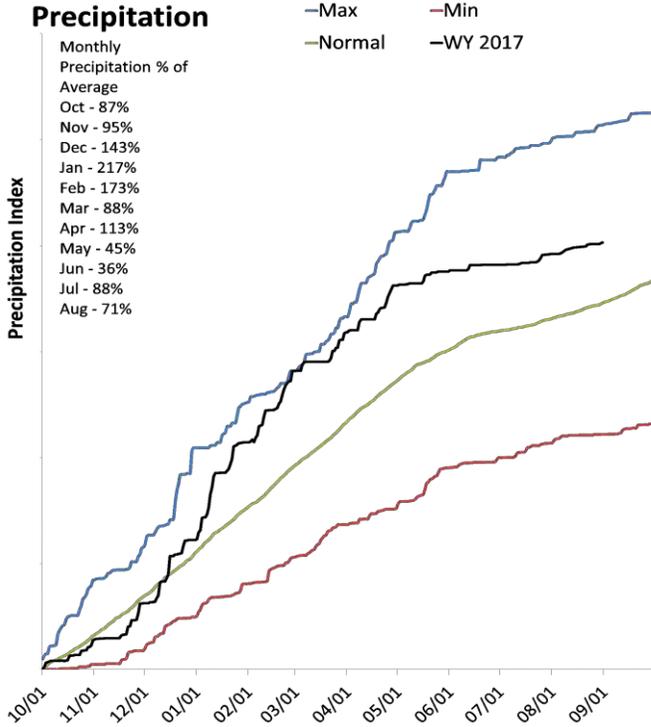
[†]EOM, end of month; [#]WAI, Water Availability Index; [^]KAF, thousand acre-feet.



Provo & Jordan River Basins

September 1, 2017

Precipitation in August was below average at 72%, which brings the seasonal accumulation (Oct-Aug) to 116% of average. Soil moisture is at 21% compared to 19% last year. Reservoir storage is at 76% of capacity, compared to 57% 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.

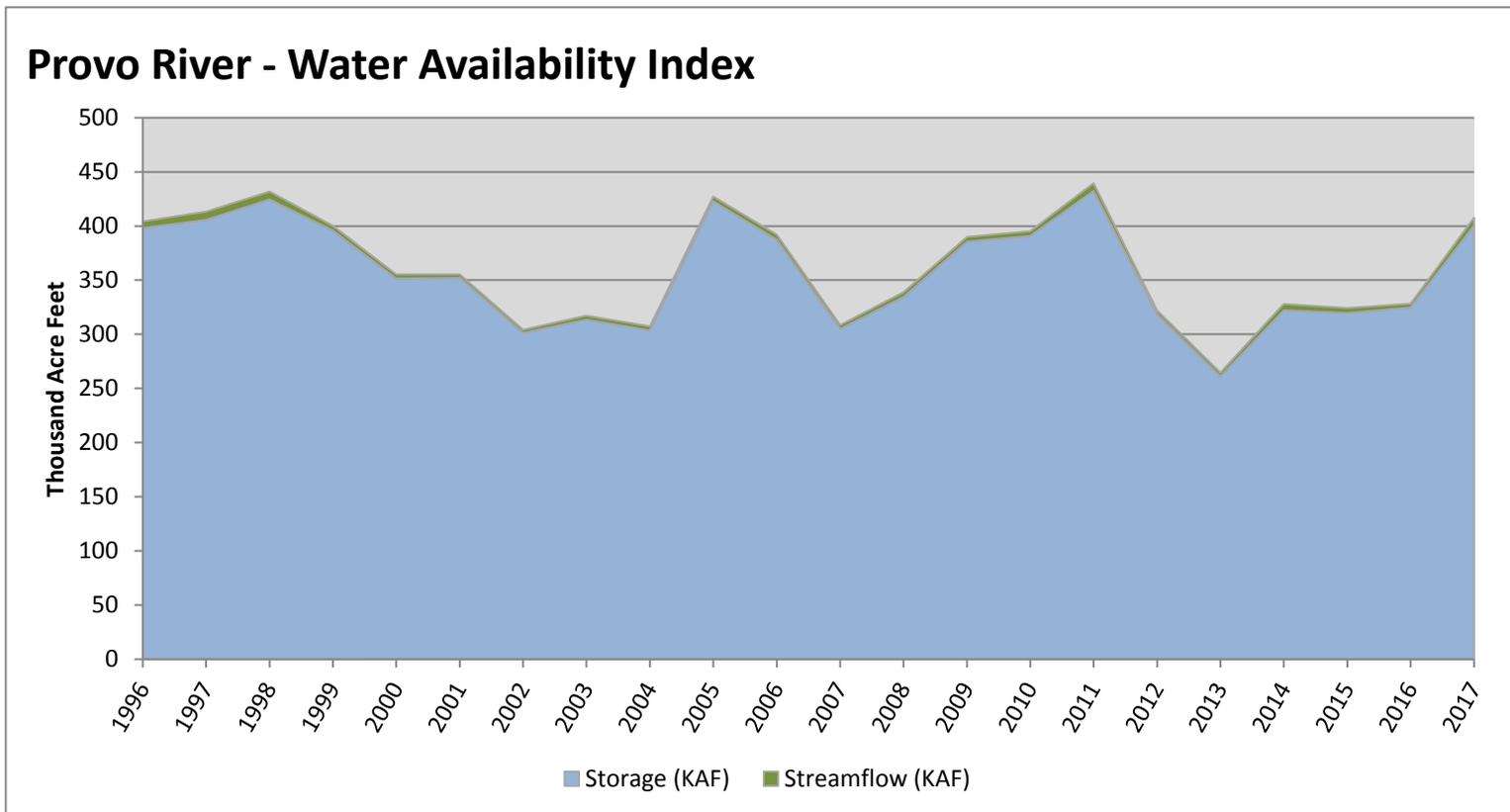
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

September 1, 2017

Water Availability Index

Basin or Region	Aug EOM [^] Storage	August Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Provo River	400.51	7.23	407.74	78	2.36	99, 96, 97, 05

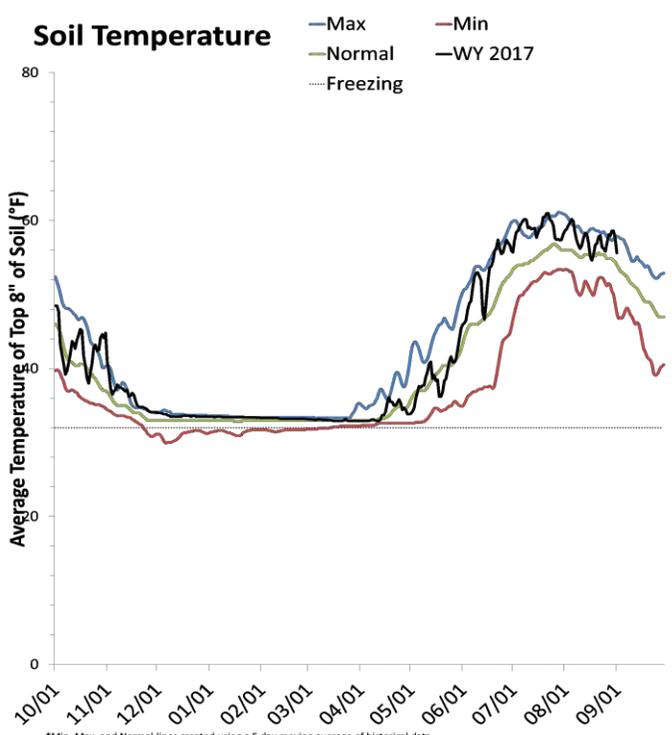
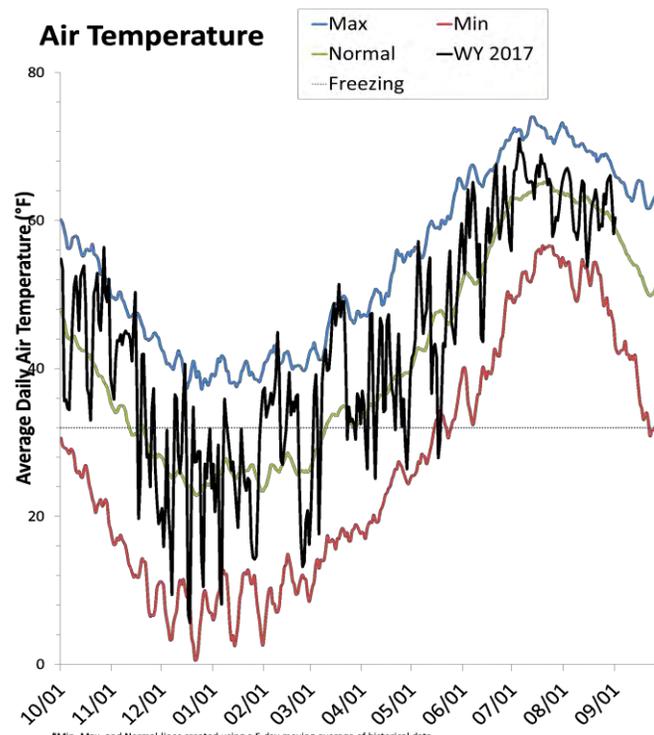
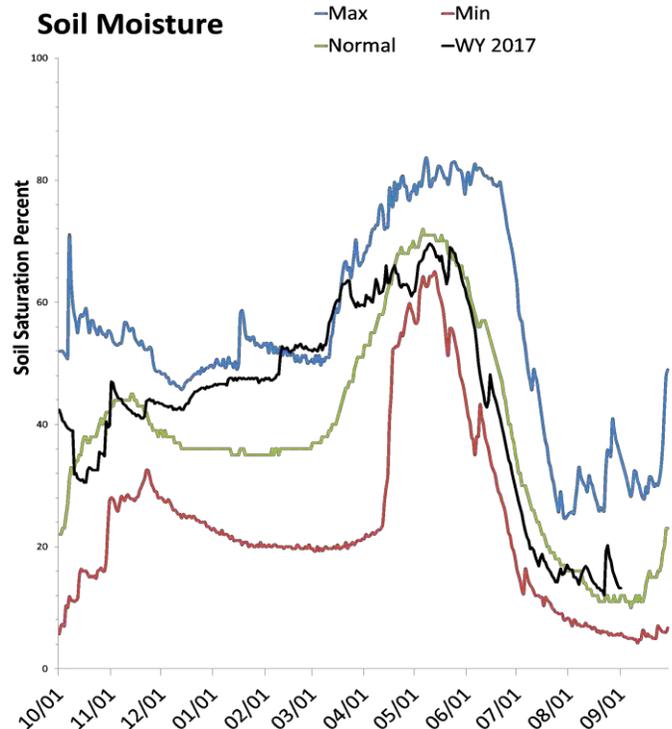
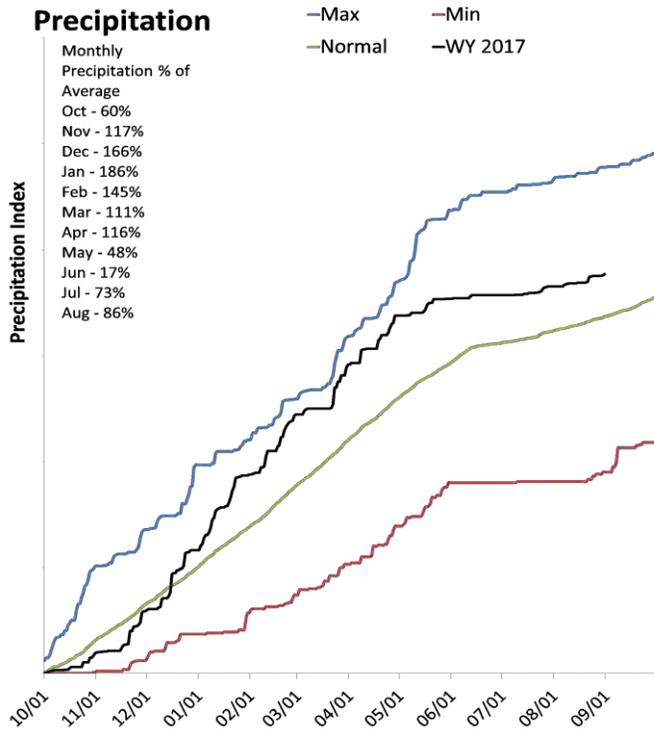
[^]EOM, end of month; [#]WAI, Water Availability Index; [^]KAF, thousand acre-feet.



Tooele Valley & West Desert Basins

September 1, 2017

Precipitation in August was below average at 87%, which brings the seasonal accumulation (Oct-Aug) to 112% of average. Soil moisture is at 13% compared to 5% last year. Reservoir storage is at 36% of capacity, compared to 13% last year.



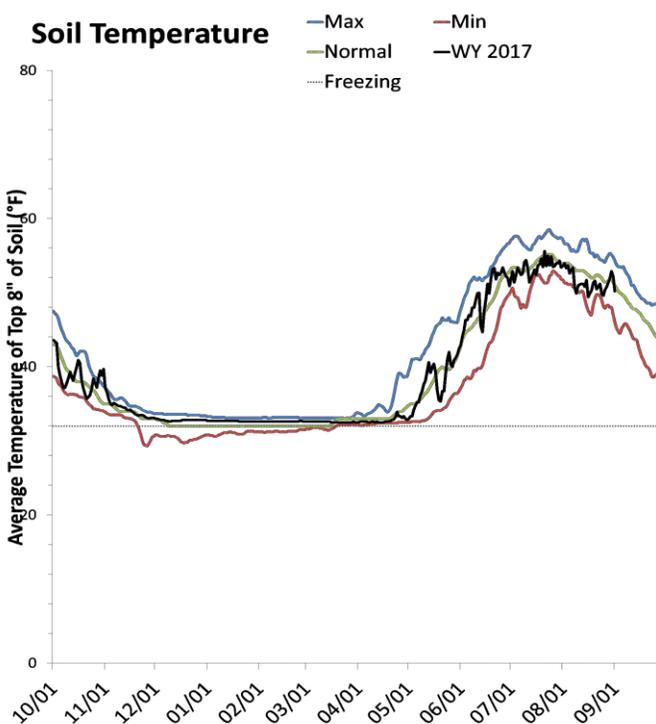
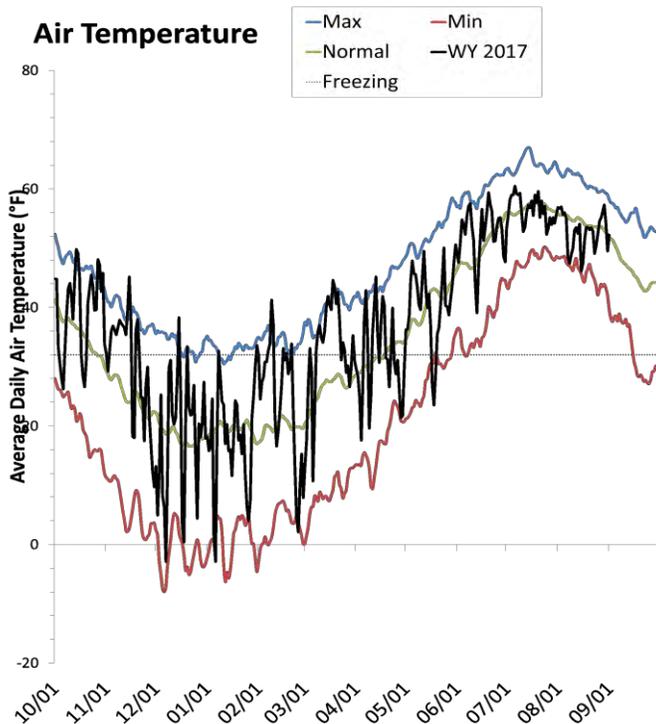
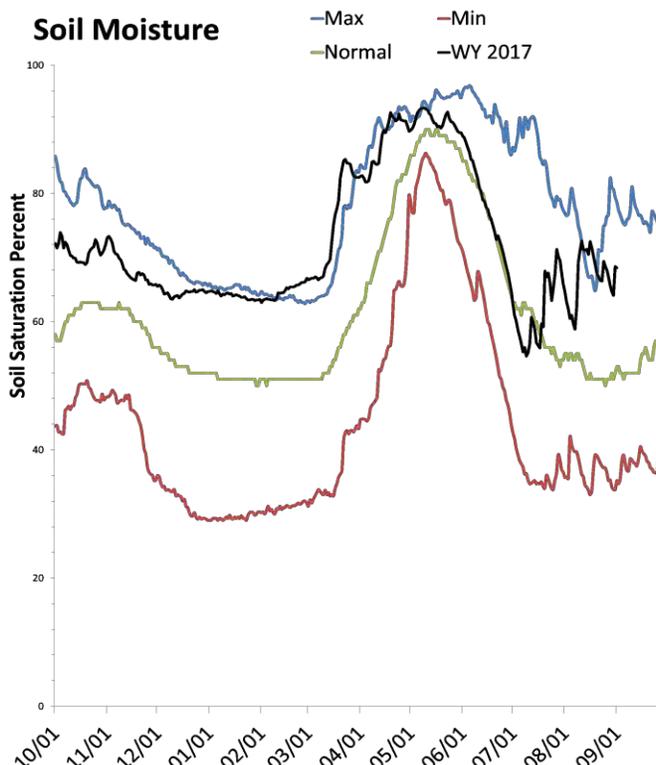
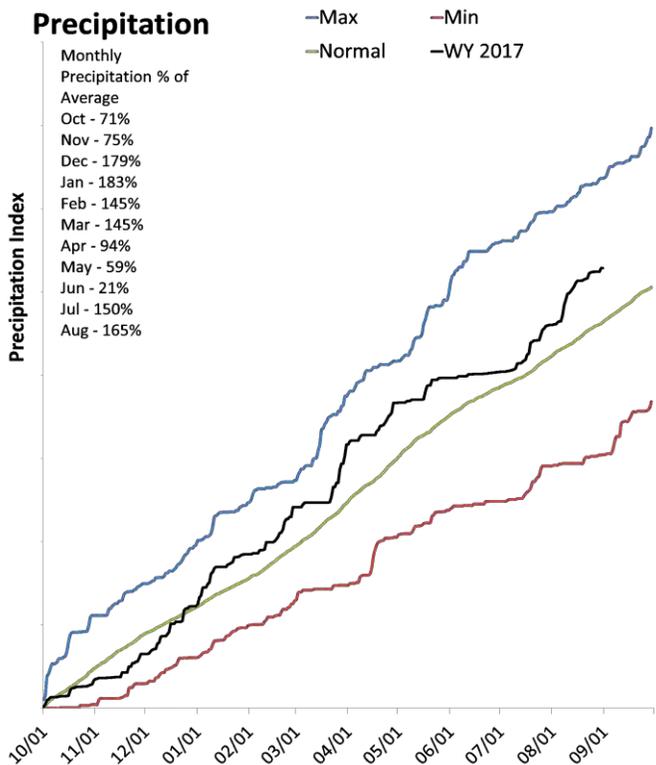
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

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

Northeastern Uinta Basin

September 1, 2017

Precipitation in August was much above average at 167%, which brings the seasonal accumulation (Oct-Aug) to 114% of average. Soil moisture is at 68% compared to 38% last year. Reservoir storage is at 94% of capacity, compared to 86% last year. The water availability index for Blacks Fork is 46% and 71% for Smiths Creek.



