



Utah Climate and Water Report

December 1, 2017



Mirror Lake Highway

Photo by Jordan Clayton

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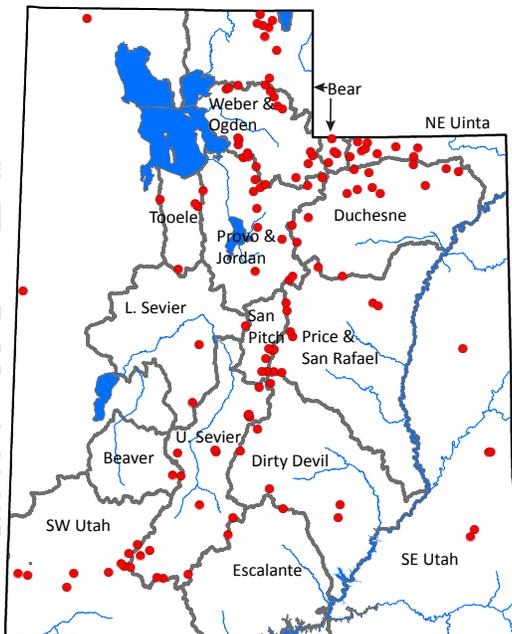
Utah Climate and Water Report

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.



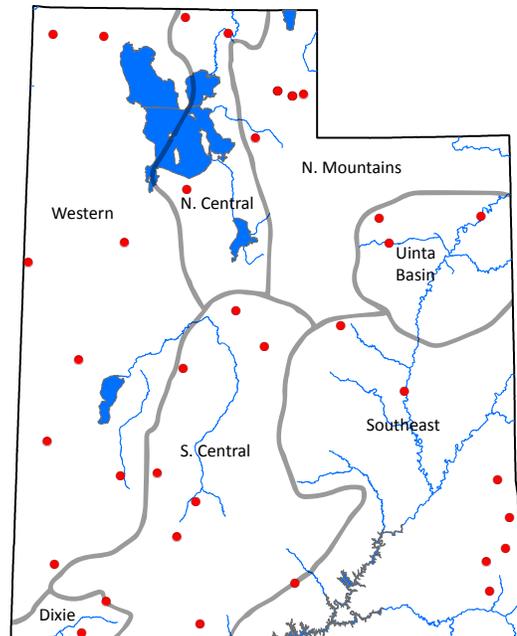
SNOTEL

- 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

December 1, 2017

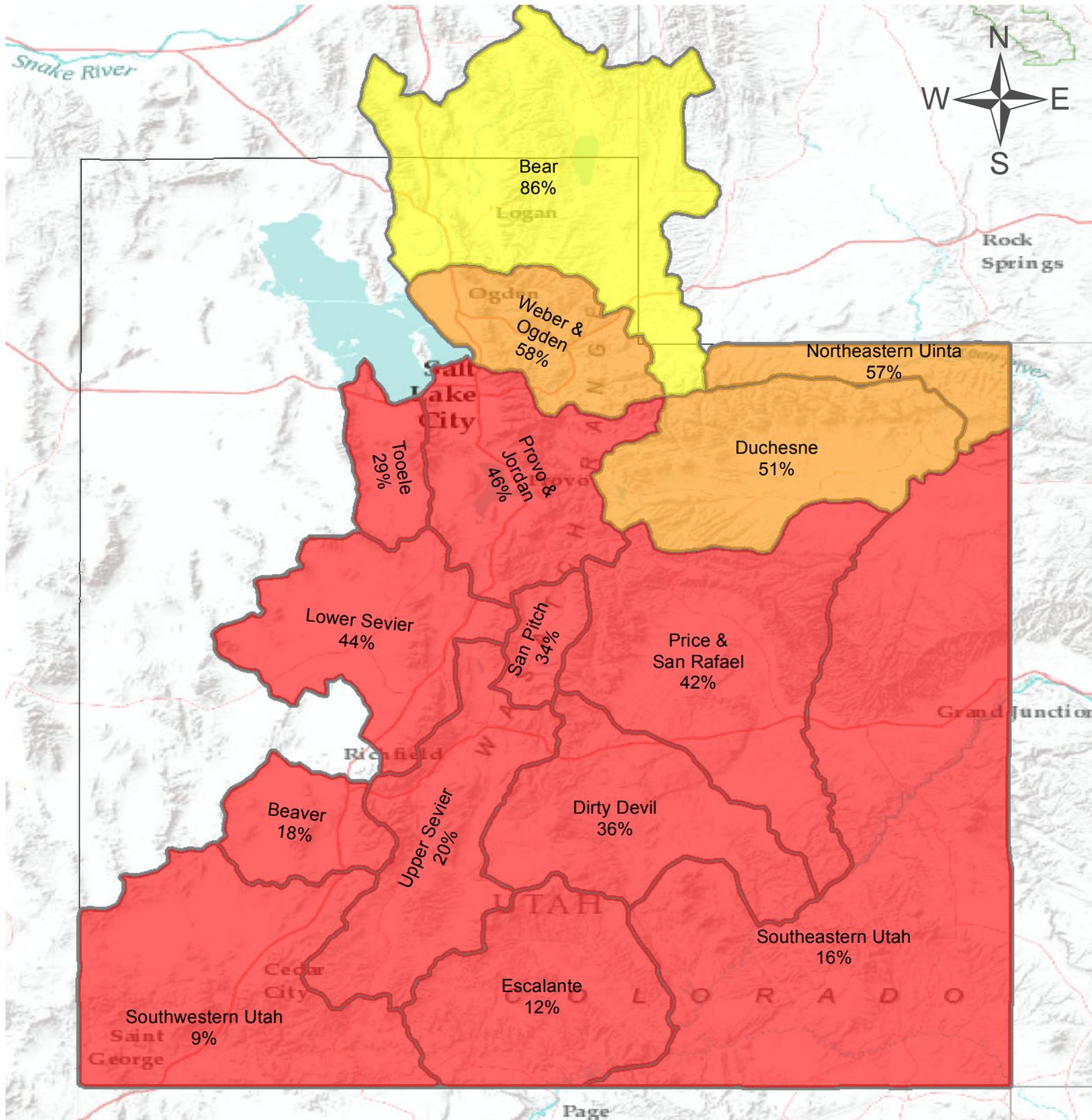
*This report has been reorganized to better reflect two distinct geographic areas being monitored – the low elevation valley sites (**Soil Climate Analysis Network**) that are critical for agricultural production and operations, and the high elevation mountainous areas where water supply is generated (**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 slow start to the water year for Southern Utah has continued, but conditions improved considerably in Northern Utah. November brought a wide disparity between Northern and Southern Utah, with a high of 1.8 inches in the Northern regions to none in the Southeast. Statewide precipitation for Utah's valley locations averaged 0.5 inches last month. Soil moisture conditions are now very good in the North, but remain at or near record-low levels in all of the Southern regions. This reflects the dry conditions present since the beginning of the water year. Like last month, both air and soil temperatures have remained relatively steady this past month reflecting the overall mild conditions through the month. As of December 1st, both soil and air temperature were significantly above normal statewide at SCAN sites.

Current Mountain Conditions (SNOTEL)

Unless you are considering the Bear River watershed, snowpack conditions in Utah are off to a rough start. Most areas of southern Utah, in particular, have 10% or less of their normal snow water equivalent for this time of year. We have had a combination of too little mountain precipitation and very warm temperatures; average soil temperatures measured at Utah SNOTEL sites actually reached a new maximum for mid-November. Overall, as of December 1st, the statewide snow water equivalent is 46% of normal. Precipitation at SNOTEL sites during November was below average at 75%, which brings the seasonal accumulation (Oct-Nov) to 49% of average. Soil moisture is at 52% of saturation compared to 55% last year. However, reservoir storage is at 71% of capacity (compared to 47% last year) and streamflow is roughly average, which means that the statewide Water Availability Index is at the 65th percentile (despite large variation between basins).



Statewide Precipitation

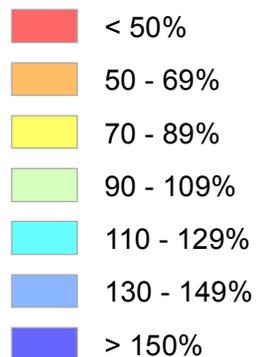
As of December 1, 2017:

49% of Normal Precipitation

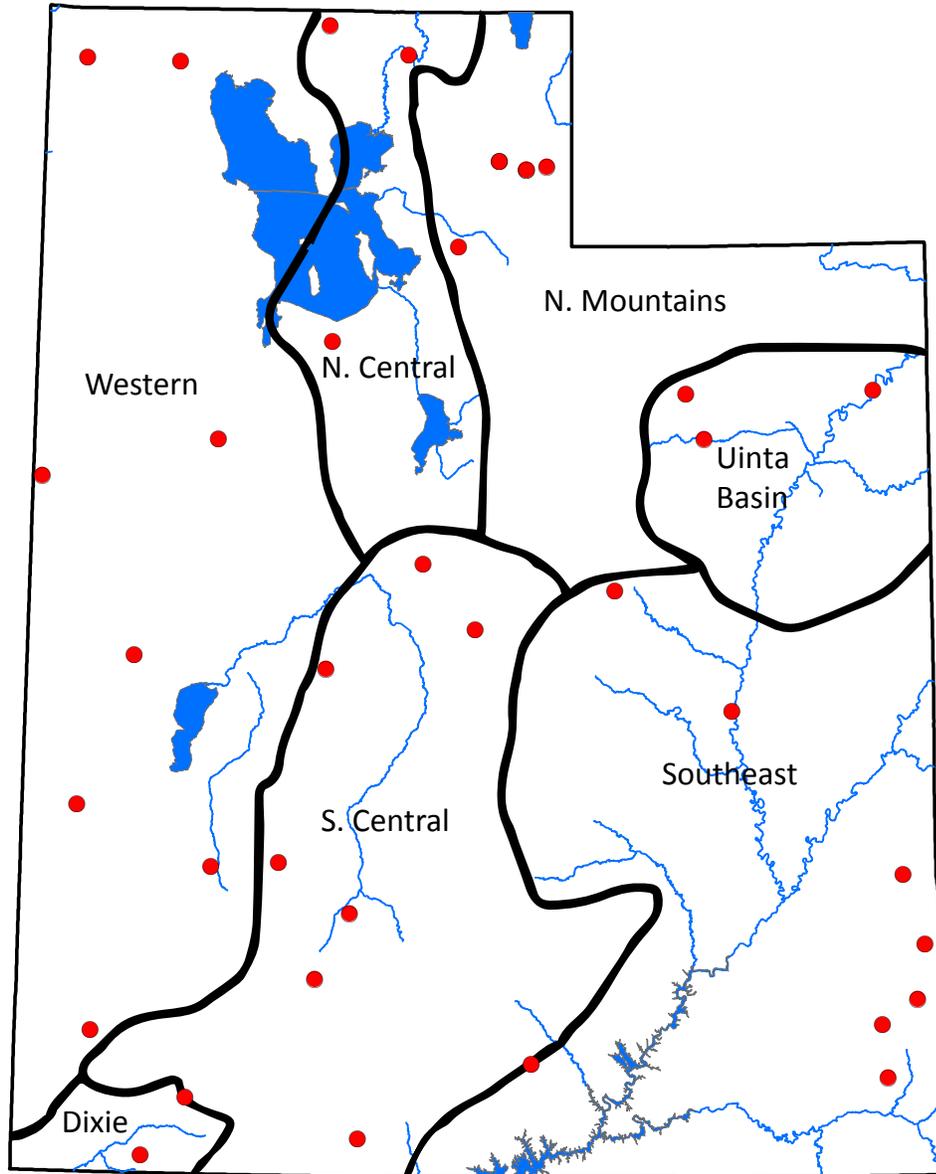
75% of Normal Precipitation Last Month



% of Normal



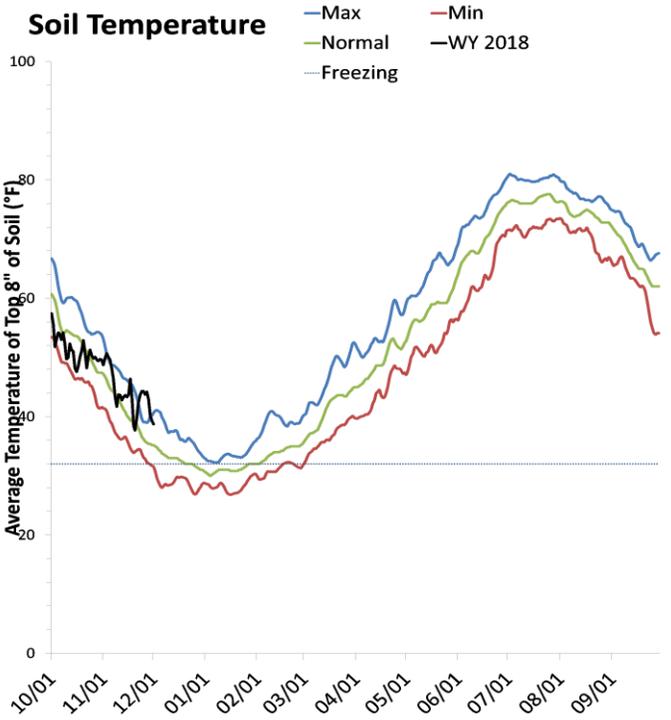
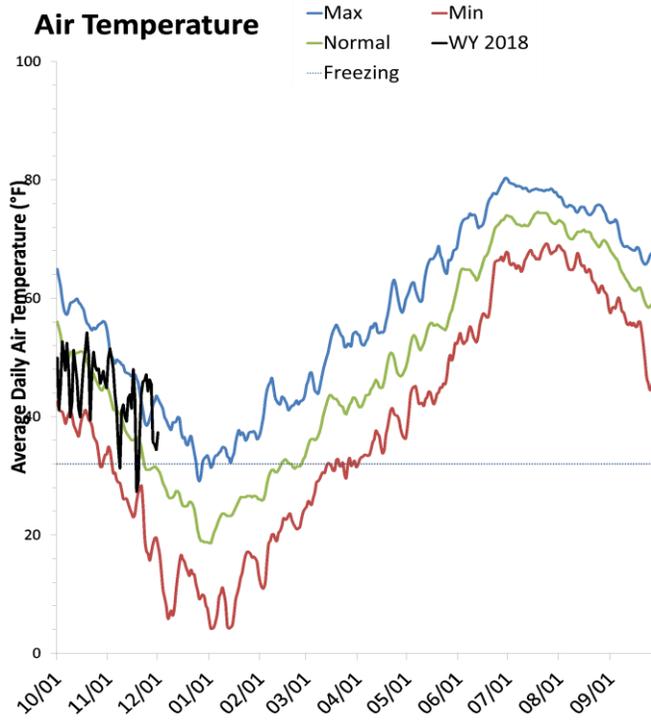
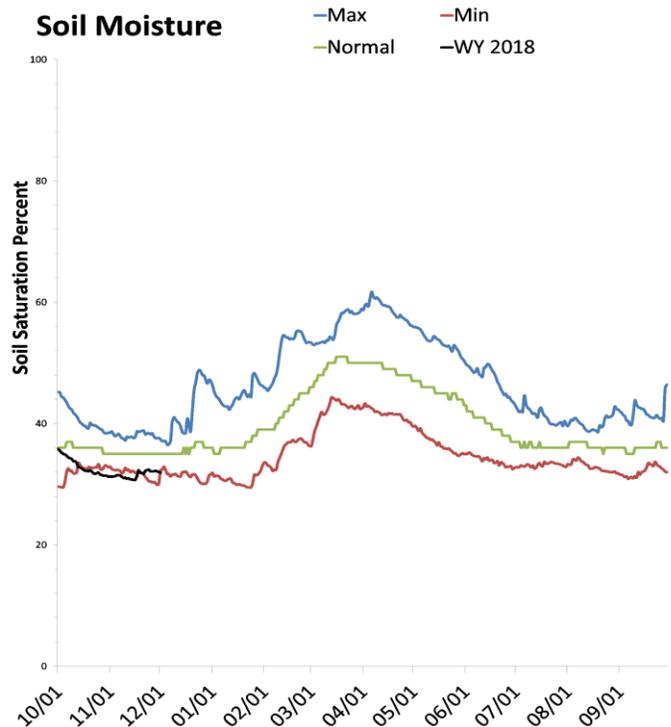
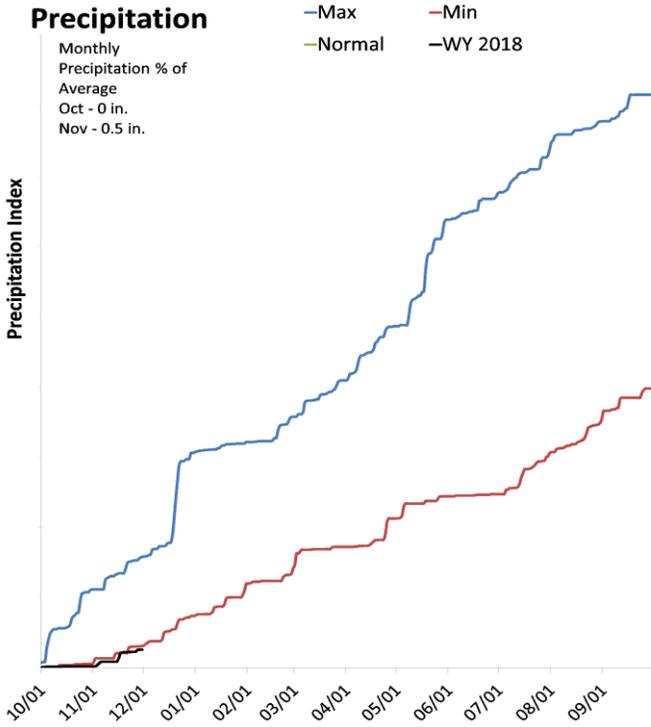
SCAN portion of report



Statewide SCAN

December 1, 2017

The average precipitation at SCAN sites within Utah was 0.5 inches in November, which brings the seasonal accumulation (Oct-Nov) to 0.5 inches. Soil moisture is at 31% compared to 37% last year.