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

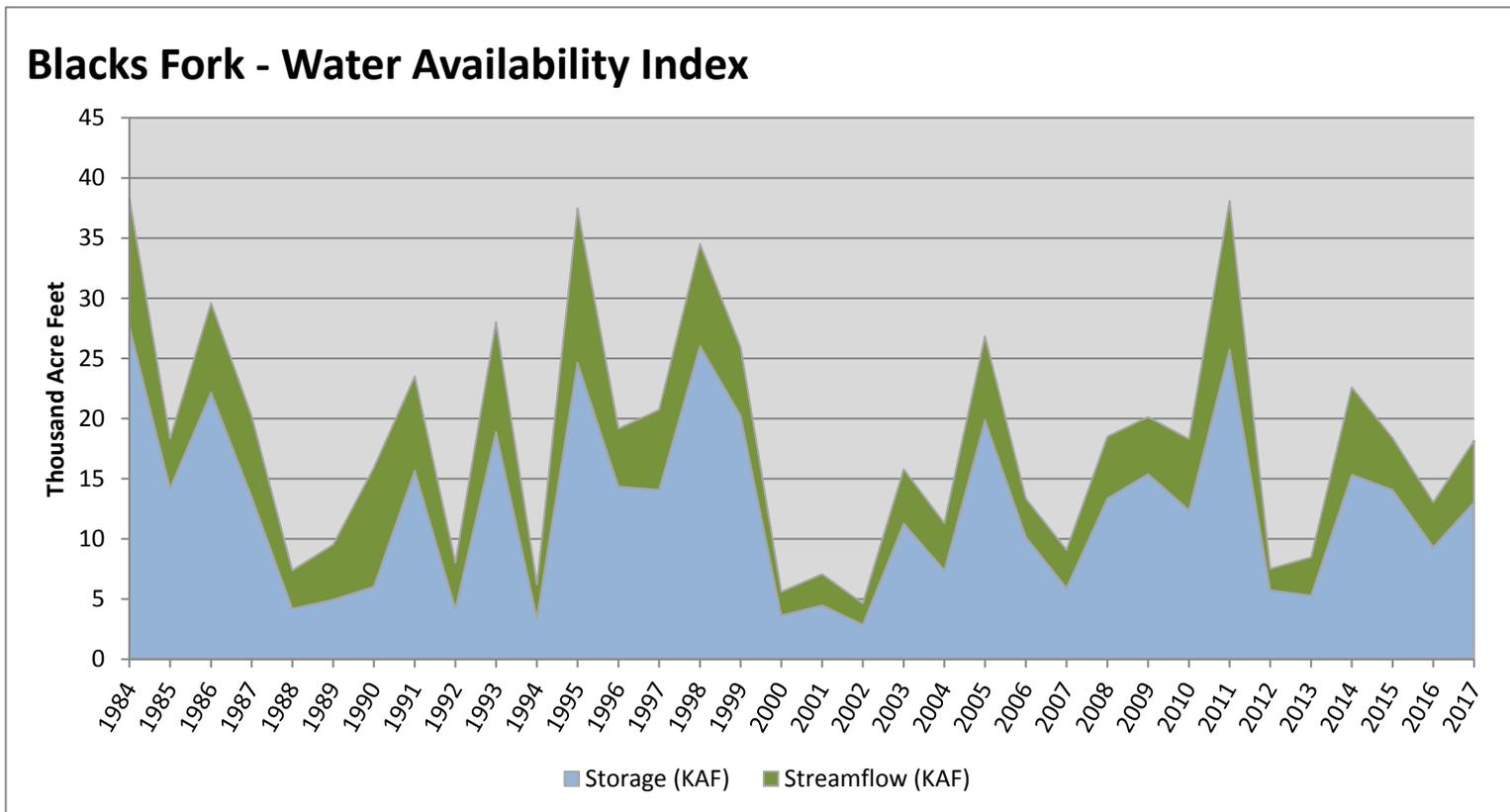
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

September 1, 2017

Water Availability Index

Basin or Region	Aug EOM [^] Storage	August Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Blacks Fork	13.03	5.14	18.17	46	-0.36	03, 90, 10, 85

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

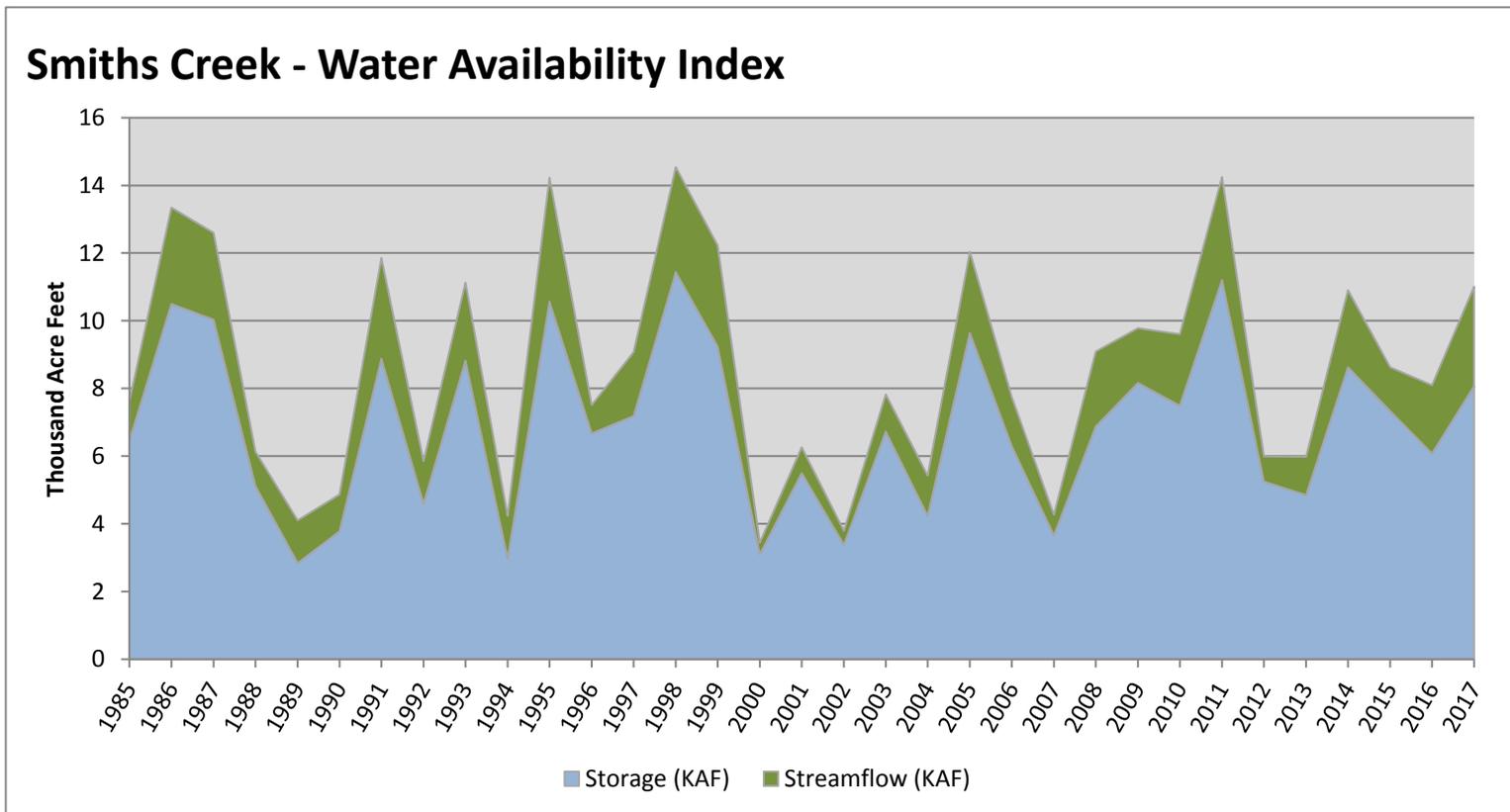


September 1, 2017

Water Availability Index

Basin or Region	Aug EOM [^] Storage	August Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Smiths Creek	8.07	2.94	11.01	71	1.72	09, 14, 93, 91

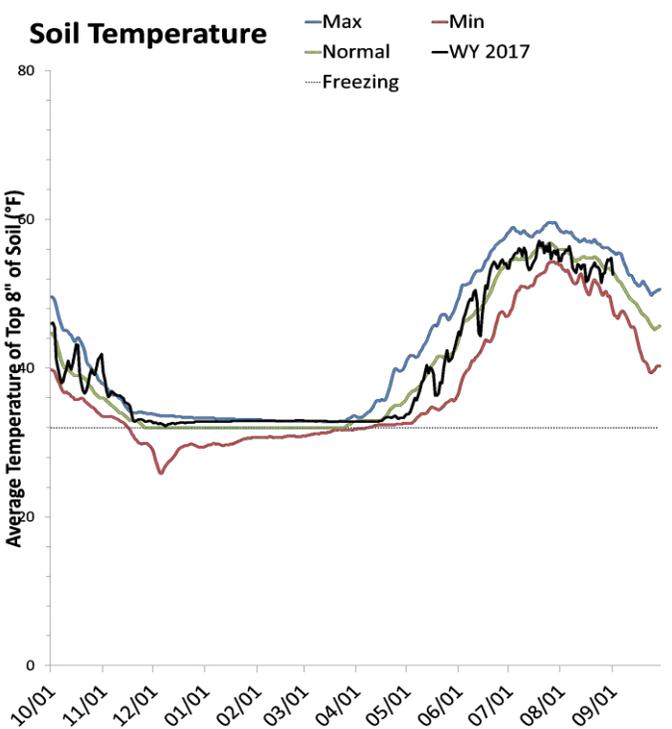
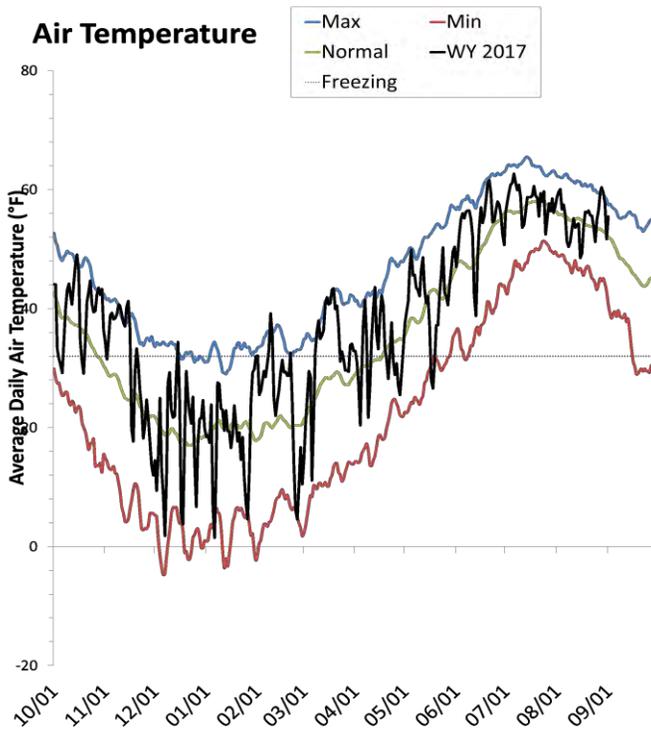
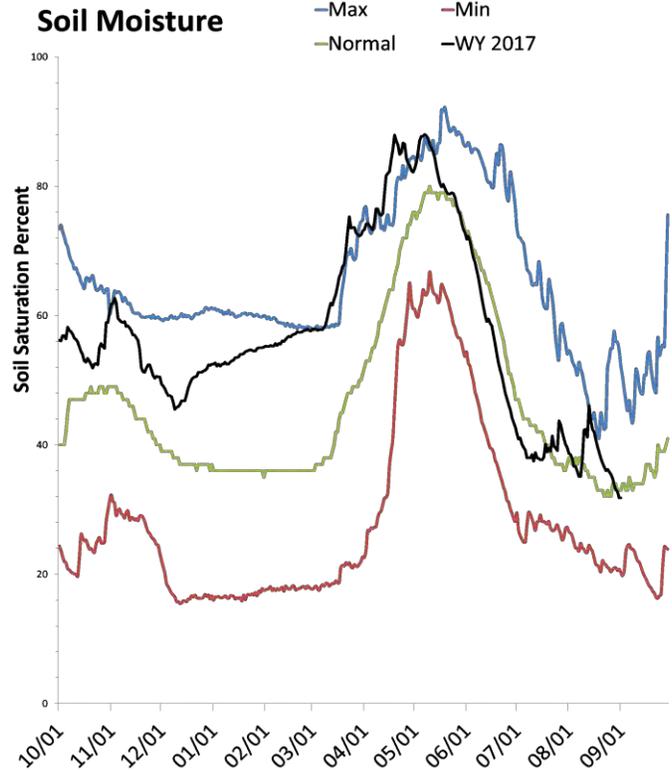
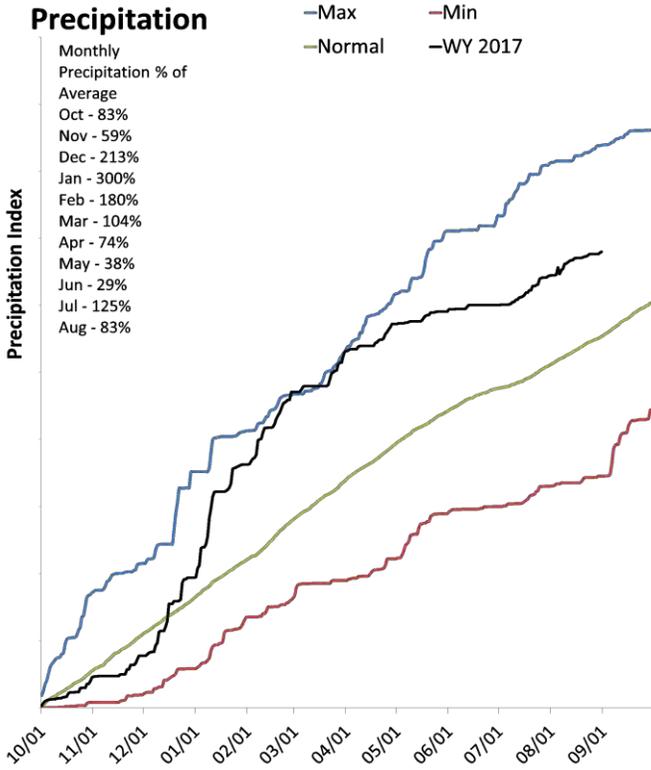
[^]EOM, end of month; [#]WAI, Water Availability Index; [^]KAF, thousand acre-feet.



Duchesne River Basin

September 1, 2017

Precipitation in August was below average at 83%, which brings the seasonal accumulation (Oct-Aug) to 123% of average. Soil moisture is at 36% compared to 20% last year. Reservoir storage is at 82% of capacity, compared to 69% last year. The water availability index for the Western Uintas is 77% and 45% for the Eastern Uintas.



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

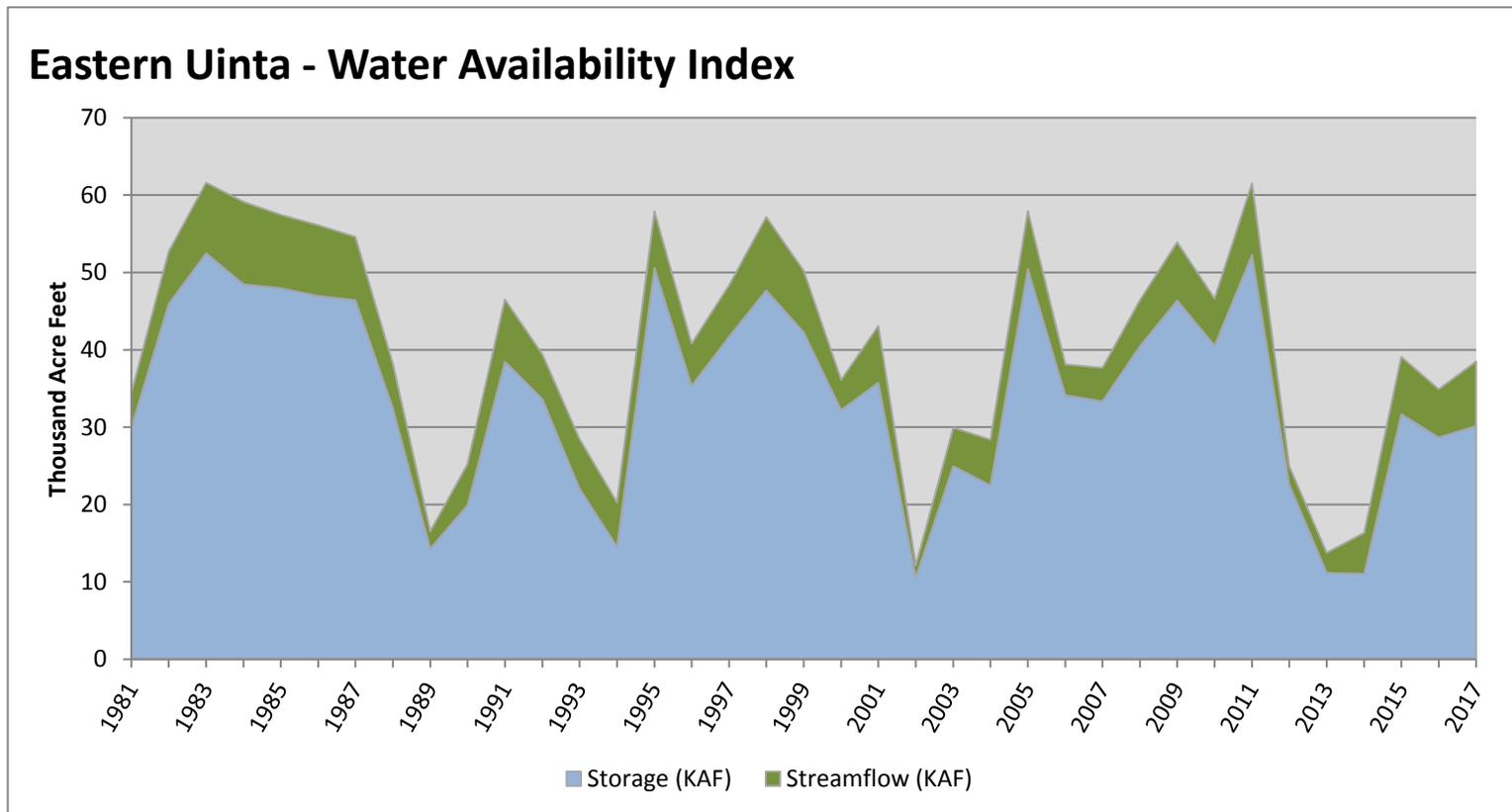
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

September 1, 2017

Water Availability Index

Basin or Region	Aug EOM [^] Storage	August Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Eastern Uinta	30.13	8.33	38.46	45	-0.44	06, 88, 15, 92

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

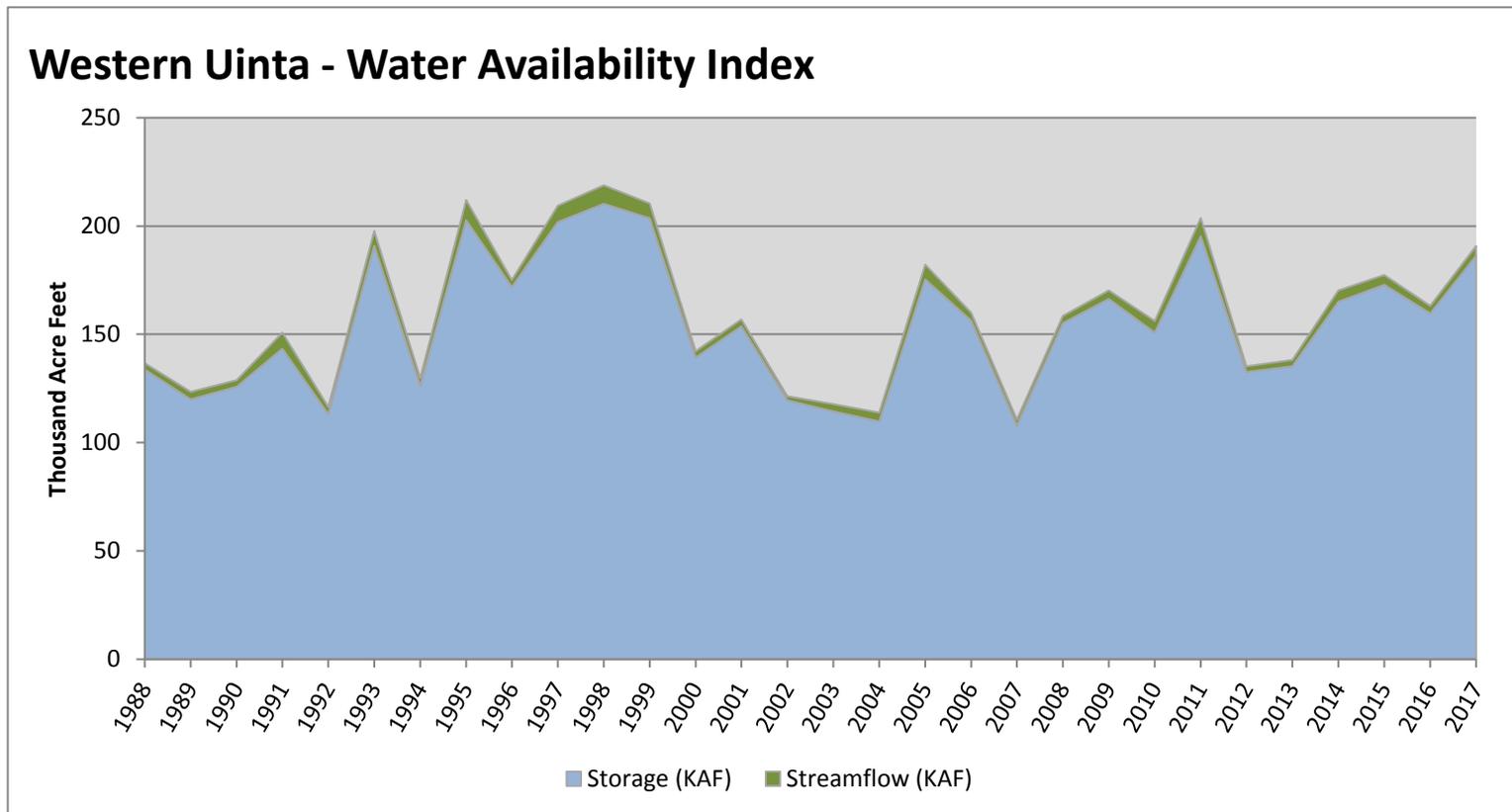


September 1, 2017

Water Availability Index

Basin or Region	Aug EOM [^] Storage	August Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Western Uinta	186.21	4.51	190.72	77	2.28	15, 05, 93, 11

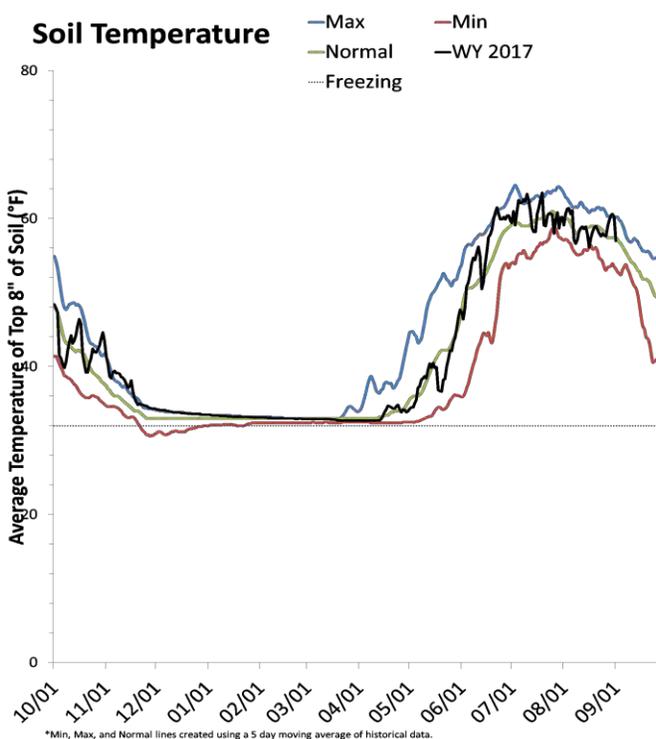
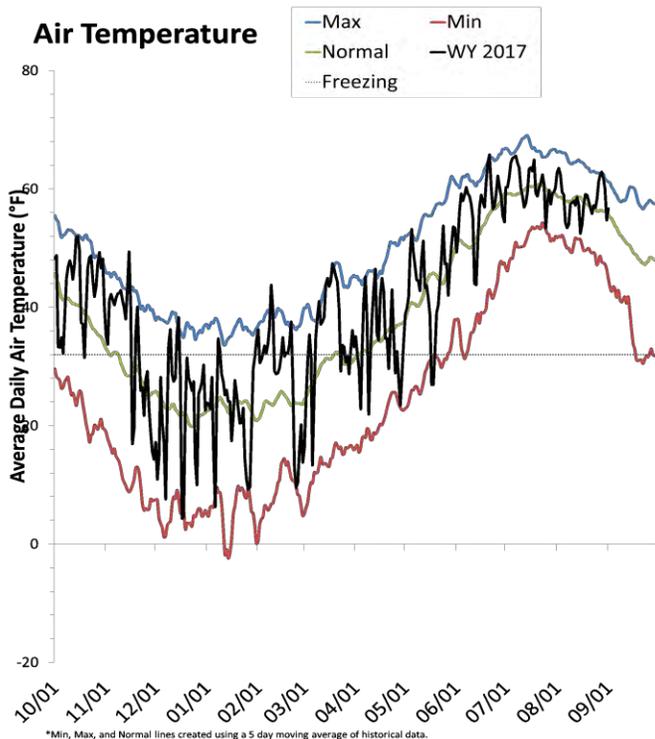
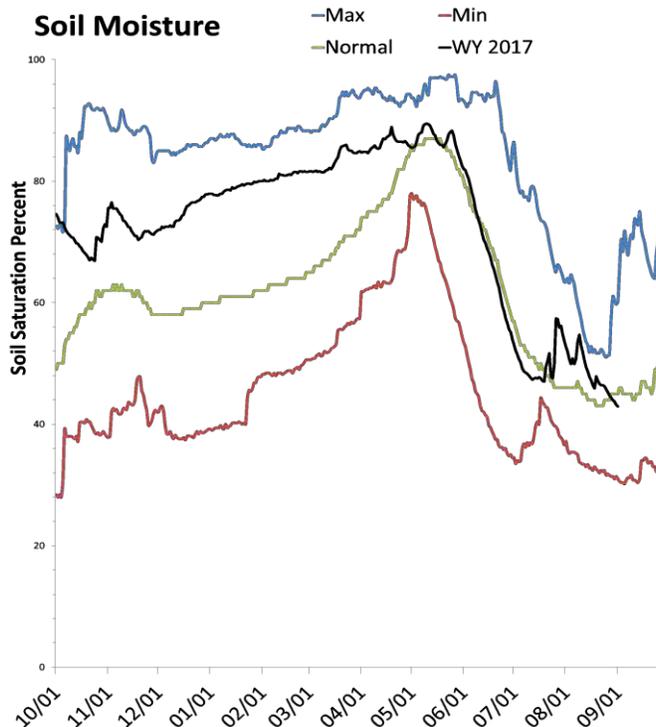
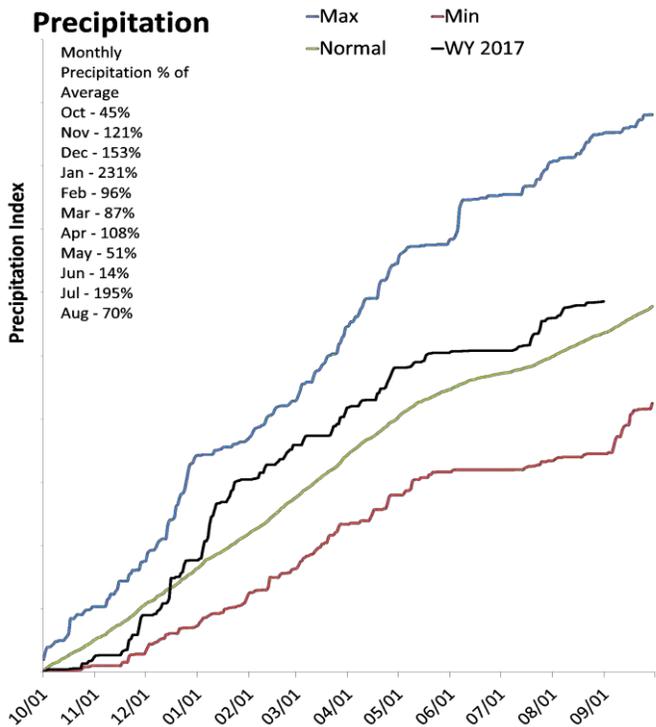
[^]EOM, end of month; [#]WAI, Water Availability Index; [^]KAF, thousand acre-feet.



San Pitch River Basin

September 1, 2017

Precipitation in August was much below average at 69%, which brings the seasonal accumulation (Oct-Aug) to 109% of average. Soil Moisture is at 43% compared to 43% last year. Reservoir storage is at 21% of capacity, compared to 0% last year. The water availability index for the San Pitch is 45%.



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

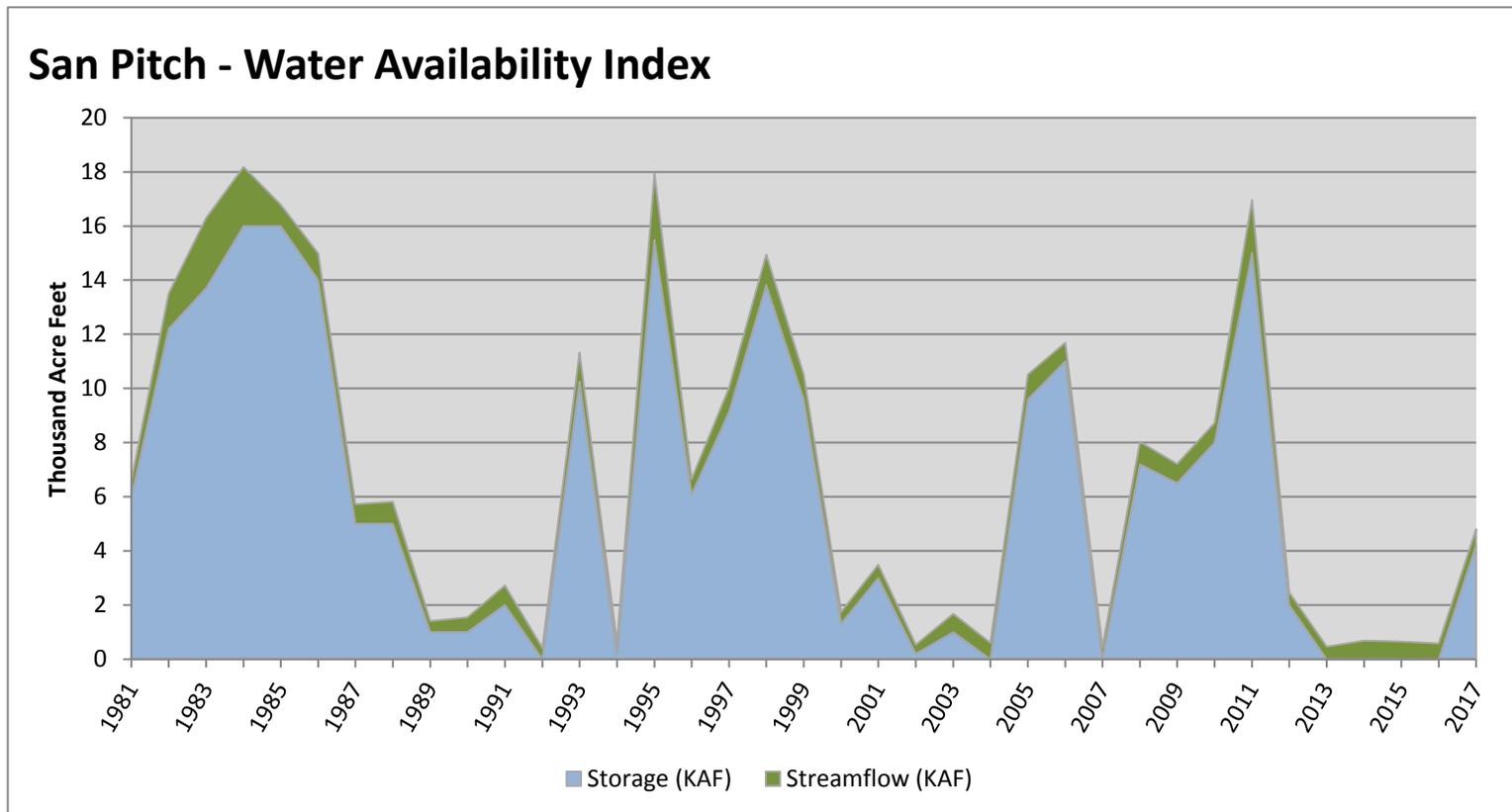
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

September 1, 2017

Water Availability Index

Basin or Region	Aug EOM [^] Storage	August Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
San Pitch	4.20	0.61	4.81	45	-0.44	91, 01, 87, 88