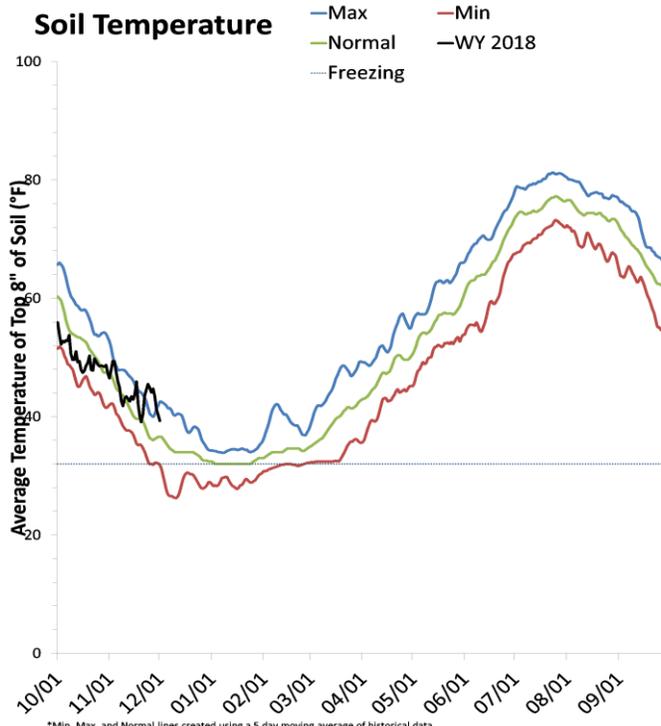
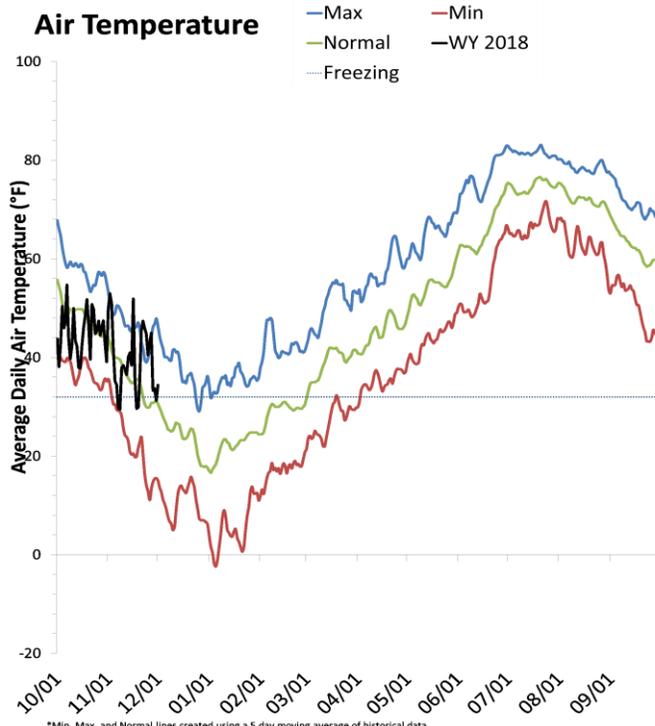
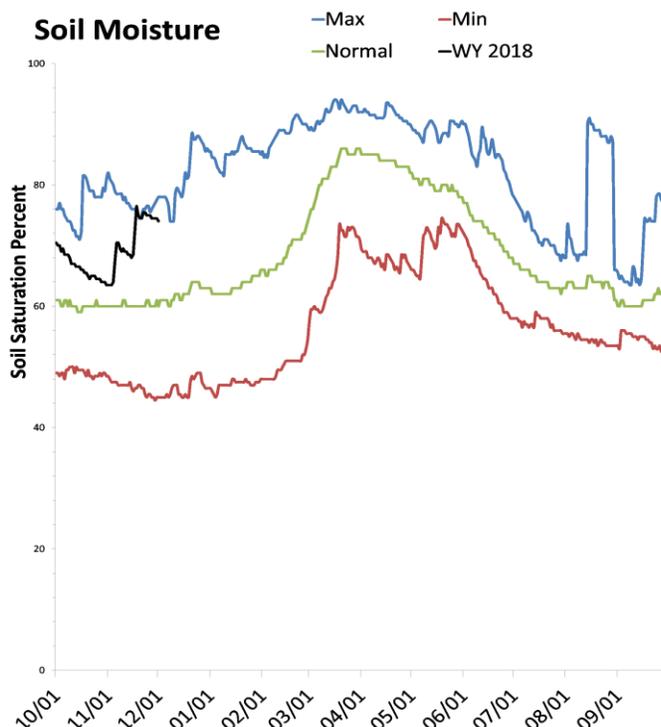
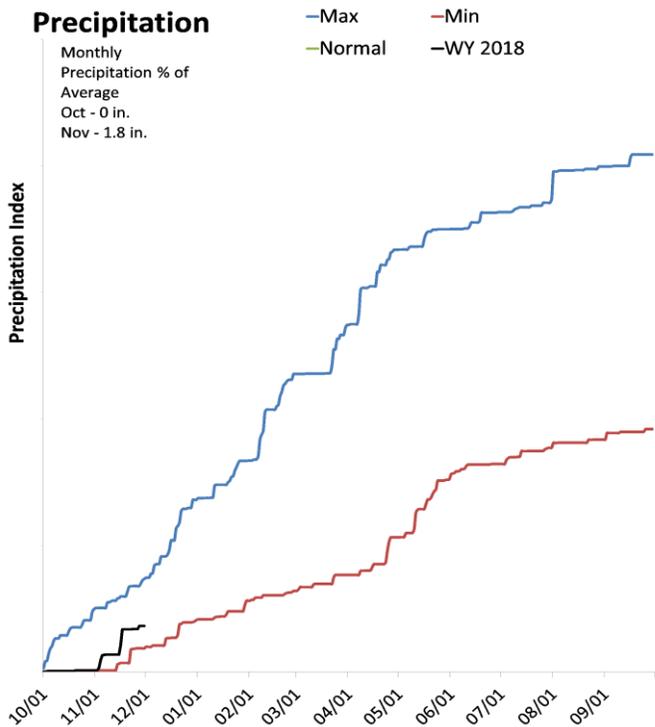
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

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

North Central

December 1, 2017

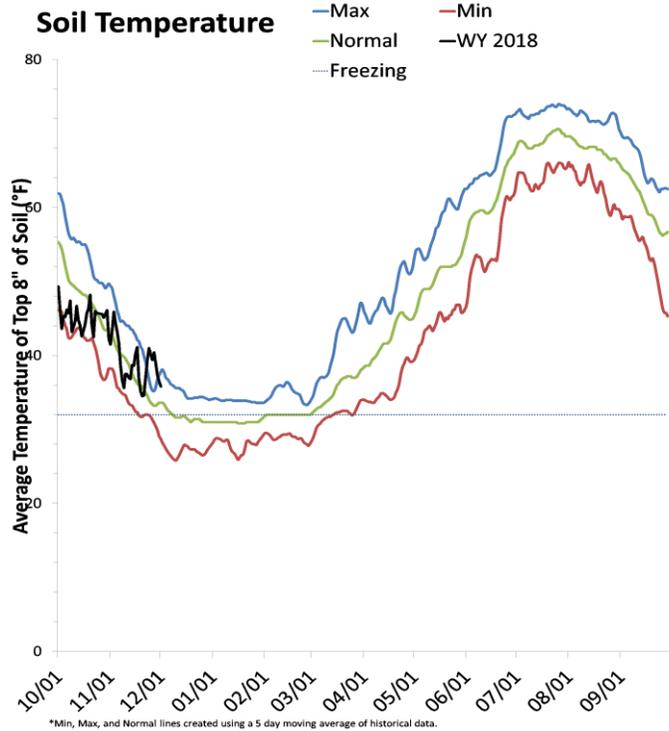
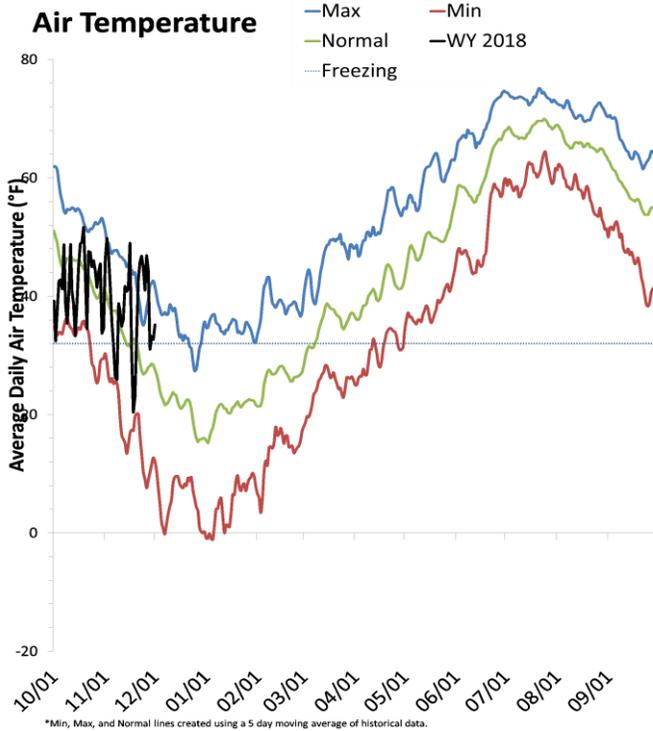
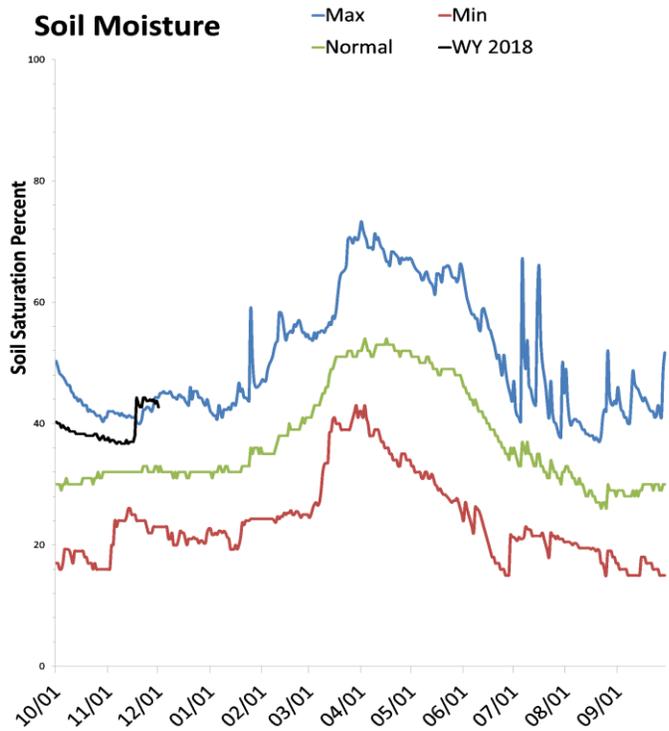
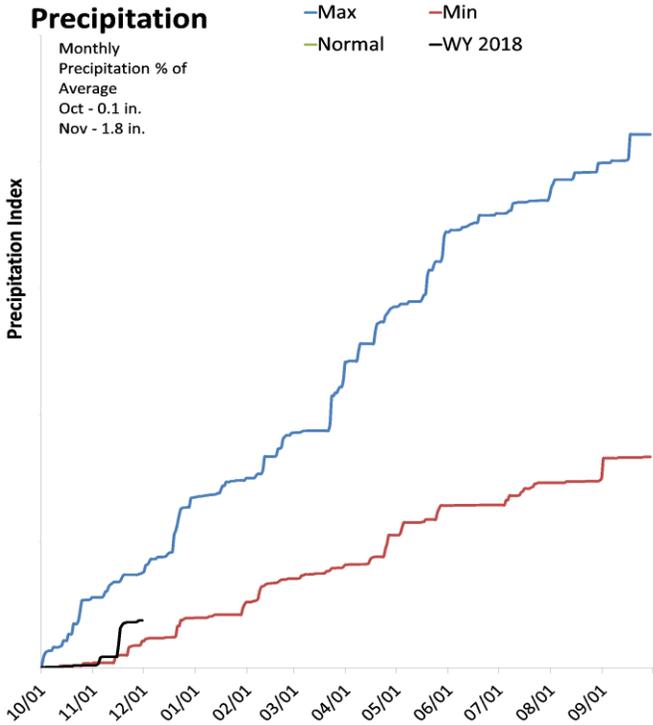
The average precipitation in November at SCAN sites within the basin was 1.8 inches, which brings the seasonal accumulation (Oct-Nov) to 1.8 inches. Soil moisture is at 74% compared to 78% last year.