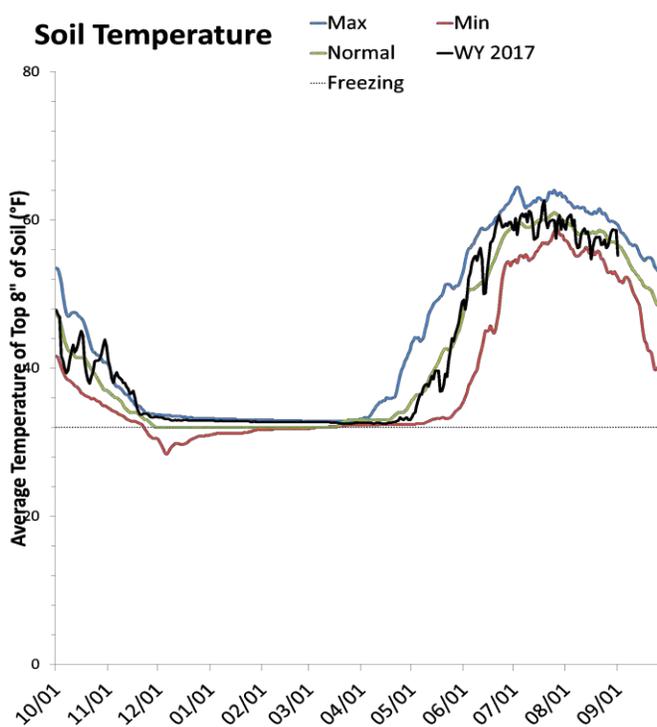
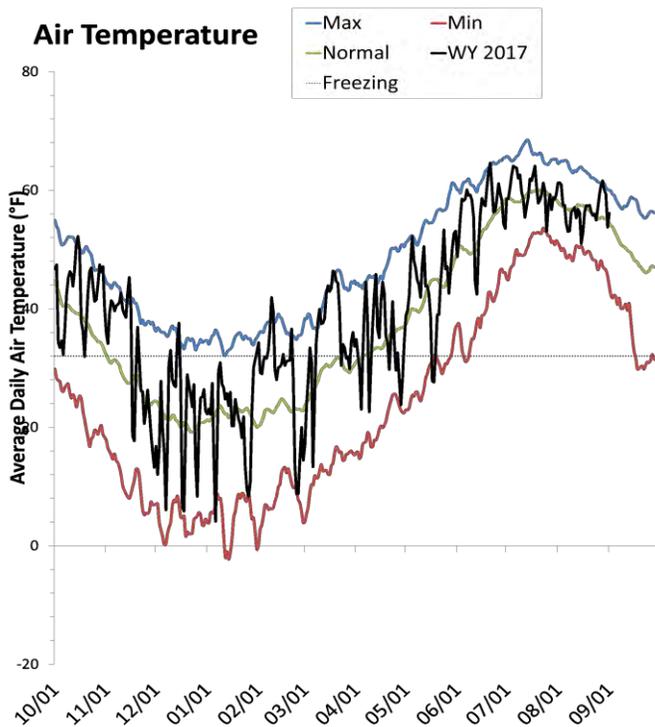
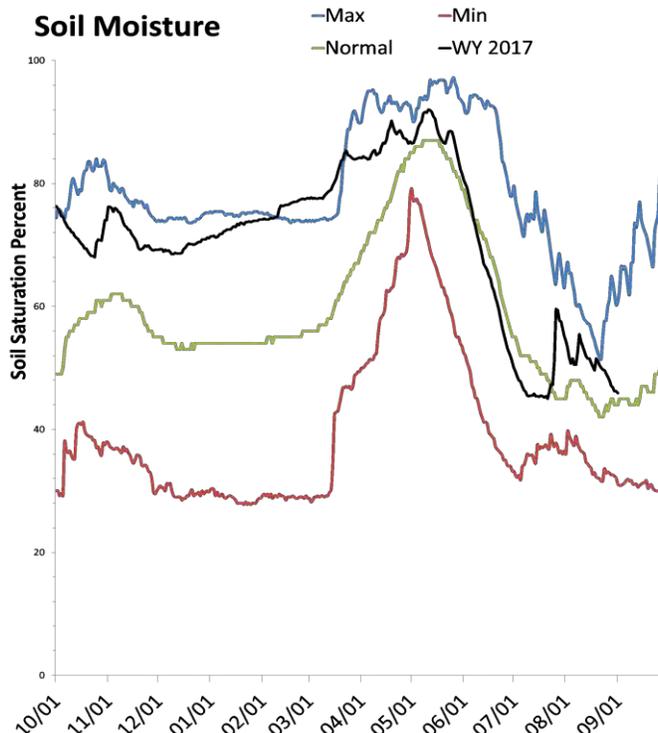
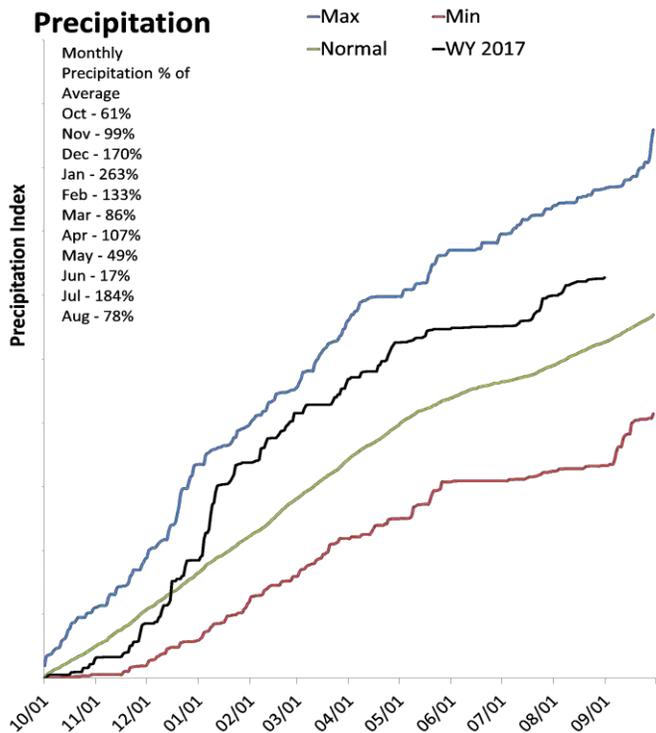
[^]EOM, end of month; [#]WAI, Water Availability Index; [^]KAF, thousand acre-feet.



Price & San Rafael Basins

September 1, 2017

Precipitation in August was below average at 78%, which brings the seasonal accumulation (Oct-Aug) to 119% of average. Soil moisture is at 46% compared to 45% last year. Reservoir storage is at 76% of capacity, compared to 40% last year. The water availability index for the Price River is 89%, and 66% for Joe's Valley.



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

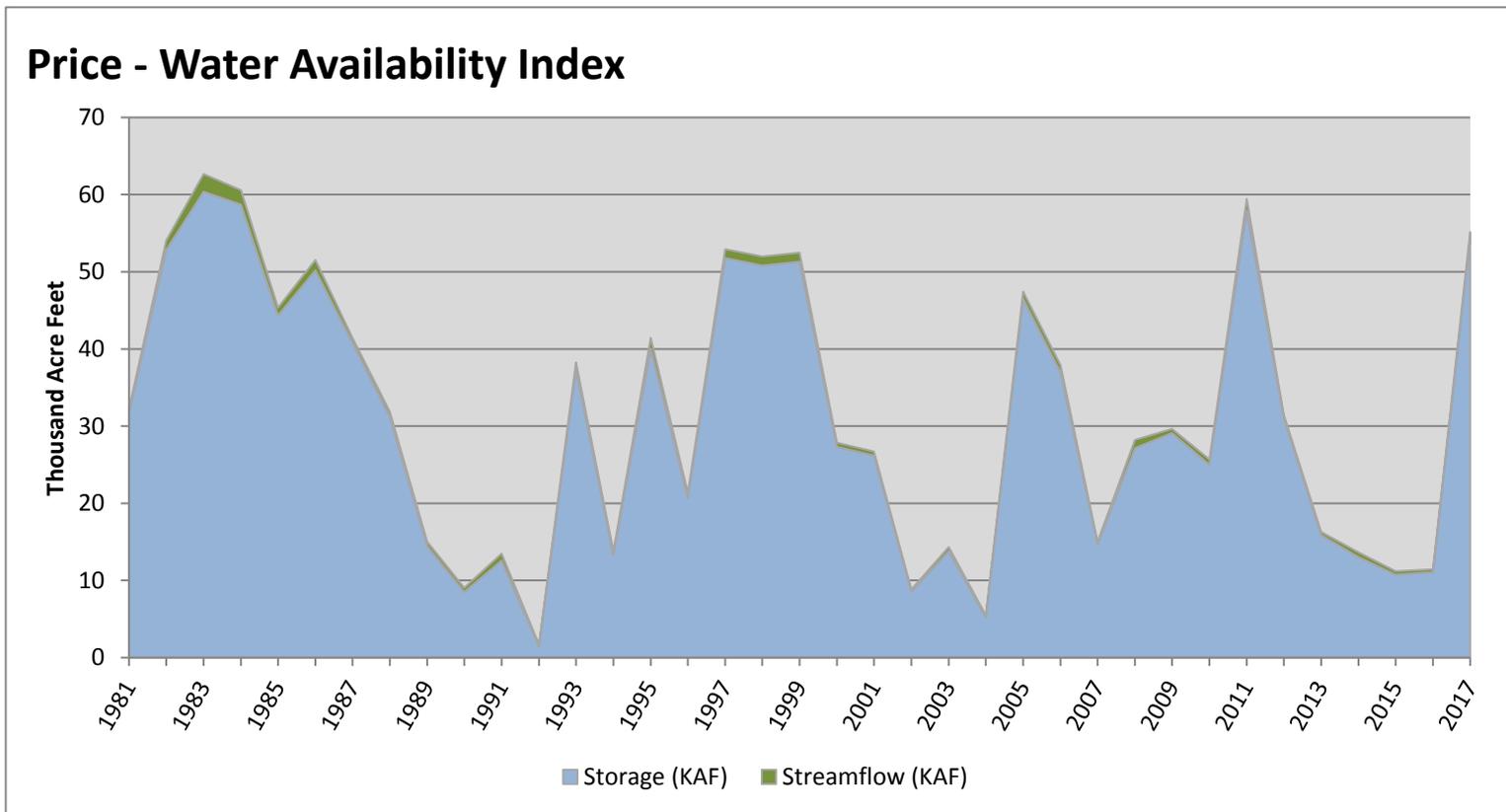
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

September 1, 2017

Water Availability Index

Basin or Region	Aug EOM [^] Storage	August Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Price	54.39	0.78	55.17	89	3.29	97, 82, 11, 84

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

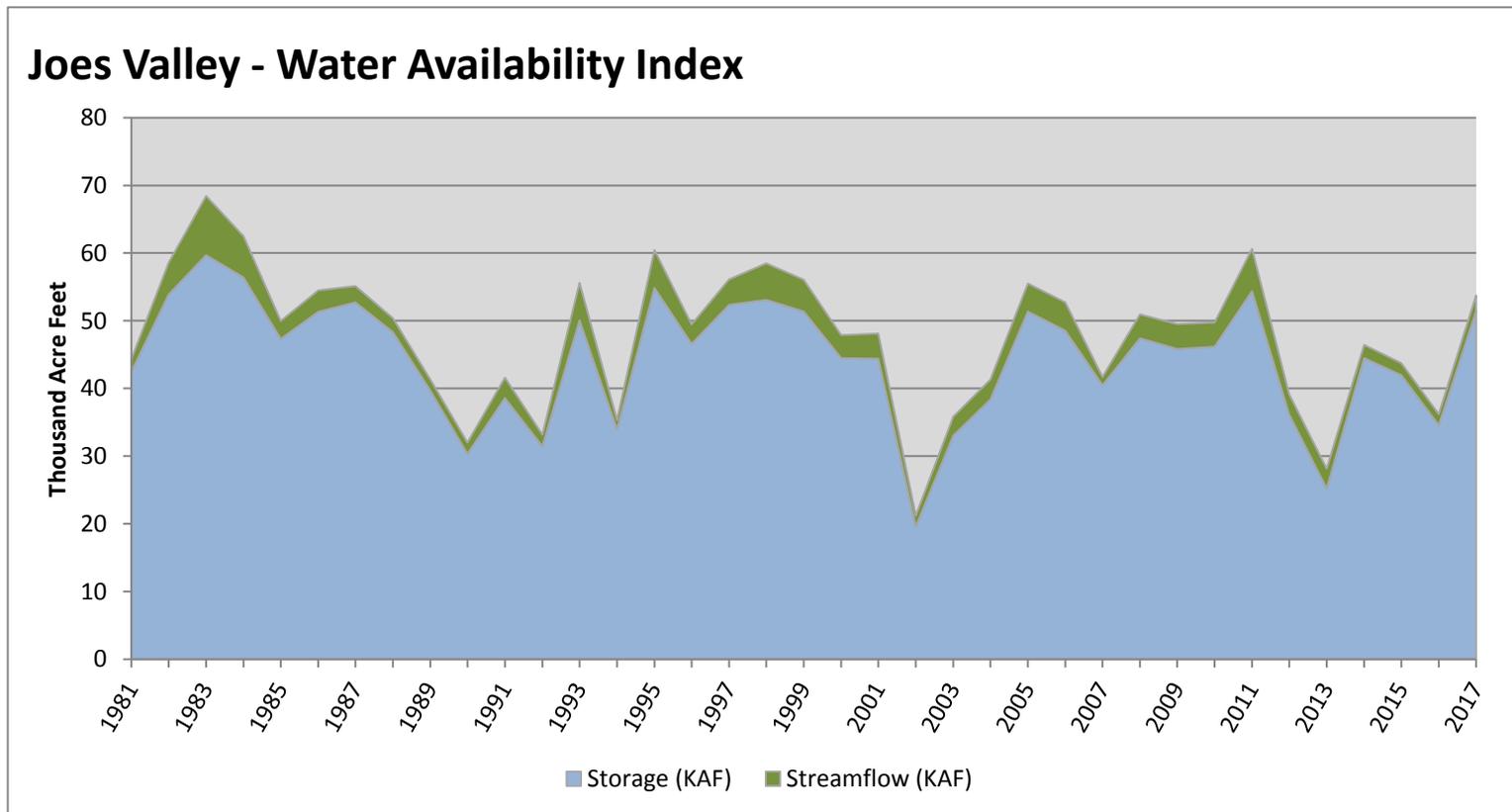


September 1, 2017

Water Availability Index

Basin or Region	Aug EOM [^] Storage	August Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Joese Valley	51.42	2.30	53.72	66	1.32	08, 06, 86, 87

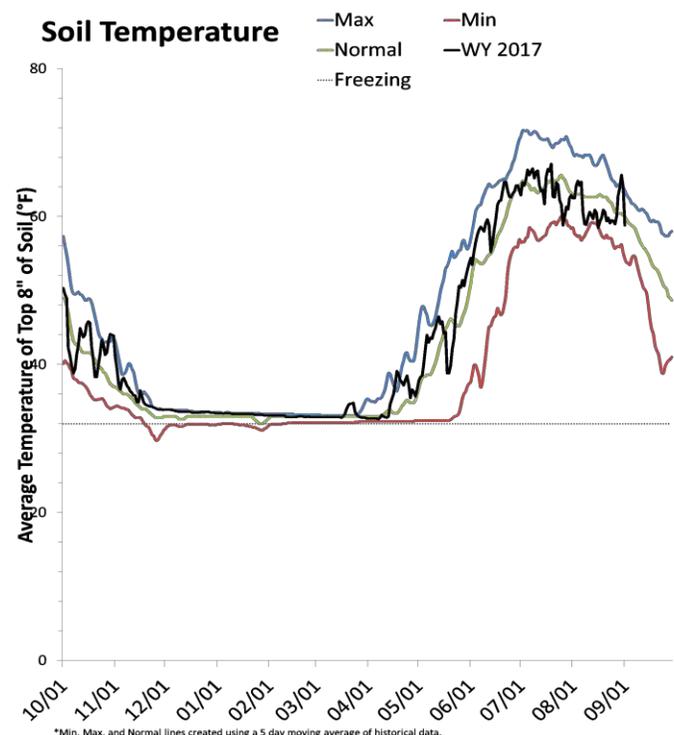
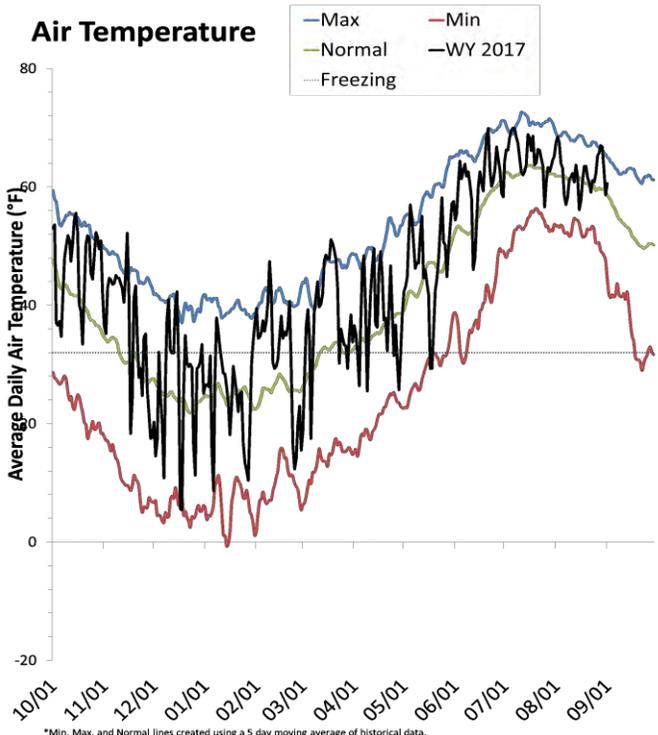
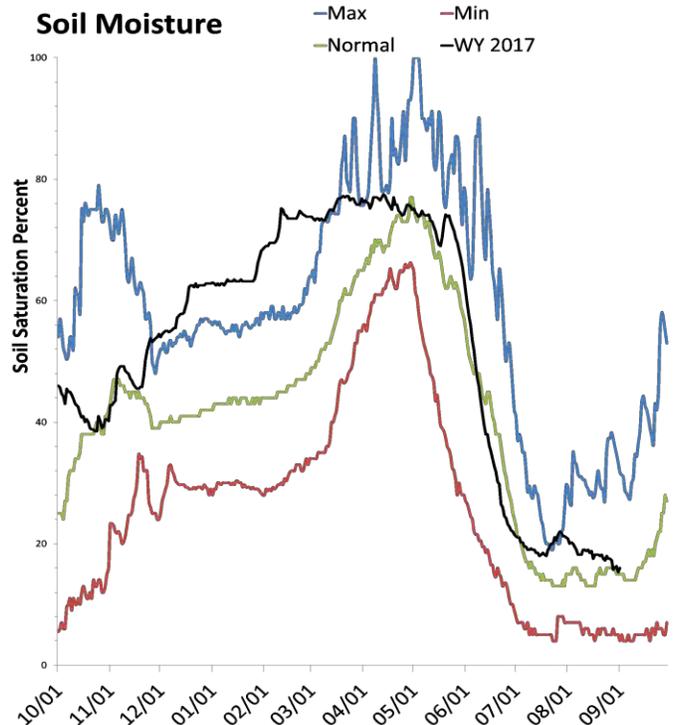
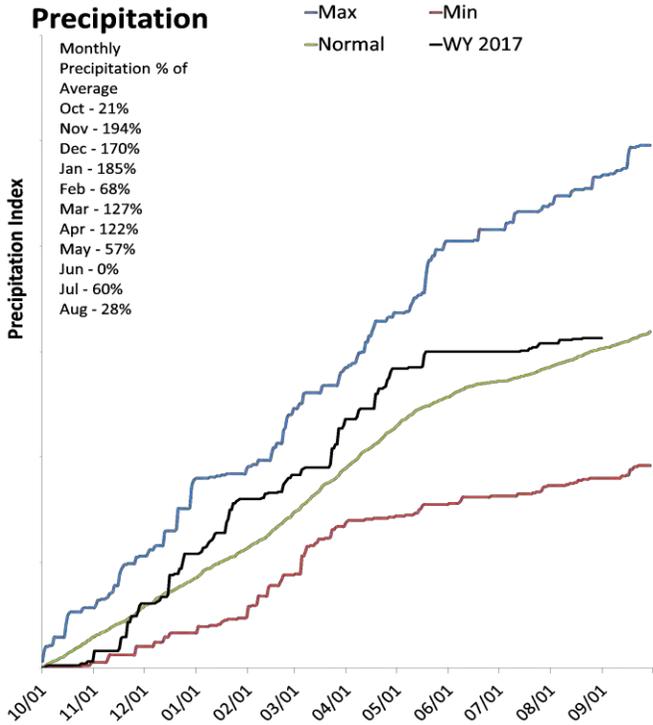
[^]EOM, end of month; [#]WAI, Water Availability Index; [^]KAF, thousand acre-feet.