Northern Mountains

December 1, 2017

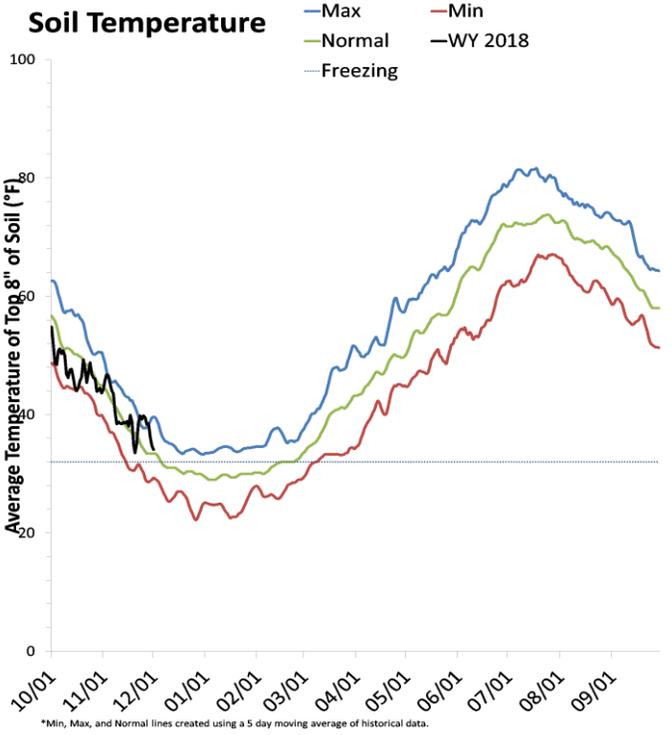
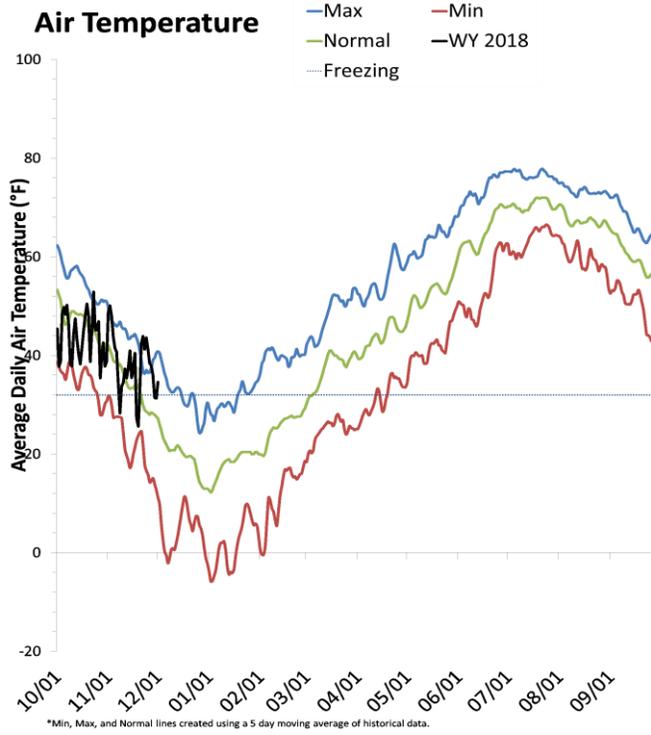
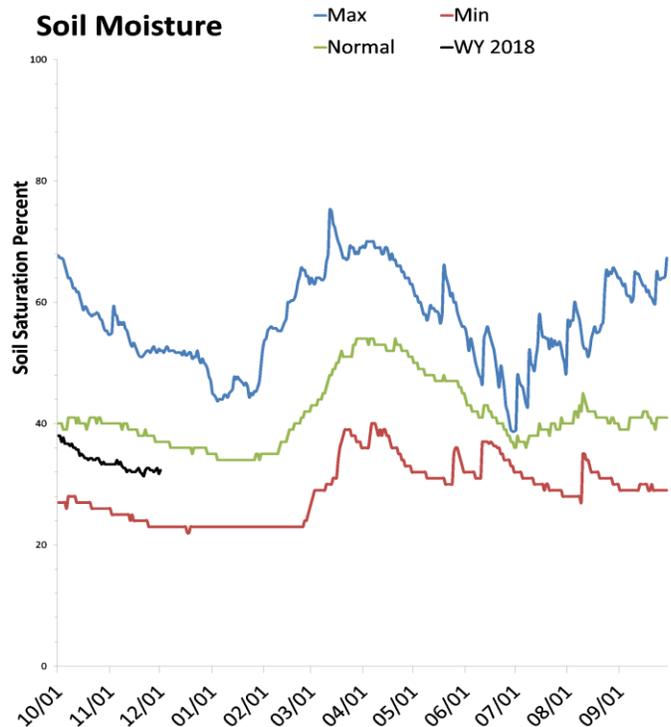
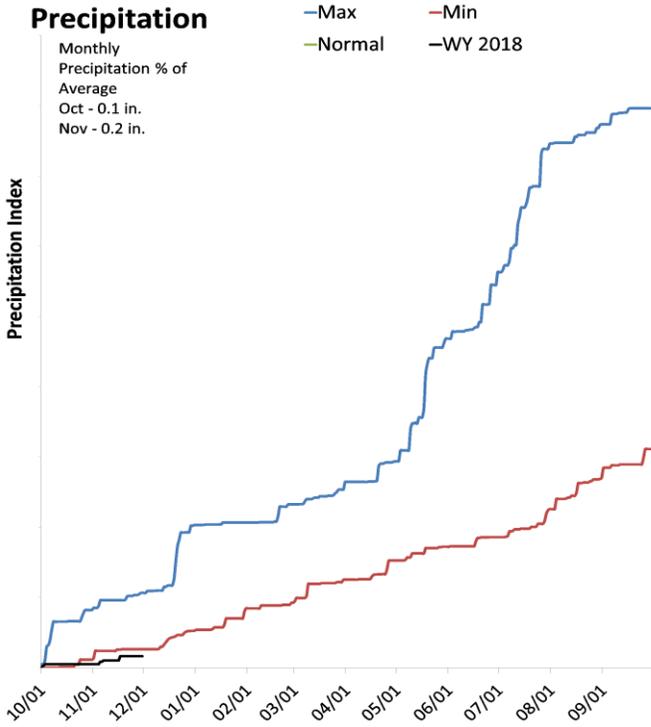
The average precipitation in November at SCAN sites within the basin was 1.8 inches, which brings the seasonal accumulation (Oct-Nov) to 1.9 inches. Soil moisture is at 43% compared to 42% last year.



Uinta Basin

December 1, 2017

The average precipitation in November at SCAN sites within the basin was 0.2 inches, which brings the seasonal accumulation (Oct-Nov) to 0.3 inches. Soil moisture is at 32% compared to 49% last year.



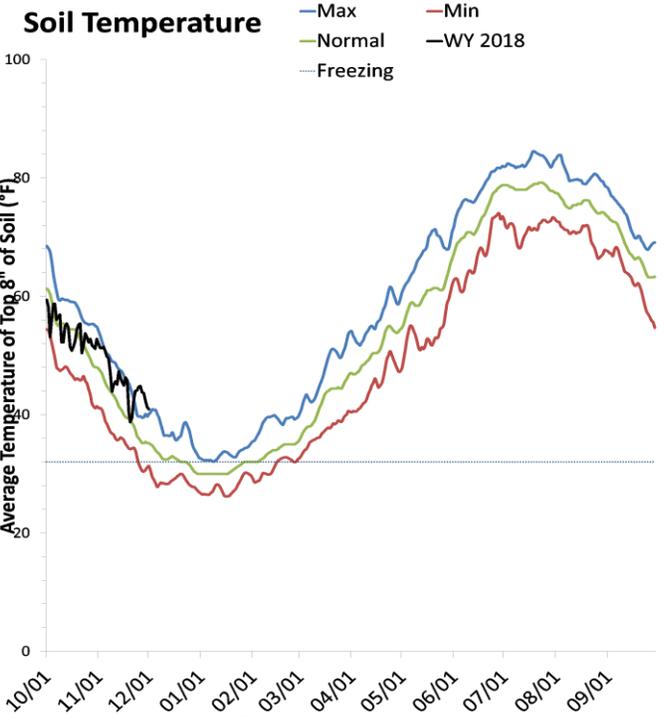
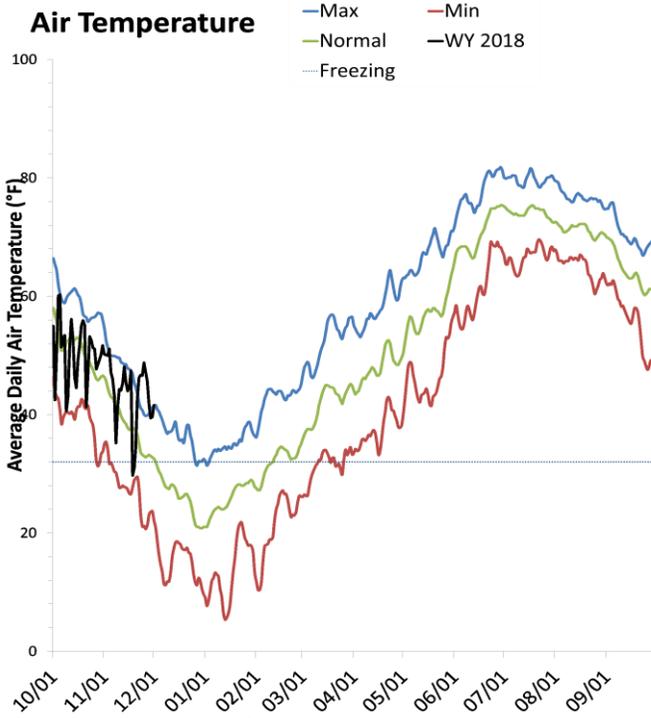
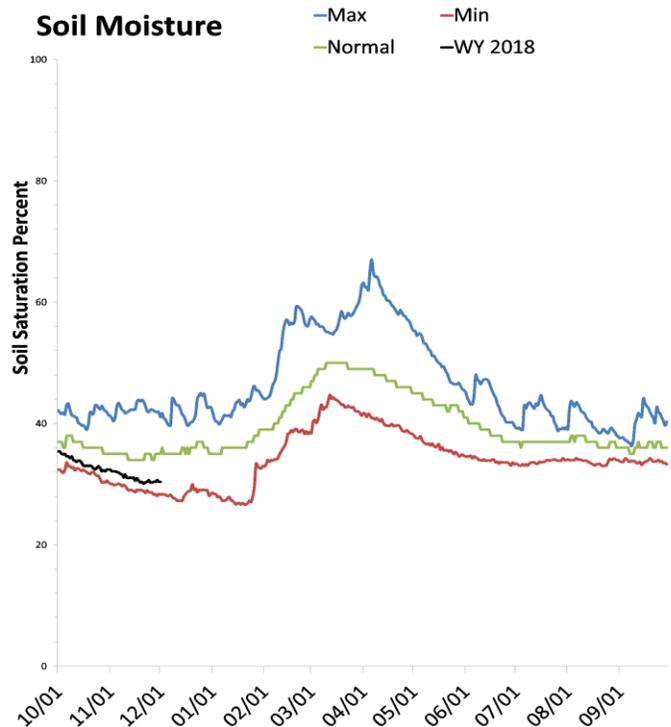
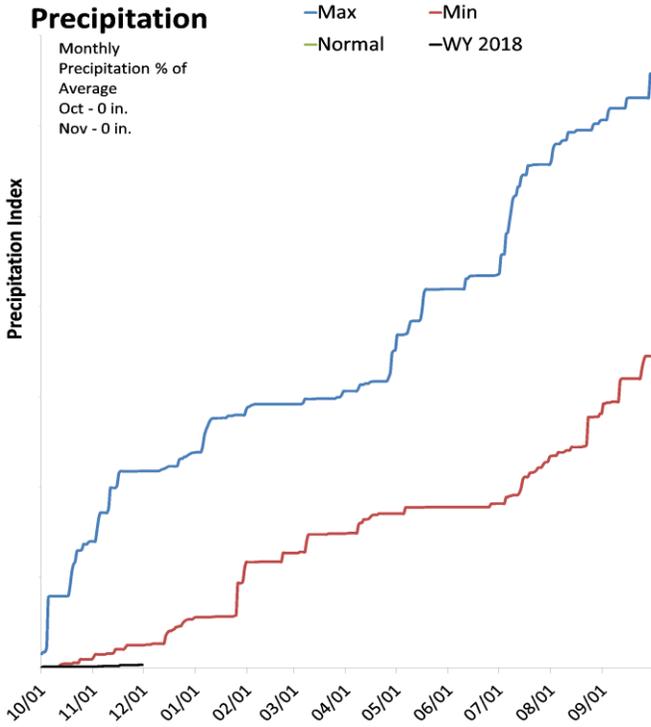
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

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Southeast

December 1, 2017

The average precipitation in November at SCAN sites within the basin was 0 inches, which brings the seasonal accumulation (Oct-Nov) to 0.1 inches. Soil moisture is at 30% compared to 37% last year.



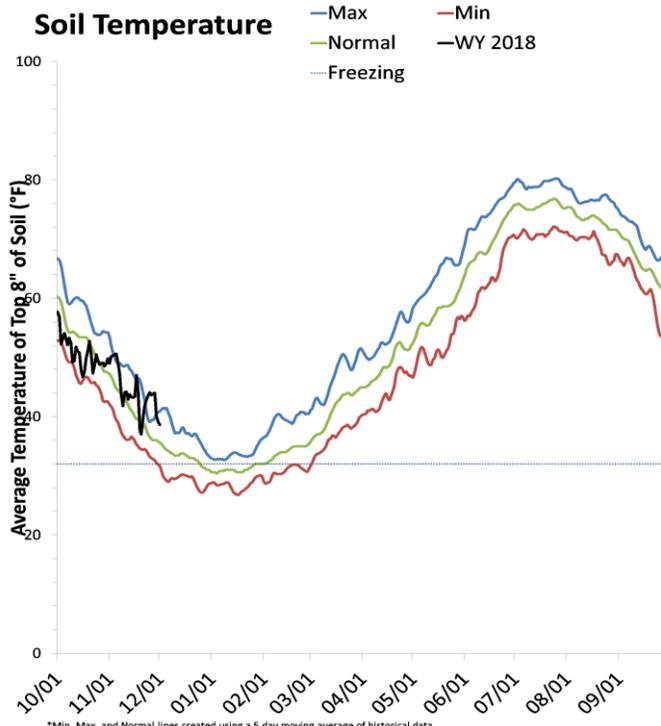
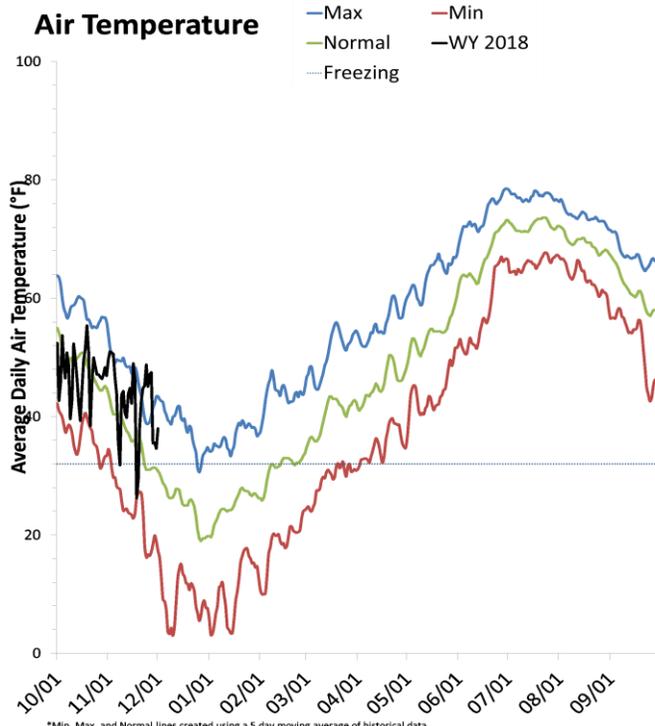
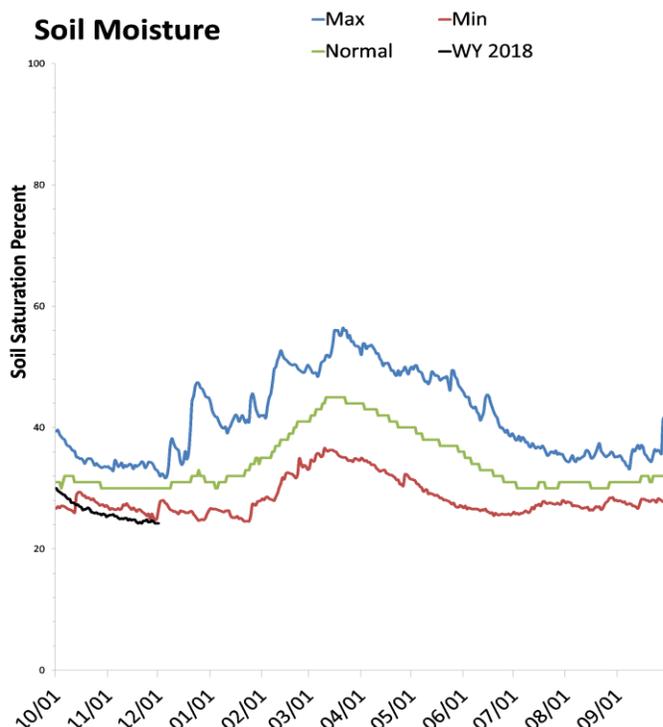
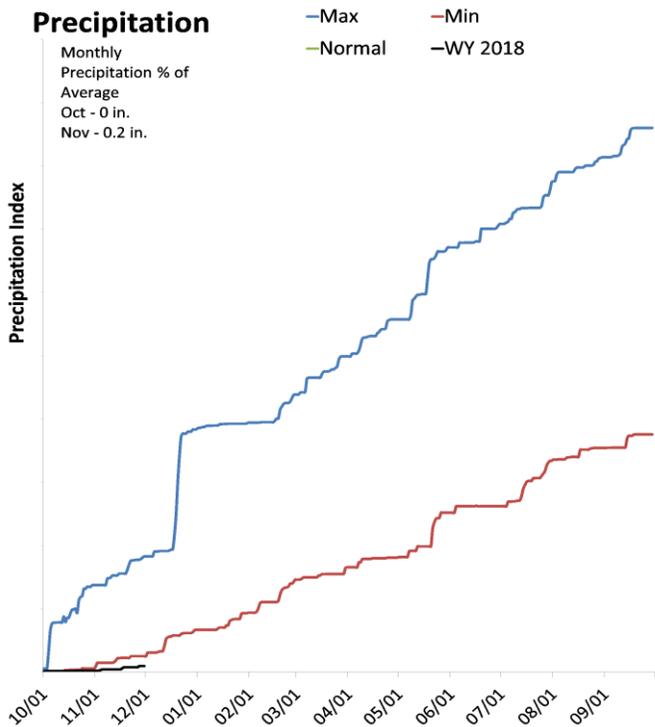
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