Lower Sevier Basin

September 1, 2017

Precipitation in August was much below average at 28%, which brings the seasonal accumulation (Oct-Aug) to 103% of average. Soil moisture is at 17% compared to 13% last year. Reservoir storage is at 5% 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.

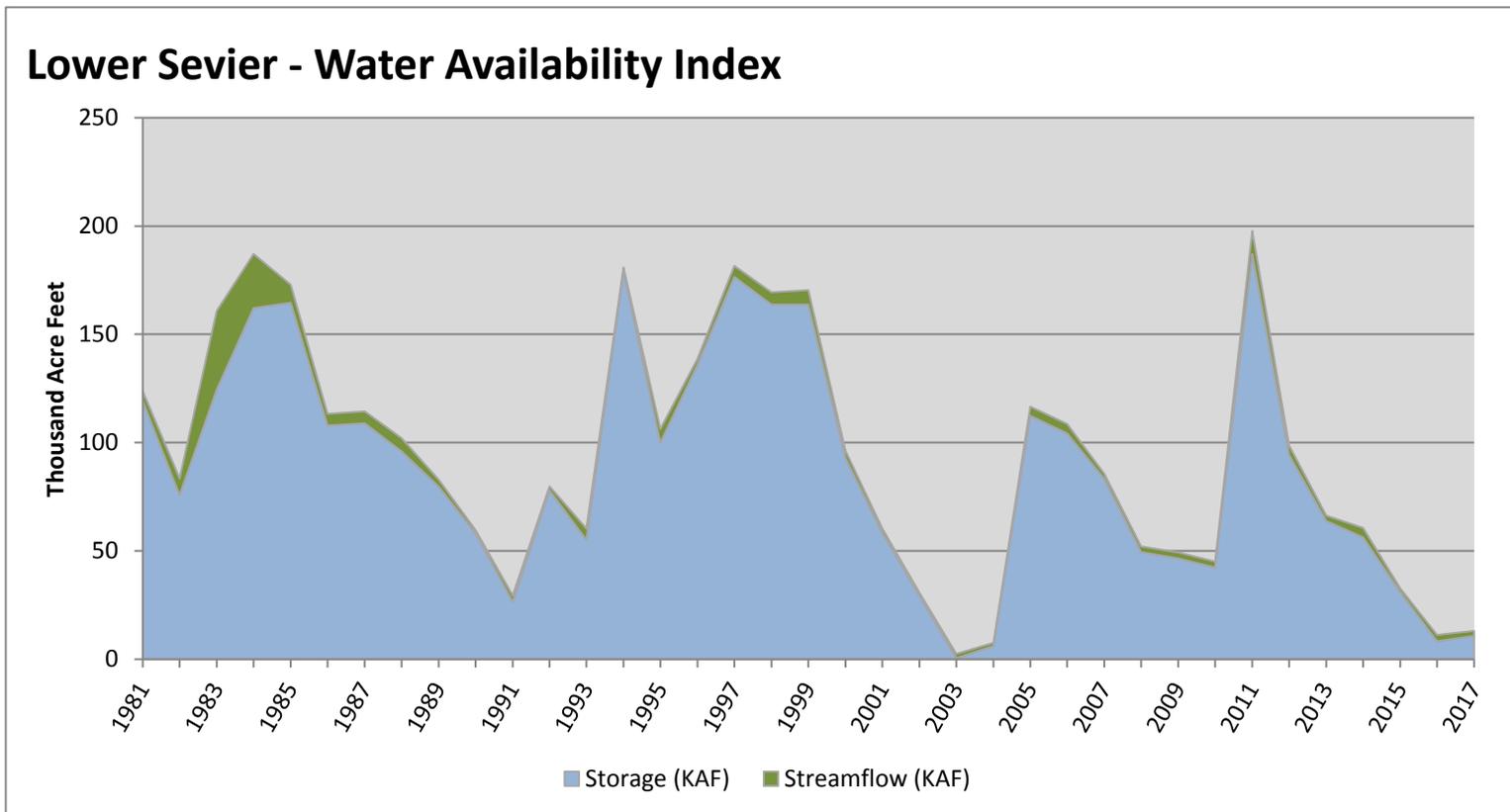
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

September 1, 2017

Water Availability Index

Basin or Region	Aug EOM [^] Storage	August Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Lower Sevier	10.76	2.36	13.12	11	-3.29	04, 16, 91, 02

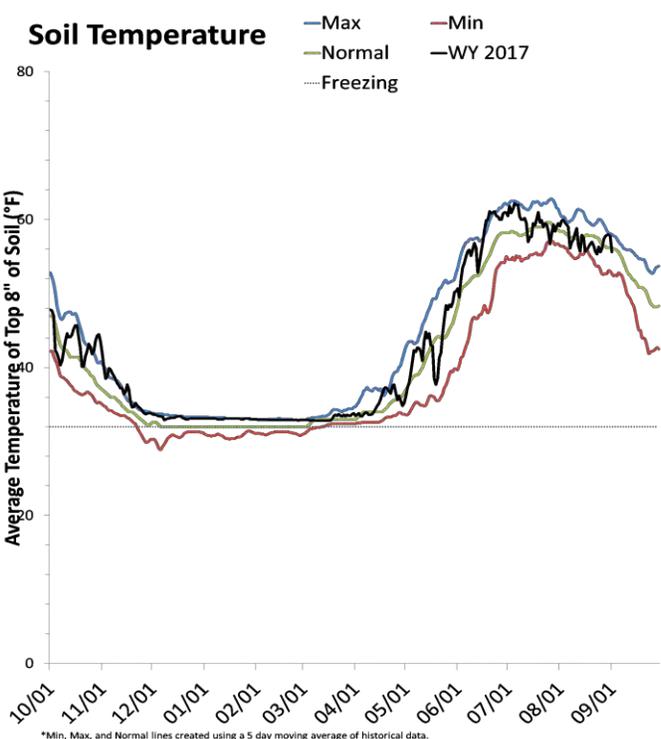
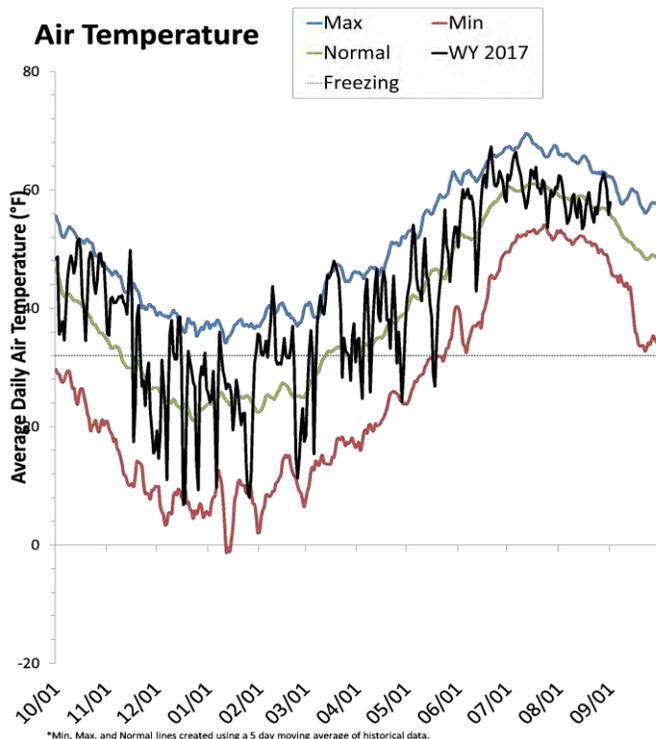
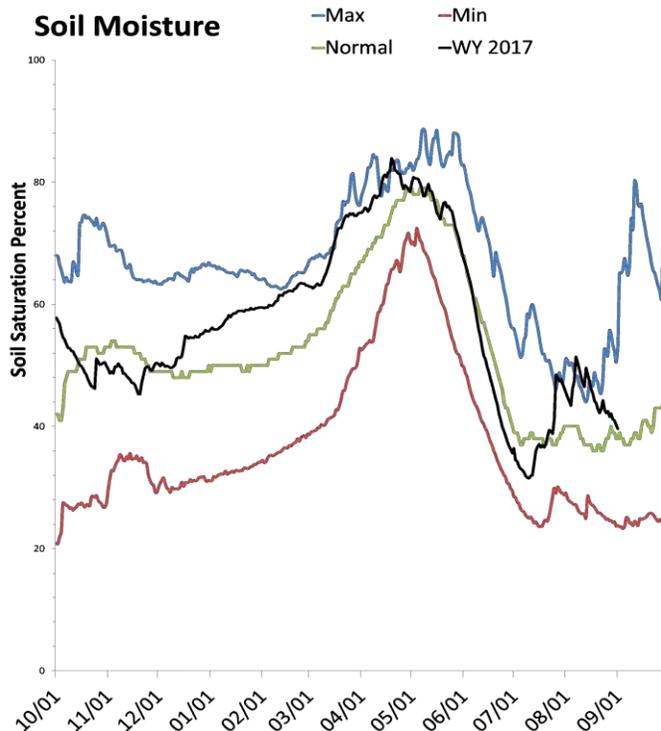
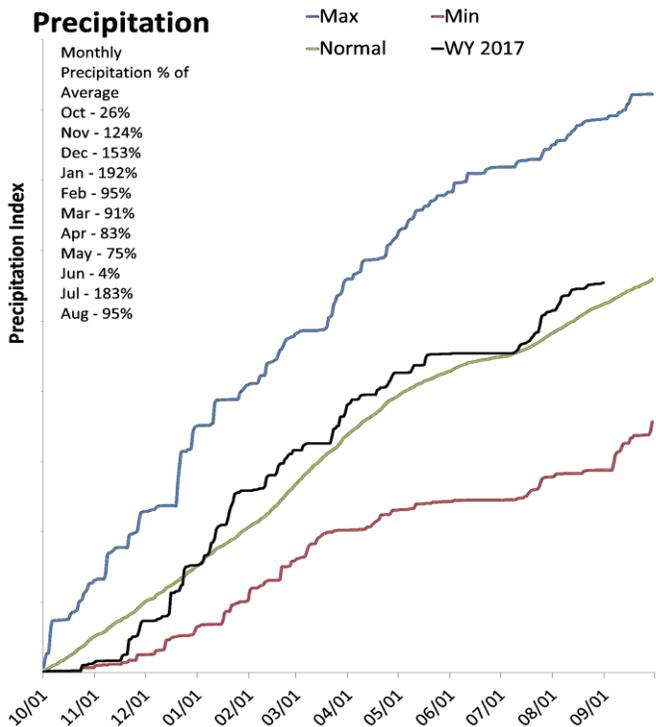
[^]EOM, end of month; [#]WAI, Water Availability Index; [^]KAF, thousand acre-feet.



Upper Sevier Basin

September 1, 2017

Precipitation in August was near average at 94%, which brings the seasonal accumulation (Oct-Aug) to 105% of average. Soil moisture is at 39% compared to 32% last year. Reservoir storage is at 28% of capacity, compared to 22% 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.

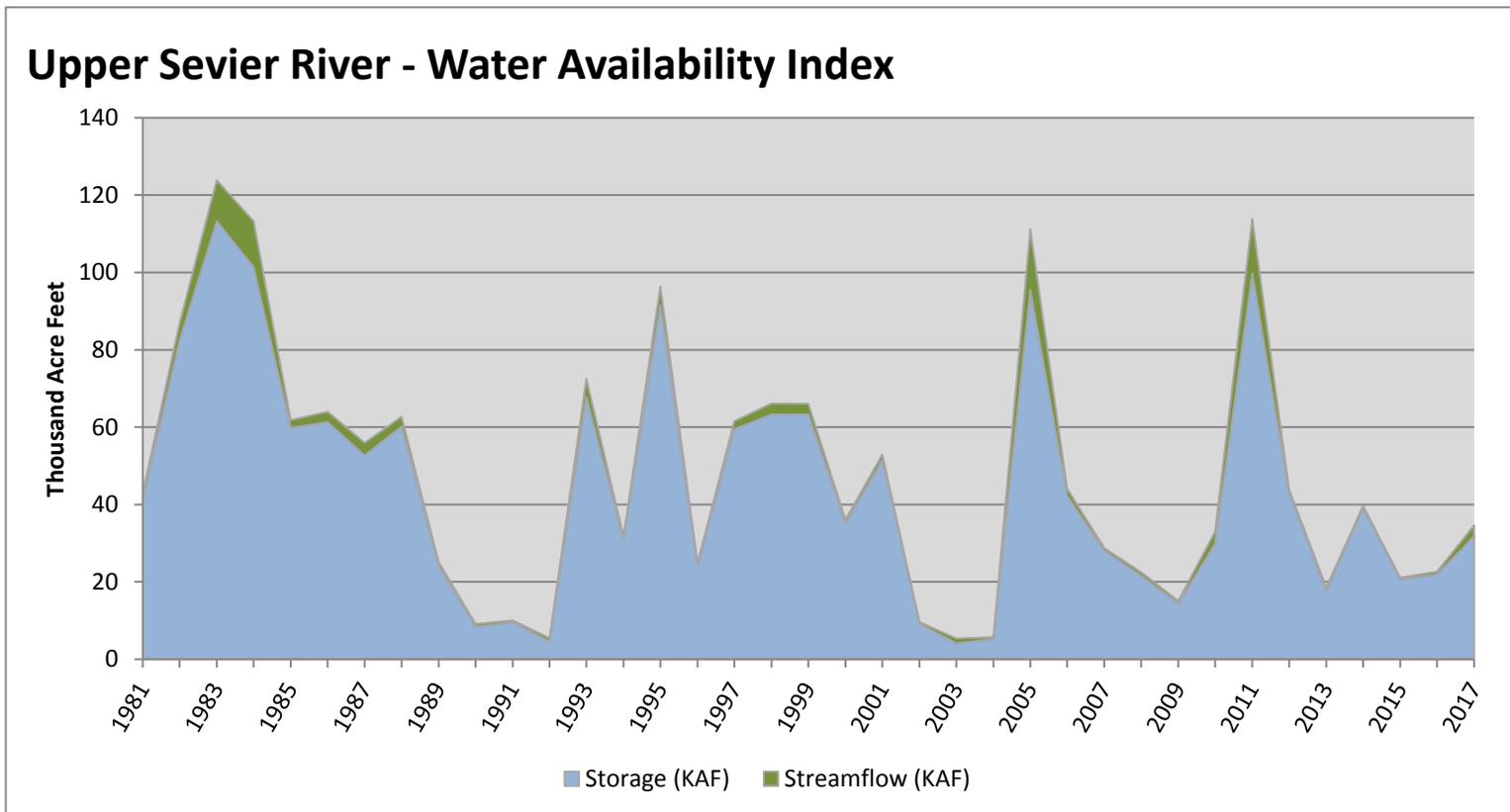
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

September 1, 2017

Water Availability Index

Basin or Region	Aug EOM [^] Storage	August Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Upper Sevier River	31.75	2.83	34.58	45	-0.44	94, 10, 00, 14