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South Central

December 1, 2017

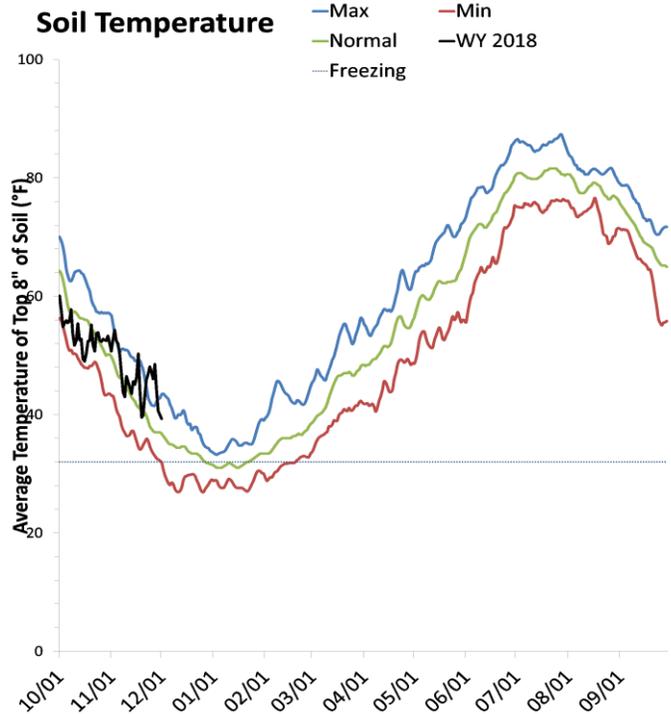
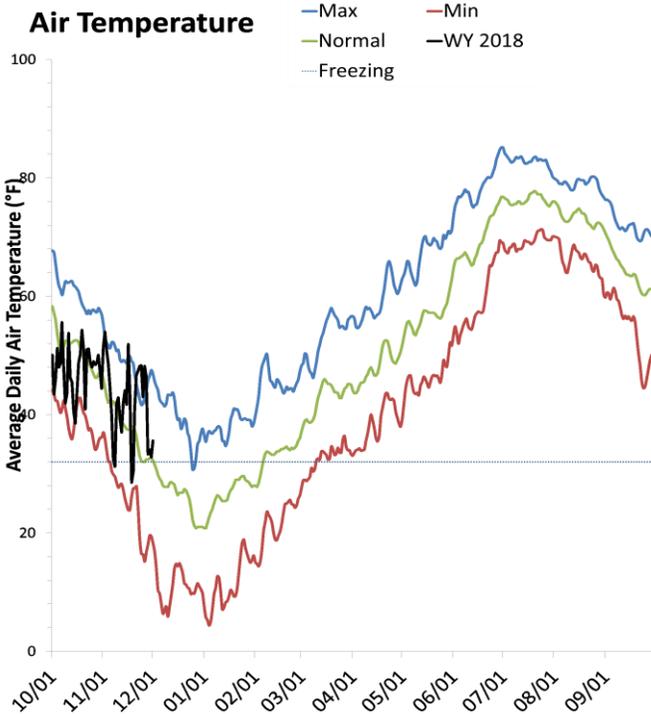
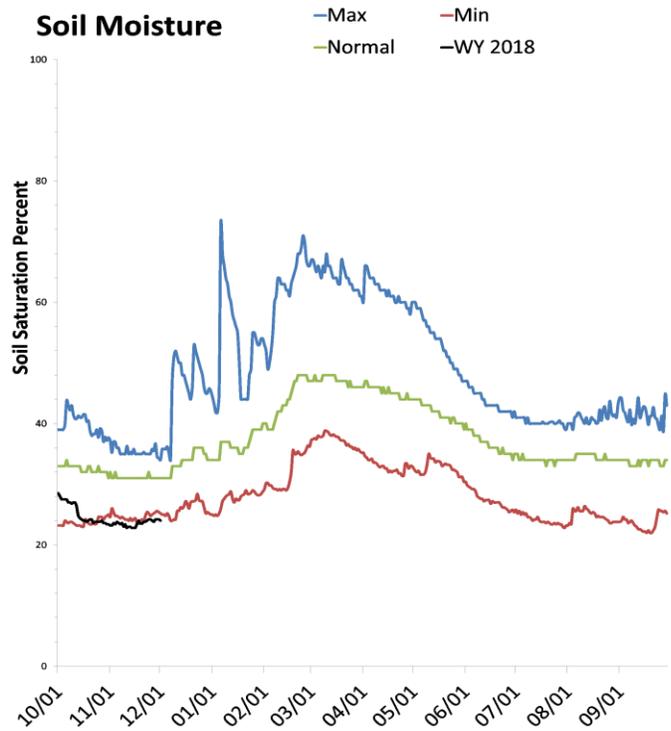
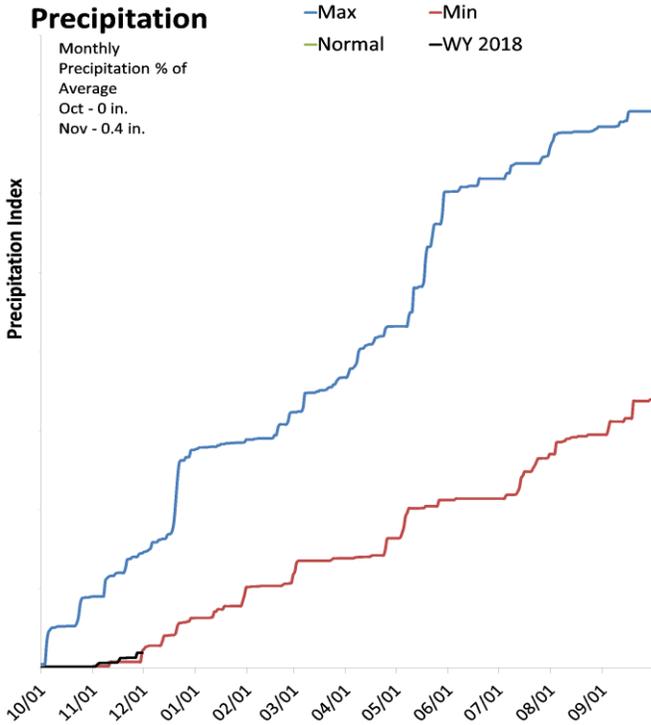
The average precipitation in November at SCAN sites within the basin was 0.2 inches, which brings the seasonal accumulation (Oct-Nov) to 0.2 inches. Soil moisture is at 24% compared to 30% last year.



Western and Dixie

December 1, 2017

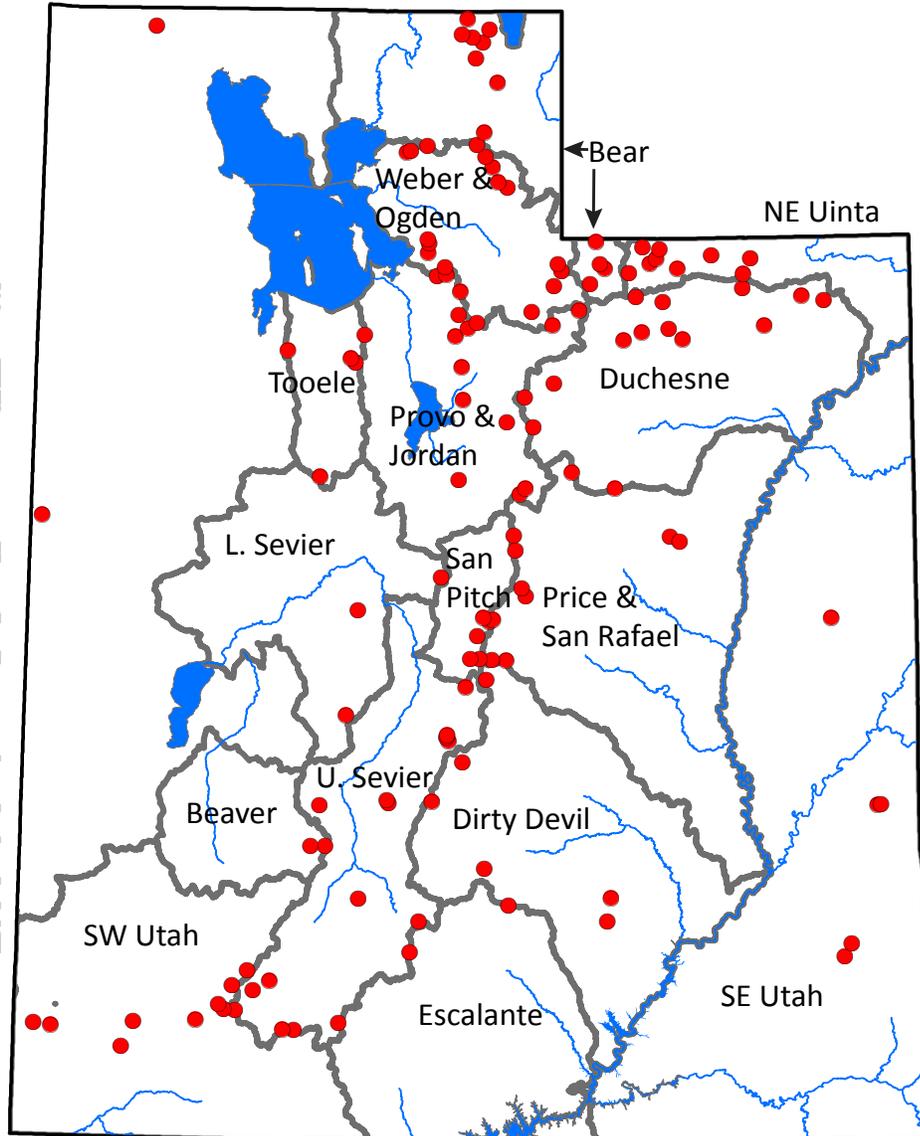
The average precipitation in November at SCAN sites within the basin was 0.4 inches, which brings the seasonal accumulation (Oct-Nov) to 0.4 inches. Soil moisture is at 23% compared to 25% last year.



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

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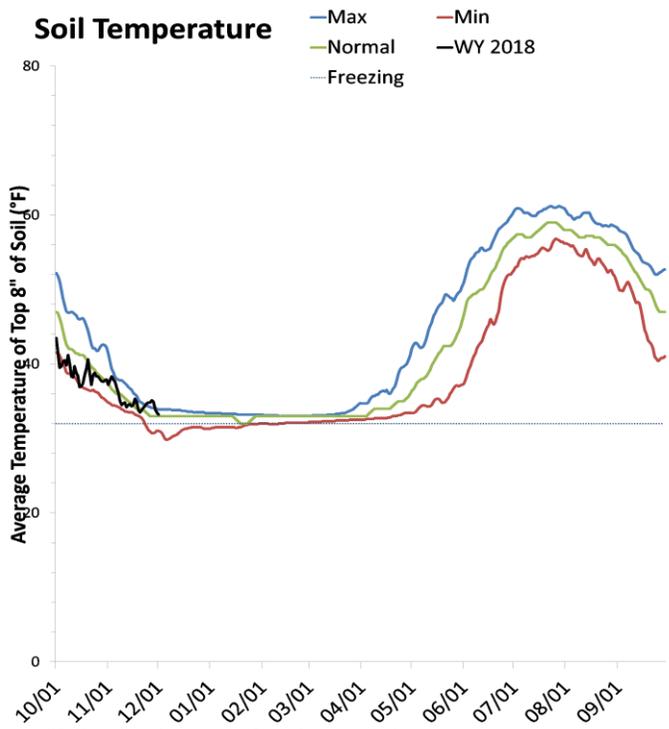
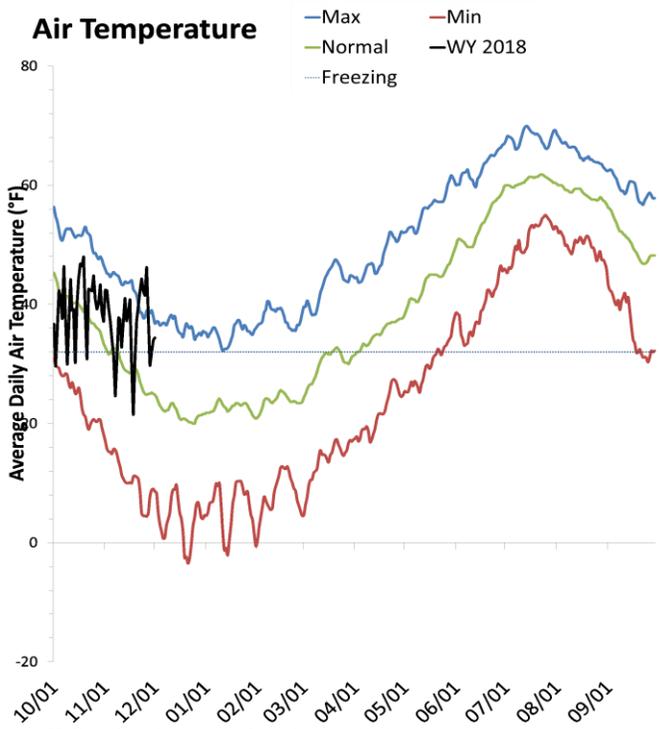
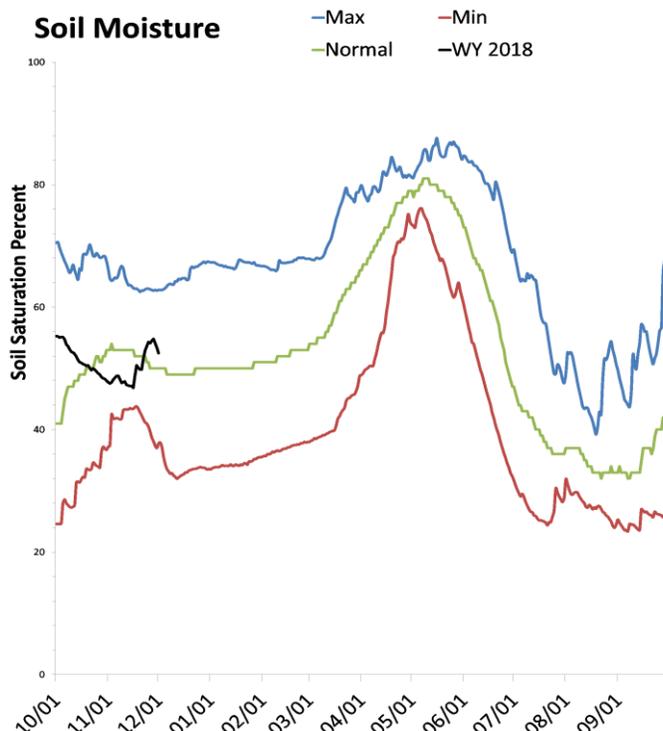
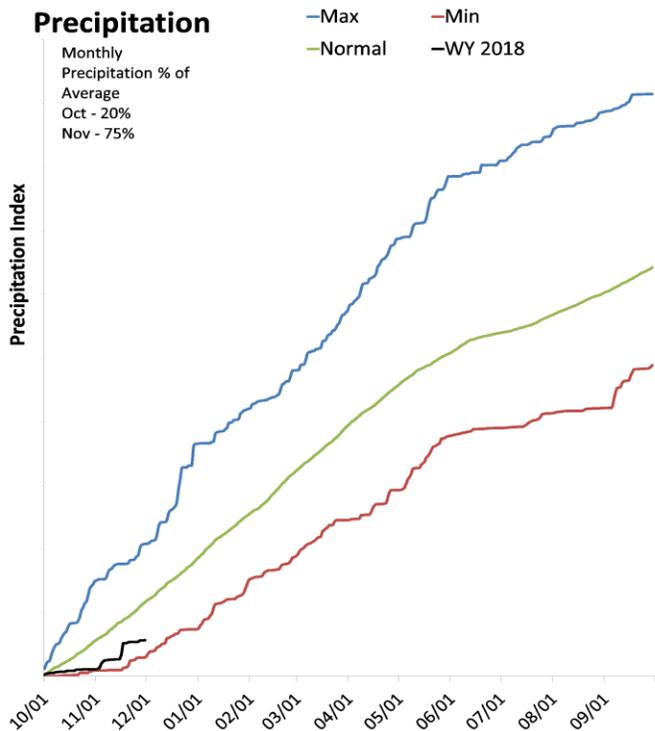
SNOTEL portion of report



Statewide SNOTEL

December 1, 2017

Precipitation at SNOTEL sites during November was below average at 75%, which brings the seasonal accumulation (Oct-Nov) to 49% of average. Soil moisture is at 52% compared to 55% last year. Reservoir storage is at 71% of capacity, compared to 47% last year.