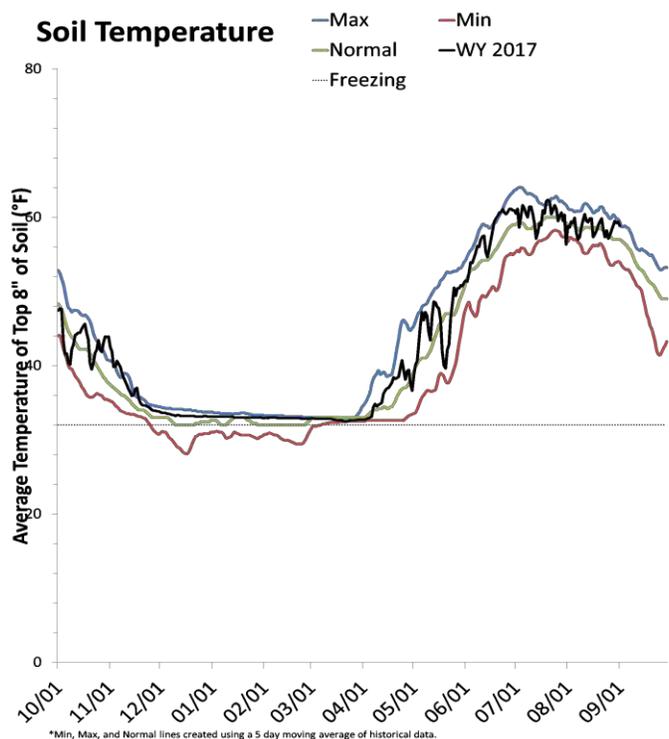
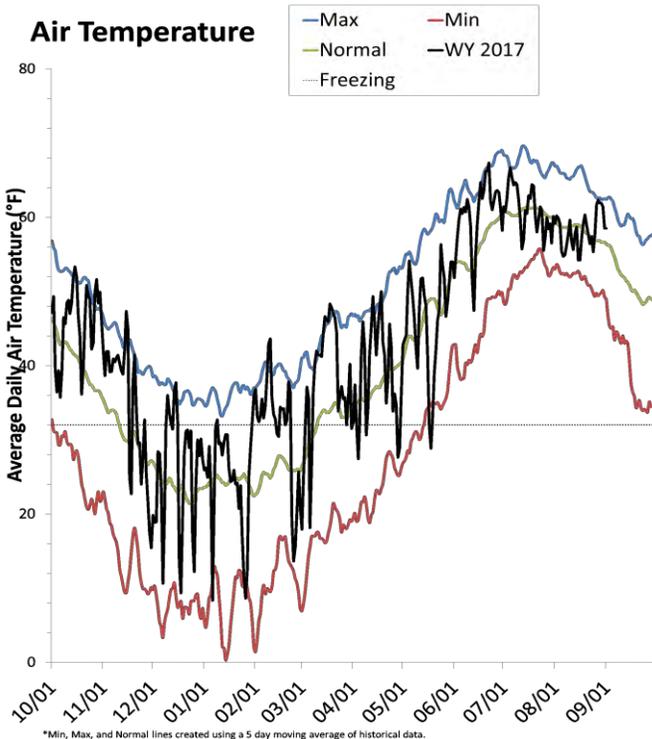
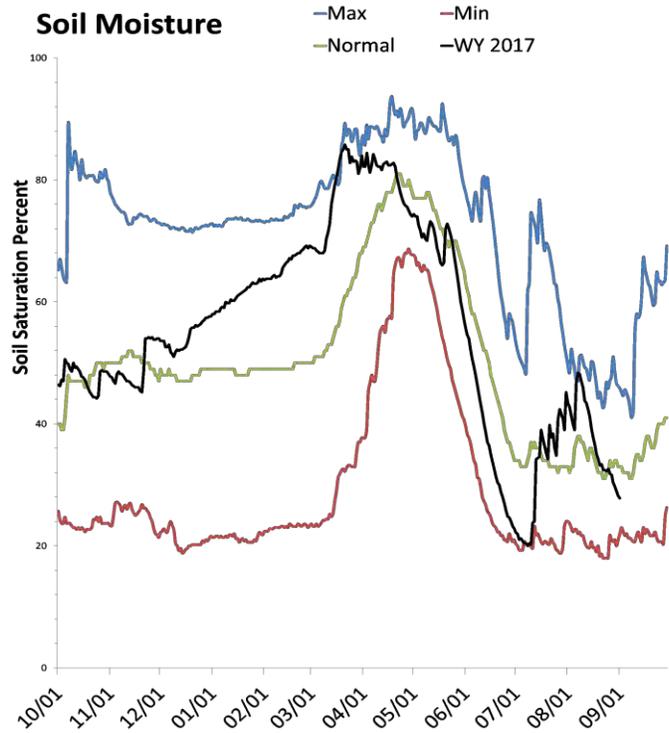
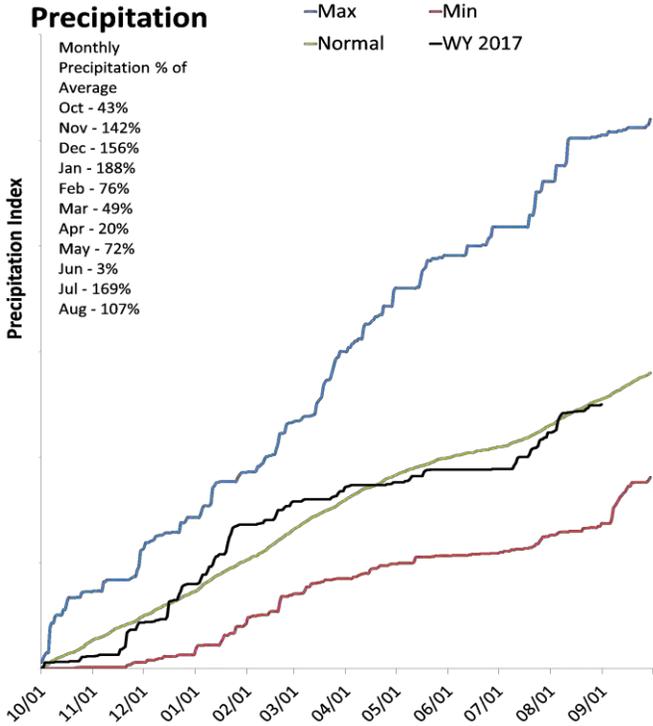
[^]EOM, end of month; [#]WAI, Water Availability Index; [^]KAF, thousand acre-feet.



Southeastern Utah

September 1, 2017

Precipitation in August was near average at 105%, which brings the seasonal accumulation (Oct-Aug) to 98% of average. Soil moisture is at 28% compared to 40% last year. Reservoir storage is at 44% of capacity, compared to 78% last year. The water availability index for Moab is 52%.



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

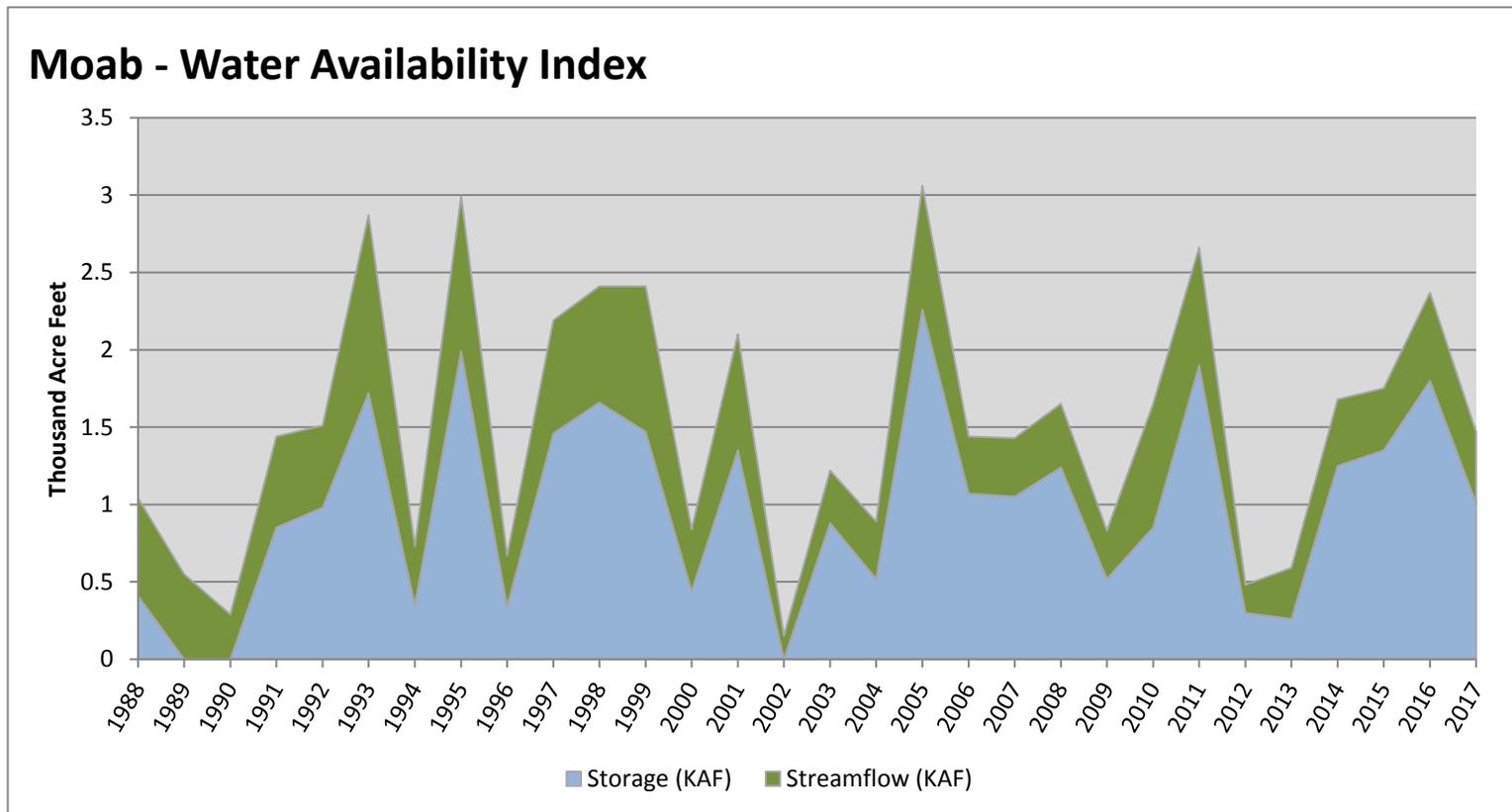
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

September 1, 2017

Water Availability Index

Basin or Region	Aug EOM [^] Storage	August Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Moab	1.01	0.46	1.47	52	0.13	91, 06, 92, 08

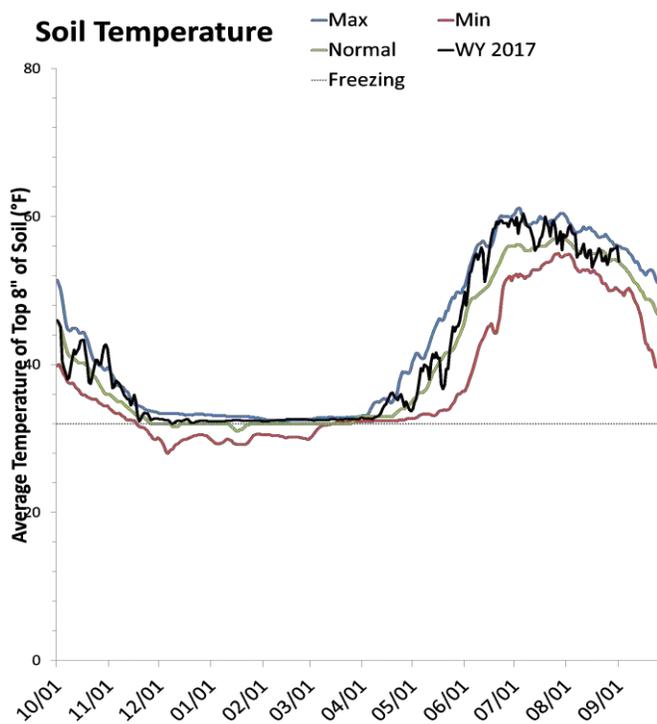
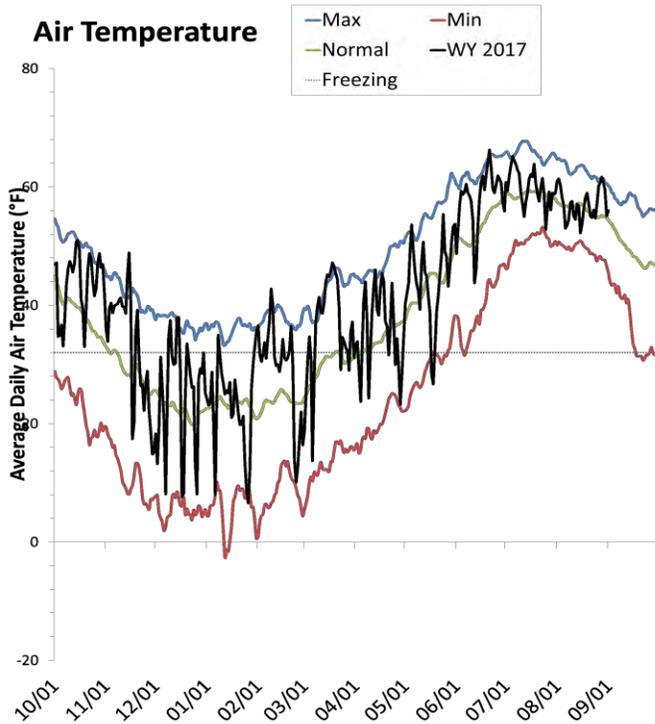
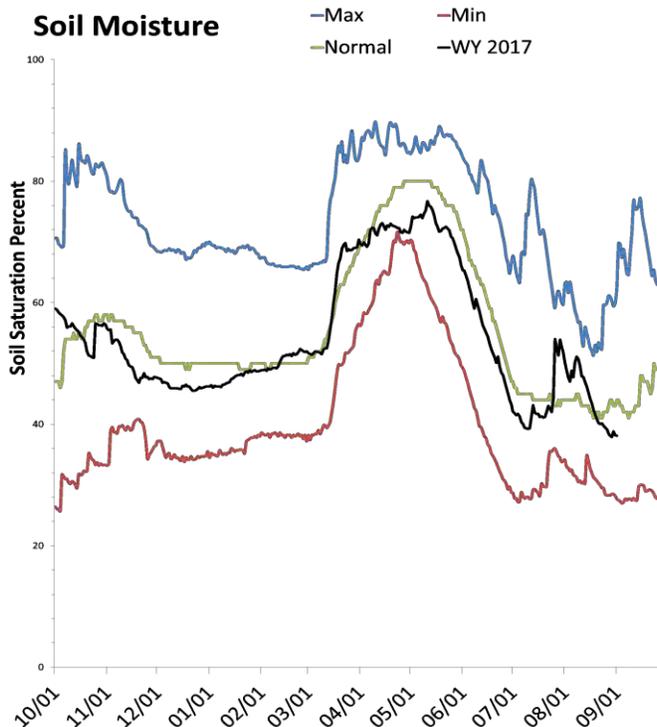
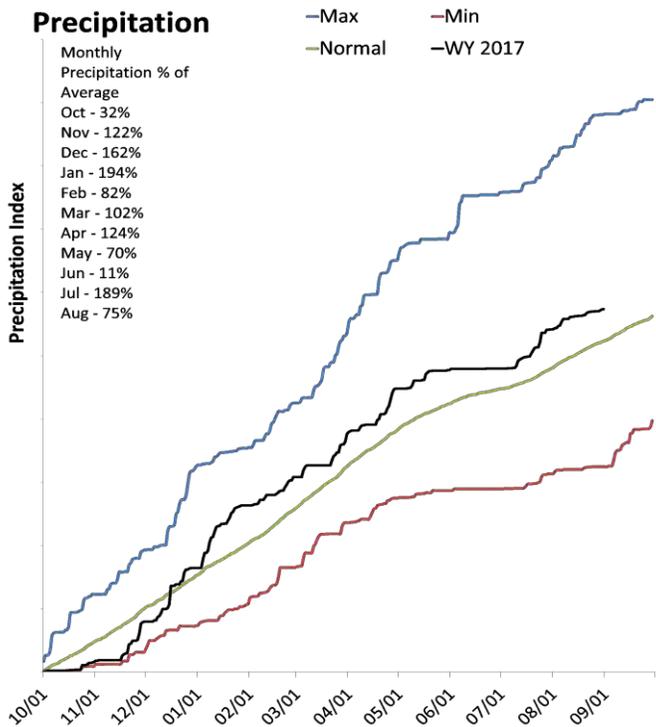
[^]EOM, end of month; [#]WAI, Water Availability Index; [^]KAF, thousand acre-feet.



Dirty Devil Basin

September 1, 2017

Precipitation in August was below average at 74%, which brings the seasonal accumulation (Oct-Aug) to 110% of average. Soil moisture is at 39% compared to 22% last year.



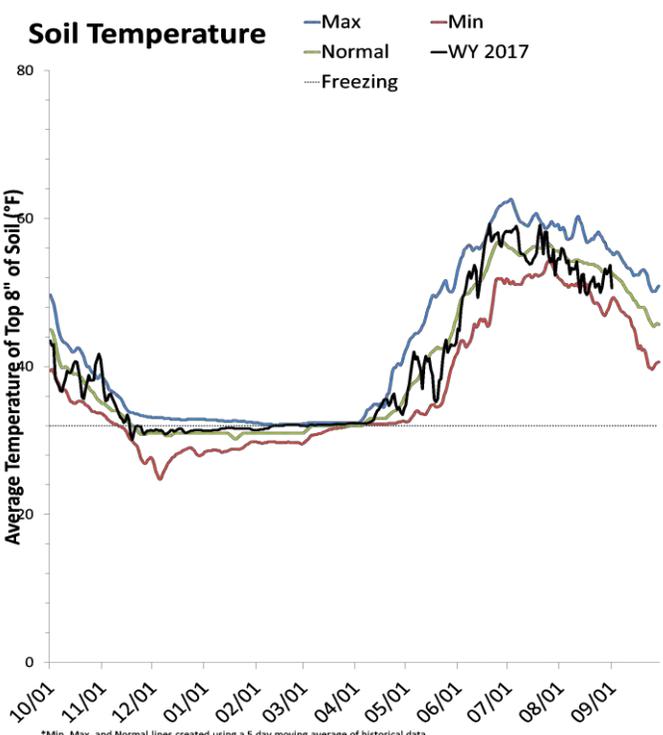
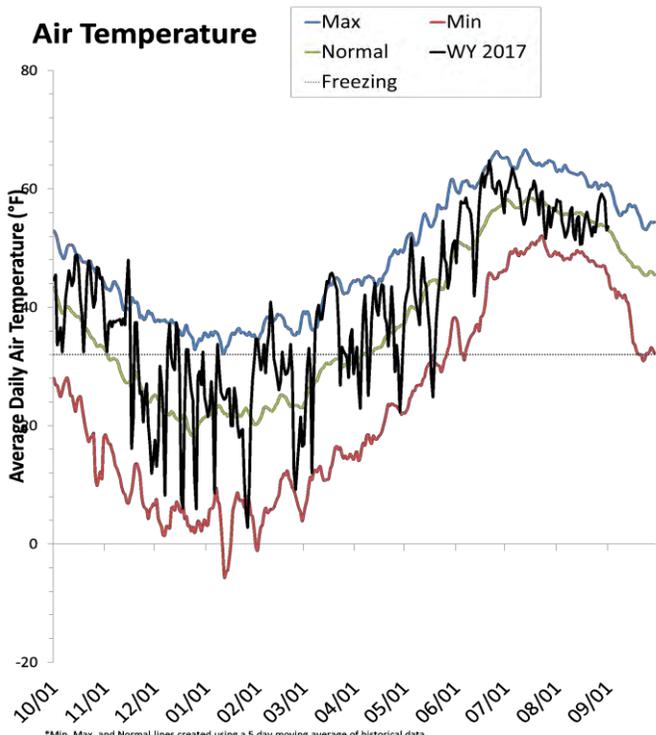
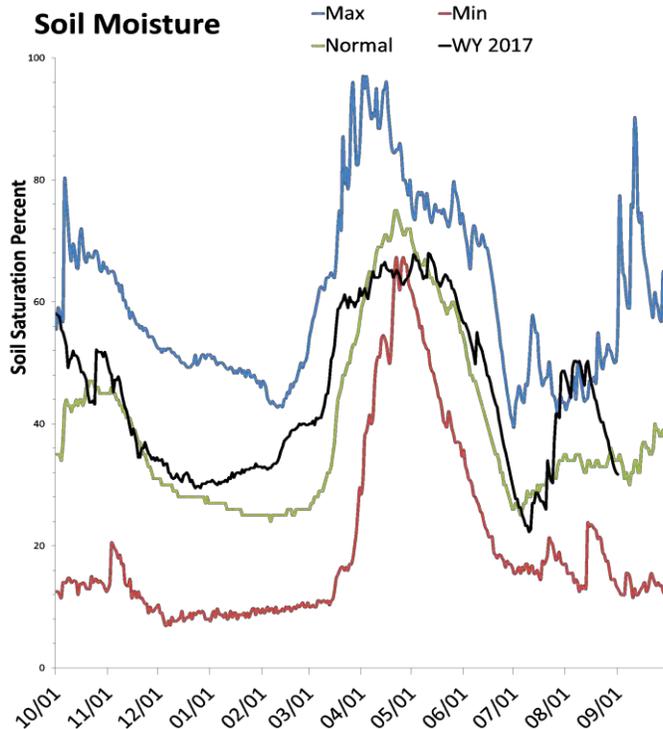
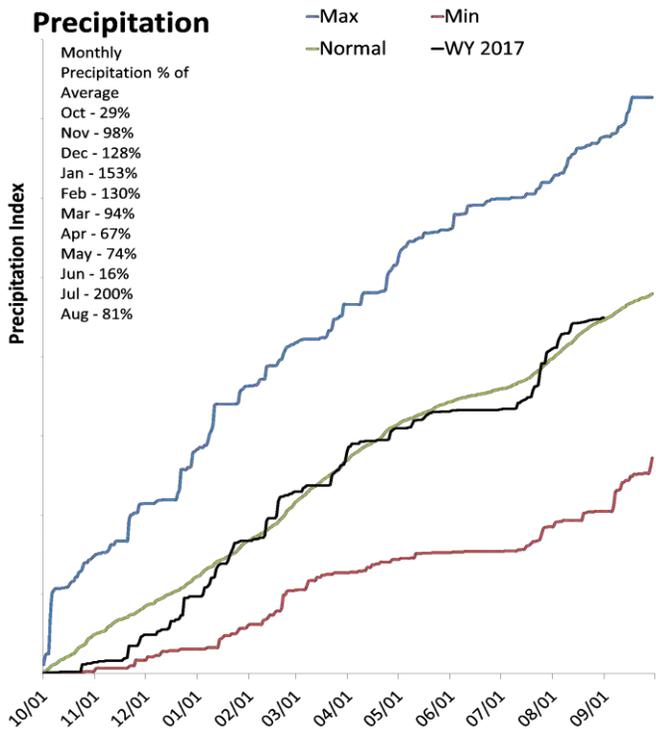
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

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

Escalante River Basin

September 1, 2017

Precipitation in August was below average at 80%, which brings the seasonal accumulation (Oct-Aug) to 101% of average. Soil moisture is at 32% compared to 22% last year.



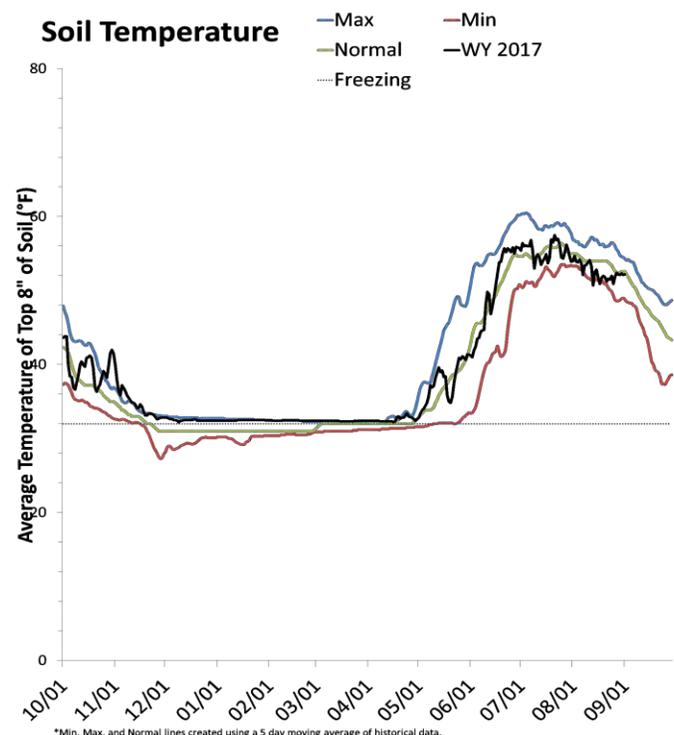
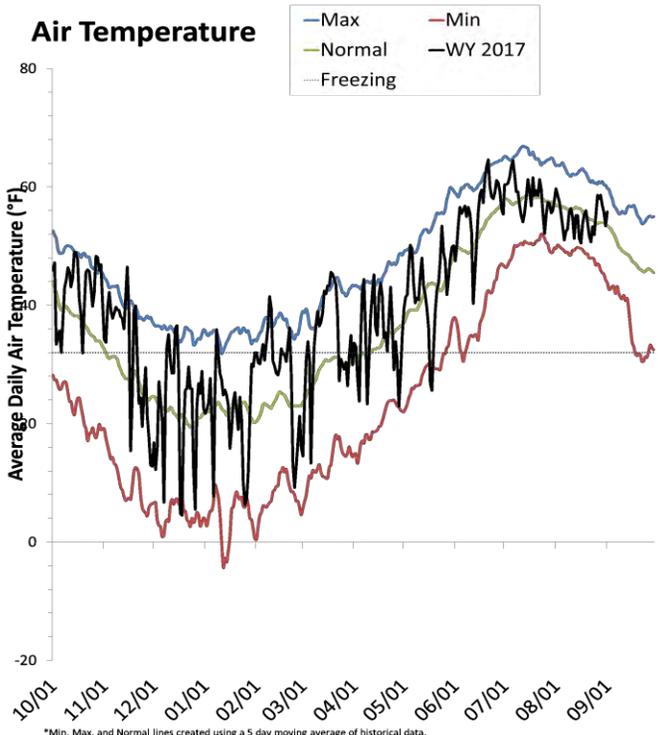
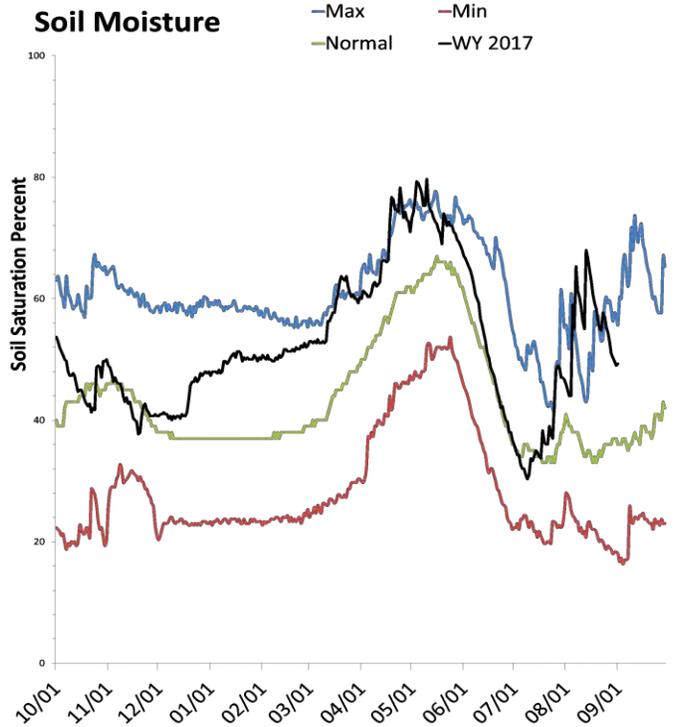
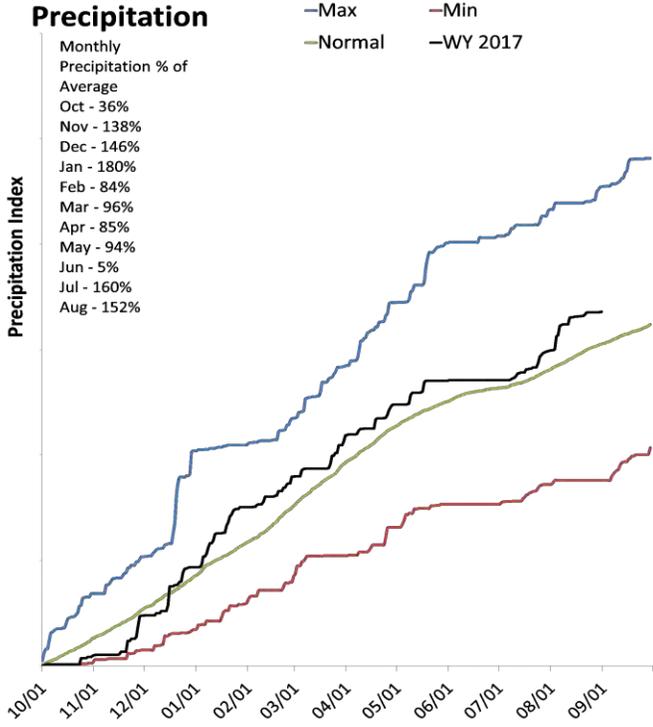
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

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

Beaver River Basin

September 1, 2017

Precipitation in August was much above average at 152%, which brings the seasonal accumulation (Oct-Aug) to 110% of average. Soil moisture is at 49% compared to 32% last year. Reservoir storage is at 18% of capacity, compared to 15% last year. The water availability index for the Beaver River is 50%.



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

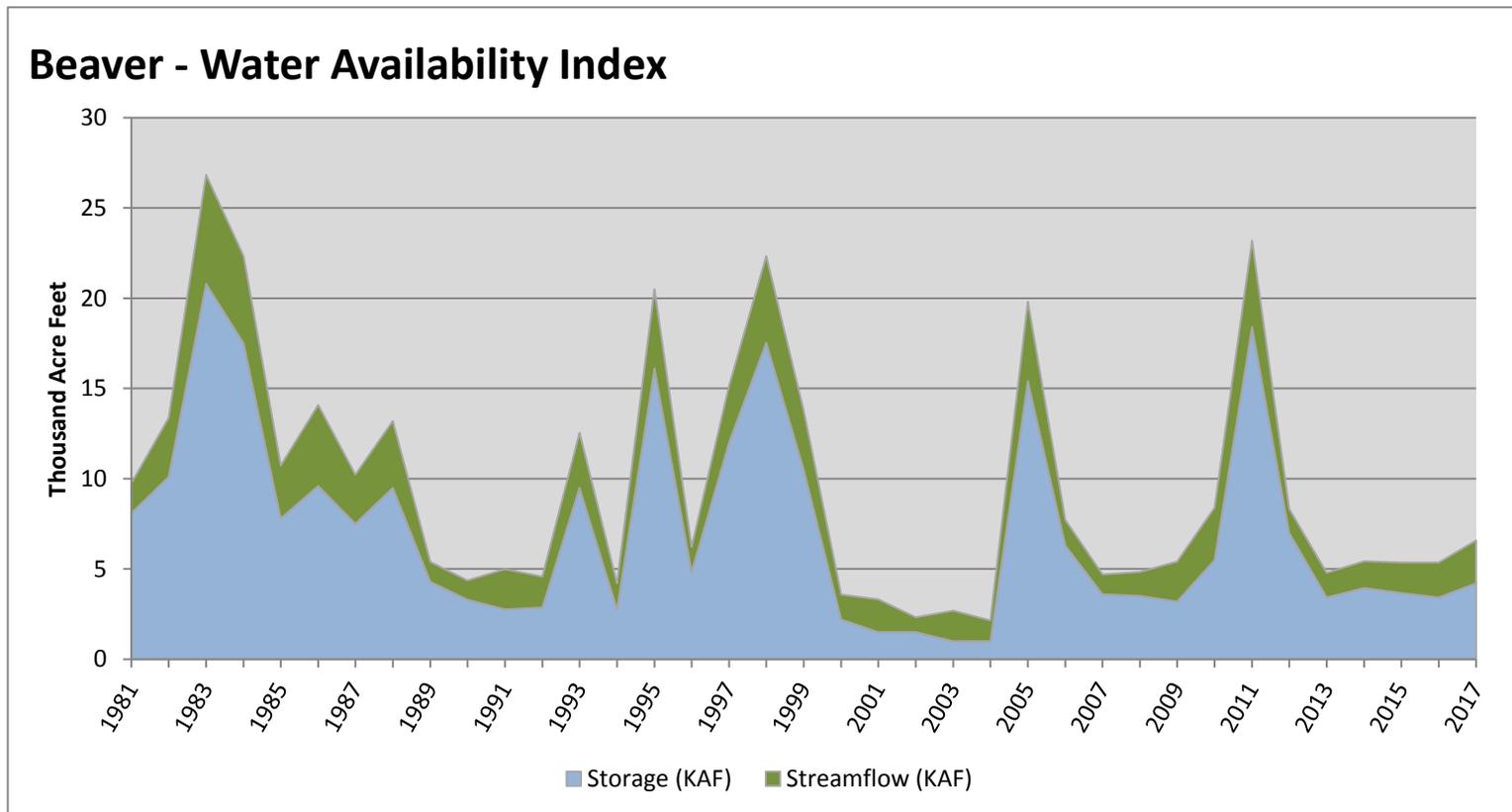
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

September 1, 2017

Water Availability Index

Basin or Region	Aug EOM [^] Storage	August Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Beaver	4.20	2.37	6.57	50	0	14, 96, 06, 12

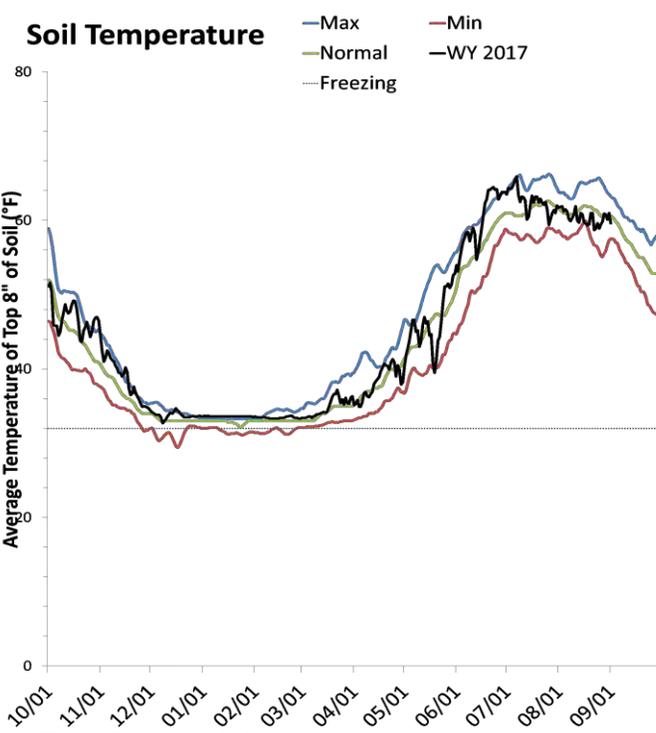
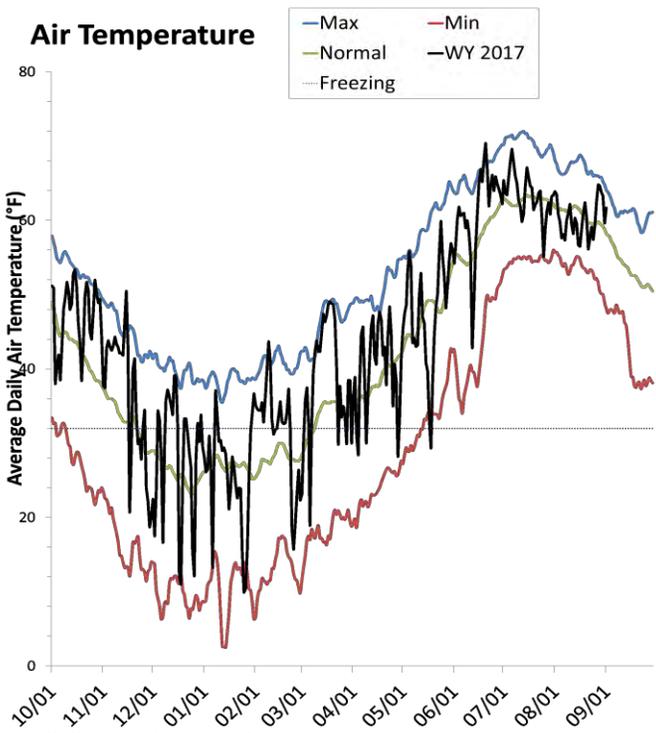
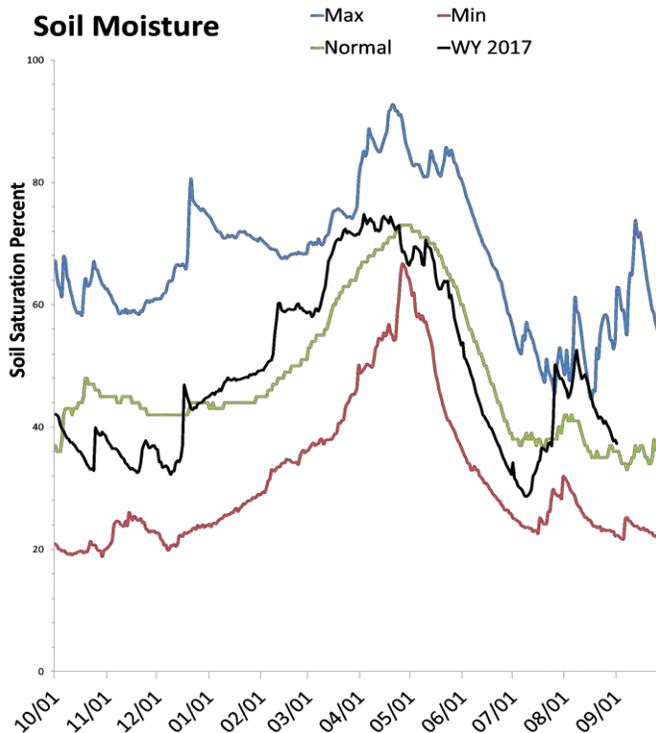
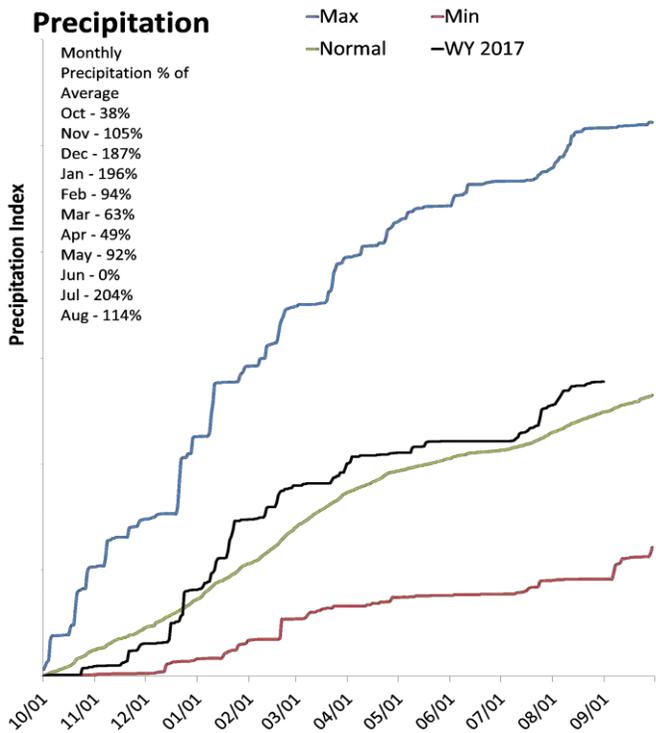
[^]EOM, end of month; [#]WAI, Water Availability Index; [^]KAF, thousand acre-feet.



Southwestern Utah

September 1, 2017

Precipitation in August was above average at 114%, which brings the seasonal accumulation (Oct-Aug) to 112% of average. Soil moisture is at 37% compared to 33% last year. Reservoir storage is at 61% of capacity, compared to 54% 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.

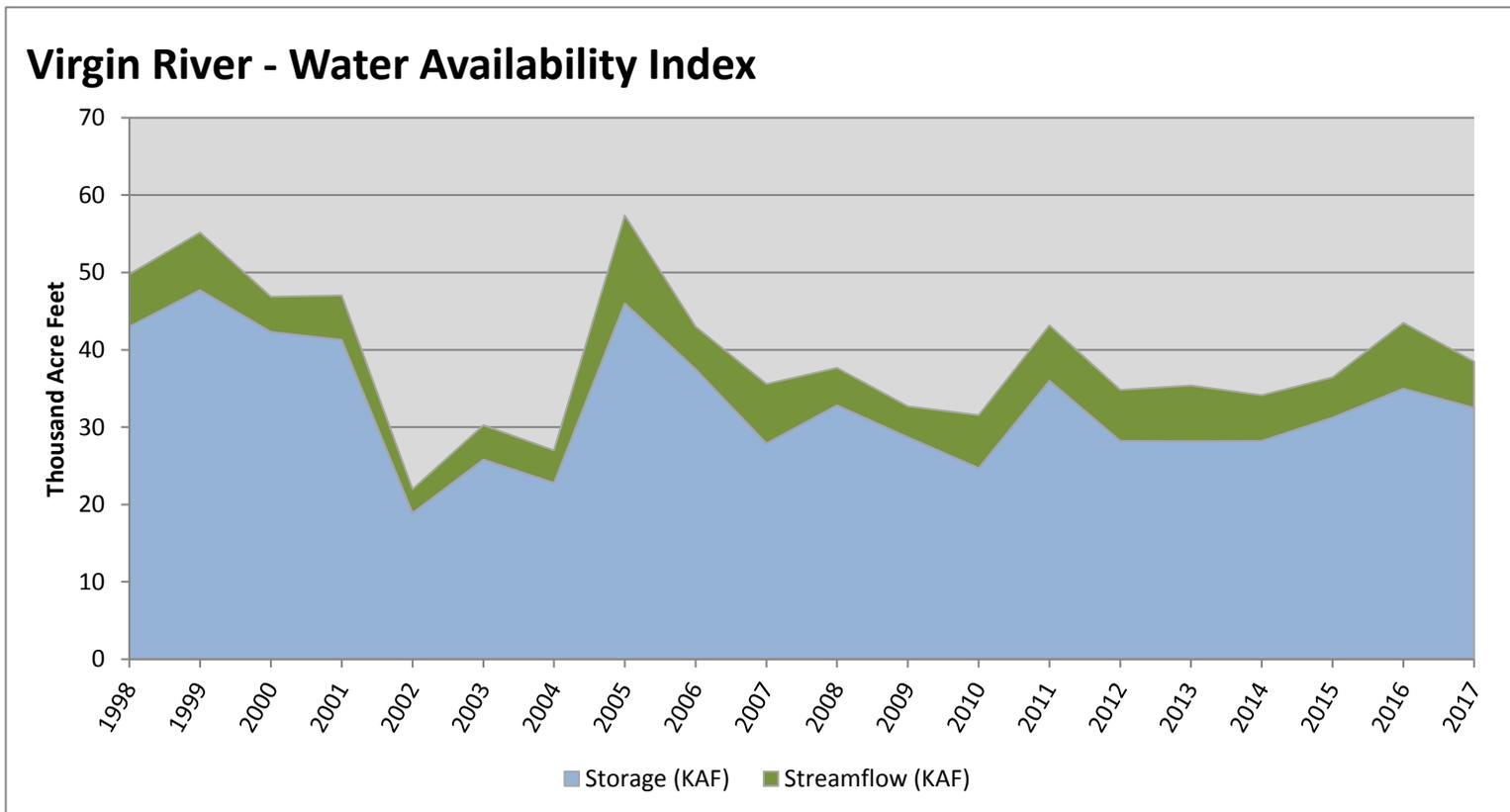
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

September 1, 2017

Water Availability Index

Basin or Region	Aug EOM [^] Storage	August Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Virgin River	32.48	6.00	38.48	57	0.6	15, 08, 06, 11

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



September 1, 2017

Water Availability Index

Basin or Region	Aug EOM* Storage	August Flow	Storage + Flow	Percentile	WAI#	Years with similiar WAI
	KAF^	KAF^	KAF^	%		
Bear River	1152	5.9	1158	79	2.4	85, 11, 99, 82
Woodruff Narrows	39.7	5.9	45.6	68	1.5	06, 08, 16, 10
Little Bear	10.2	3.5	13.7	88	3.2	99, 97, 11, 98
Ogden	91.6	3.8	95.4	89	3.3	98, 86, 84, 11
Weber	153.5	8.3	161.8	75	2.1	05, 09, 97, 98
Provo River	400.5	7.2	407.7	78	2.4	99, 96, 97, 05
Western Uinta	186.2	4.5	190.7	77	2.3	15, 05, 93, 11
Eastern Uinta	30.1	8.3	38.5	45	-0.4	06, 88, 15, 92
Blacks Fork	13.0	5.1	18.2	46	-0.4	03, 90, 10, 85
Price	54.4	0.8	55.2	89	3.3	97, 82, 11, 84
Smiths Creek	8.1	2.9	11.0	71	1.7	09, 14, 93, 91
Joes Valley	51.4	2.3	53.7	66	1.3	08, 06, 86, 87
Moab	1.0	0.5	1.5	52	0.1	91, 06, 92, 08
Upper Sevier River	31.8	2.8	34.6	45	-0.4	94, 10, 00, 14
San Pitch	4.2	0.6	4.8	45	-0.4	91, 01, 87, 88
Lower Sevier	10.8	2.4	13.1	11	-3.3	04, 16, 91, 02
Beaver	4.2	2.4	6.6	50	0.0	14, 96, 06, 12
Virgin River	32.5	6.0	38.5	57	0.6	15, 08, 06, 11

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

What is a Water Availability Index?

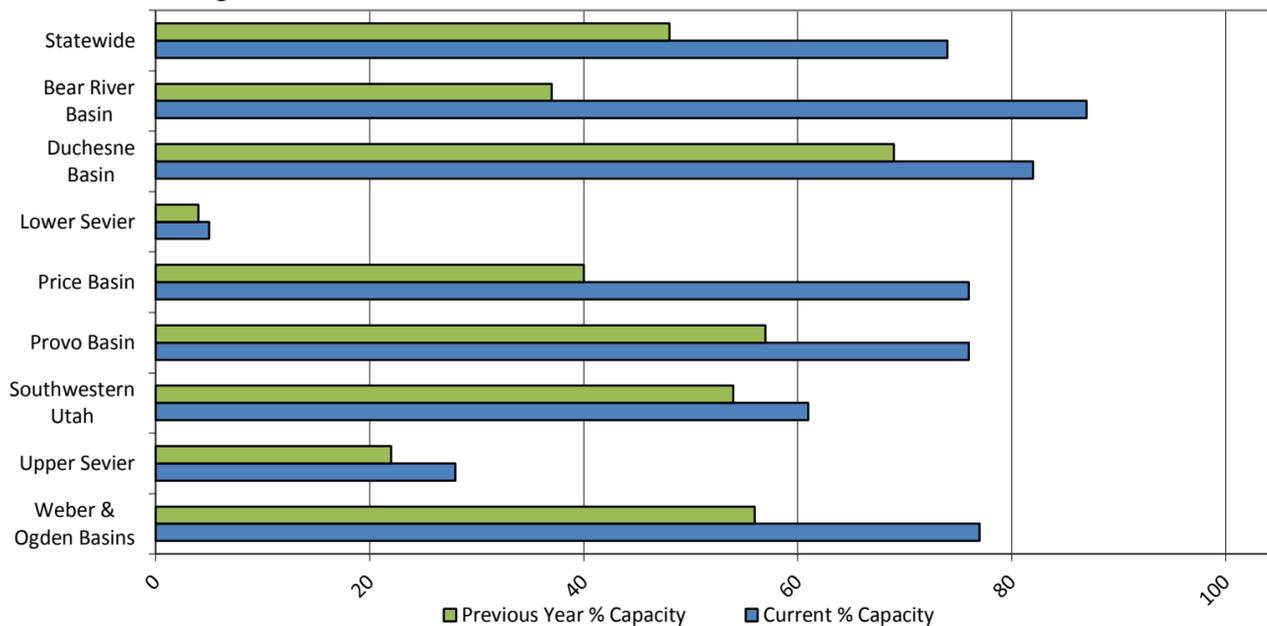
The Water Availability Index (WAI) is an observed hydrologic indicator of current surface water availability within a watershed. The index is calculated by combining current reservoir storage with the previous months streamflow. WAI values are scaled from +4.1 (abundant supply) to -4.1 (extremely dry) 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 August 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	13.2	8.2		25.7	51%	32%			
Causey Reservoir	5.9	3.7	3.4	7.1	84%	52%	48%	175%	108%
Cleveland Lake	3.5	1.9		5.4	66%	35%			
Currant Creek Reservoir	14.9	14.3	15.1	15.5	96%	92%	97%	98%	95%
Deer Creek Reservoir	128.8	98.6	105.7	149.7	86%	66%	71%	122%	93%
East Canyon Reservoir	39.4	23.3	34.8	49.5	80%	47%	70%	113%	67%
Echo Reservoir	34.3	19.7	33.3	73.9	46%	27%	45%	103%	59%
Grantsville Reservoir	1.1	0.4	1.0	3.3	33%	12%	30%	110%	39%
Gunlock	6.5	4.6	5.7	10.4	62%	44%	55%	114%	80%
Gunnison Reservoir	4.2	0.0	7.0	20.3	21%	0%	34%	60%	0%
Huntington North Reservoir	3.8	2.3	1.8	4.2	91%	56%	42%	219%	133%
Hyrum Reservoir	10.2	3.2	6.7	15.3	67%	21%	44%	152%	48%
Joes Valley Reservoir	51.4	34.6	45.1	61.6	83%	56%	73%	114%	77%
Jordanelle Reservoir	271.8	226.3	272.3	320.0	85%	71%	85%	100%	83%
Ken's Lake	1.0	1.8	1.0	2.3	44%	78%	44%	100%	178%
Kolob Reservoir	5.4	5.2		5.6	96%	93%			
Lost Creek Reservoir	18.5	15.2	13.8	22.5	82%	68%	61%	134%	110%
Lower Enterprise	1.0	0.4	0.2	2.6	38%	15%	8%	500%	200%
Miller Flat Reservoir	3.8	1.8		5.2	73%	35%			
Millsite	3.6	11.5	11.8	16.7	22%	69%	71%	31%	97%
Minersville Reservoir	4.2	3.4	7.5	23.3	18%	15%	32%	56%	46%
Moon Lake Reservoir	23.7	11.0	18.7	35.8	66%	31%	52%	127%	59%
Otter Creek Reservoir	31.1	21.8	23.8	52.5	59%	41%	45%	131%	92%
Panguitch Lake	9.4	9.8	13.6	22.3	42%	44%	61%	69%	72%
Pineview Reservoir	85.7	66.9	59.8	110.1	78%	61%	54%	143%	112%
Piute Reservoir	0.6	0.1	21.2	71.8	1%	0%	30%	3%	1%
Porcupine Reservoir	10.0	5.3	5.3	11.3	88%	47%	47%	189%	101%
Quail Creek	26.0	30.4	22.9	40.0	65%	76%	57%	114%	133%
Red Fleet Reservoir	19.5	19.1	19.0	25.7	76%	74%	74%	103%	101%
Rockport Reservoir	55.5	30.2	44.4	60.9	91%	50%	73%	125%	68%
Sand Hollow Reservoir	44.0	40.0		50.0	88%	80%			
Scofield Reservoir	54.4	11.1	32.2	65.8	83%	17%	49%	169%	34%
Settlement Canyon Reservoir	0.5	0.2	0.5	1.0	46%	18%	49%	94%	37%
Sevier Bridge Reservoir	10.8	8.3	93.4	236.0	5%	4%	40%	12%	9%
Smith And Morehouse Reservoir	5.8	4.9	4.8	8.1	72%	60%	59%	121%	102%
Starvation Reservoir	136.0	127.0	130.5	165.3	82%	77%	79%	104%	97%
Stateline Reservoir	8.1	6.1	7.2	12.0	67%	51%	60%	112%	84%
Steinaker Reservoir	10.6	9.6	17.1	33.4	32%	29%	51%	62%	56%
Strawberry Reservoir	929.9	772.0	693.0	1105.9	84%	70%	63%	134%	111%
Upper Enterprise	1.8	0.3	1.7	10.0	18%	3%	17%	103%	14%
Upper Stillwater Reservoir	26.5	21.7	19.6	32.5	82%	67%	60%	135%	111%
Utah Lake	532.9	294.5	690.2	870.9	61%	34%	79%	77%	43%
Vernon Creek Reservoir		0.1	0.1	0.6		14%	18%		75%
Willard Bay	175.6	142.8	137.8	215.0	82%	66%	64%	127%	104%
Woodruff Creek	1.0	0.3	0.5	4.0	25%	6%	13%	200%	50%
Woodruff Narrows Reservoir	39.7	41.3	24.4	57.3	69%	72%	43%	163%	169%
Meeks Cabin Reservoir	13.0	9.3	13.2	32.5	40%	29%	41%	99%	71%
Bear Lake	1151.6	461.1	635.5	1302.0	88%	35%	49%	181%	73%
Basin-wide Total	3960.2	2568.1	3296.5	5380.3	74%	48%	61%	120%	78%
# of reservoirs	42	42	42	42	42	42	42	42	42

Reservoir Storage



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