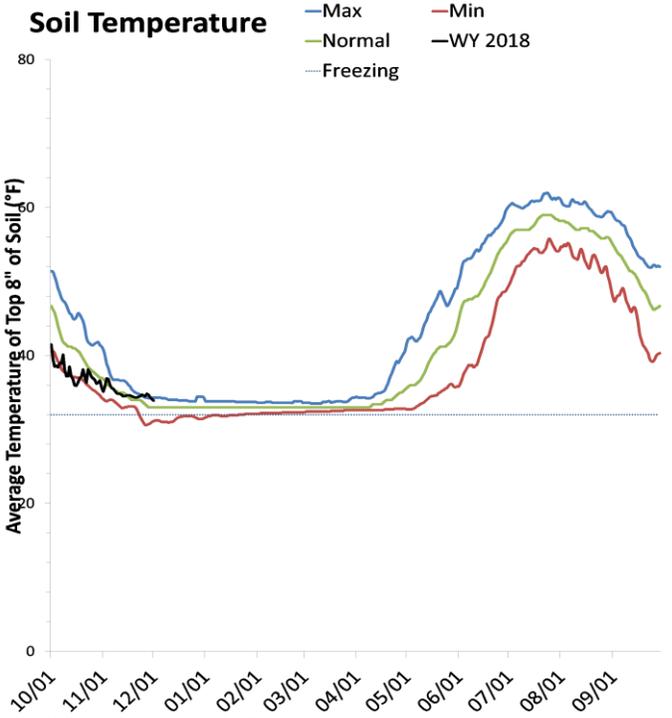
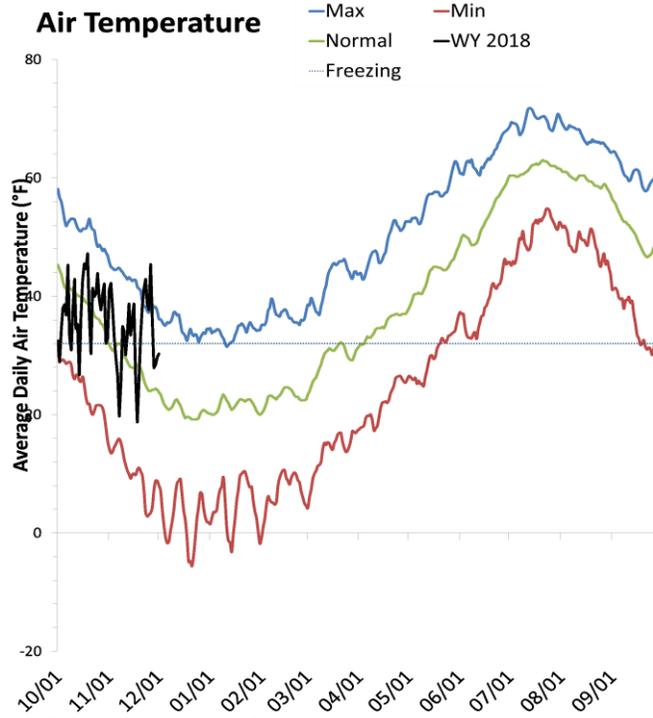
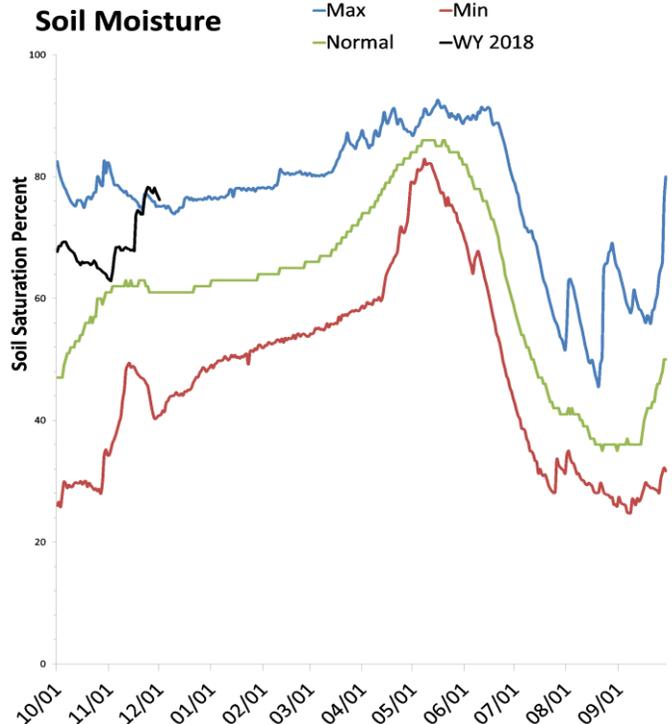
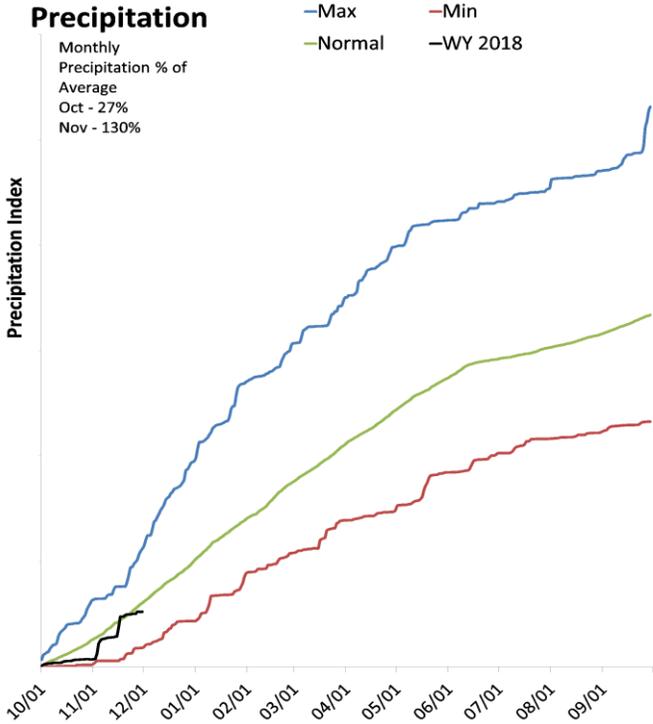
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

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Bear River Basin

December 1, 2017

Precipitation in November was above average at 129%, which brings the seasonal accumulation (Oct-Nov) to 86% of average. Soil moisture is at 76% compared to 70% last year. Reservoir storage is at 81% of capacity, compared to 37% last year. The water availability index for the Bear River is 92%, 84% for Woodruff Narrows and 92% for the Little Bear.



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

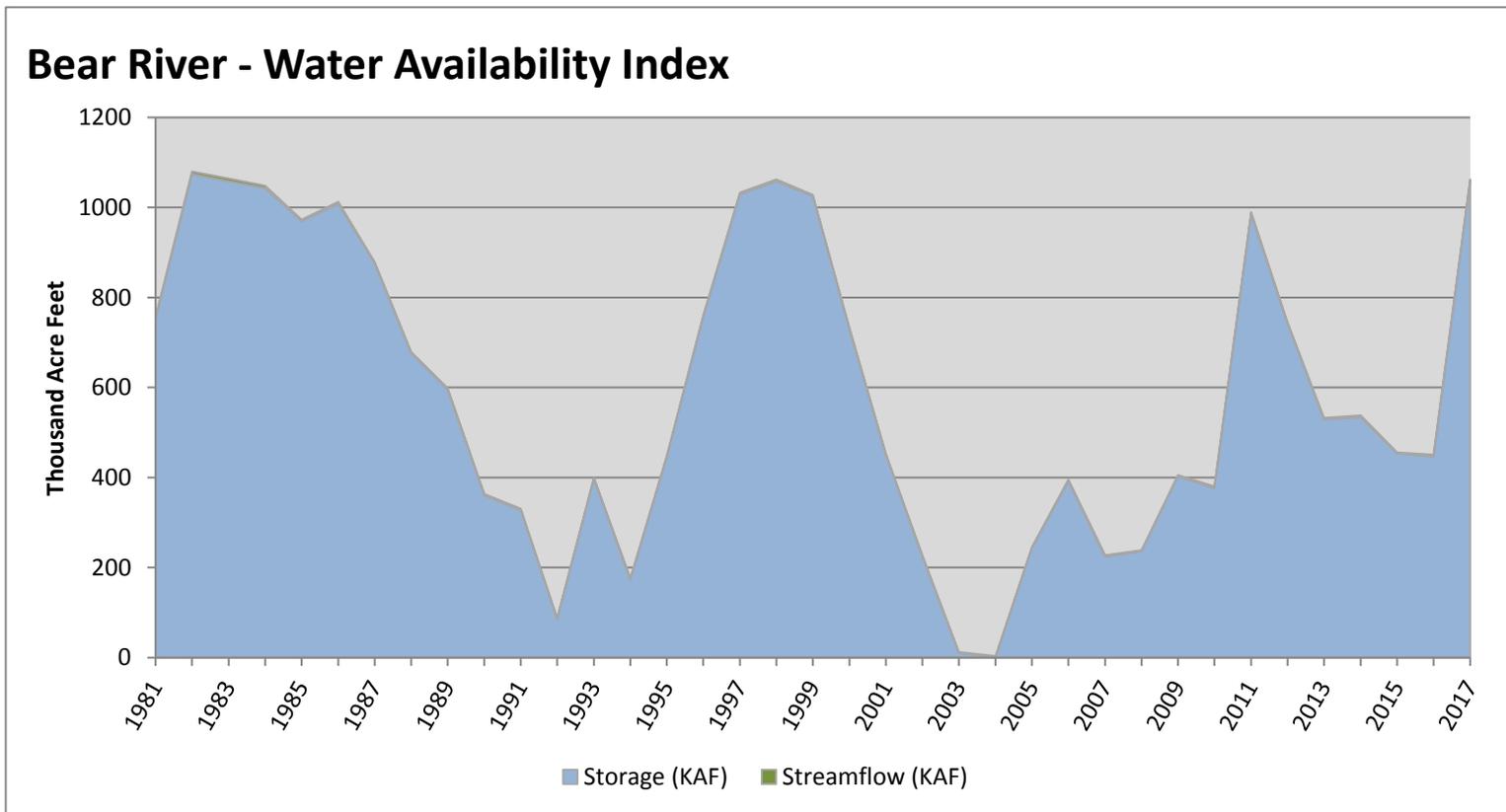
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

December 1, 2017

Water Availability Index

Basin or Region	Nov EOM [^] Storage	November Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Bear River	1058.56	3.94	1062.50	92	3.51	84, 98, 83, 82

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

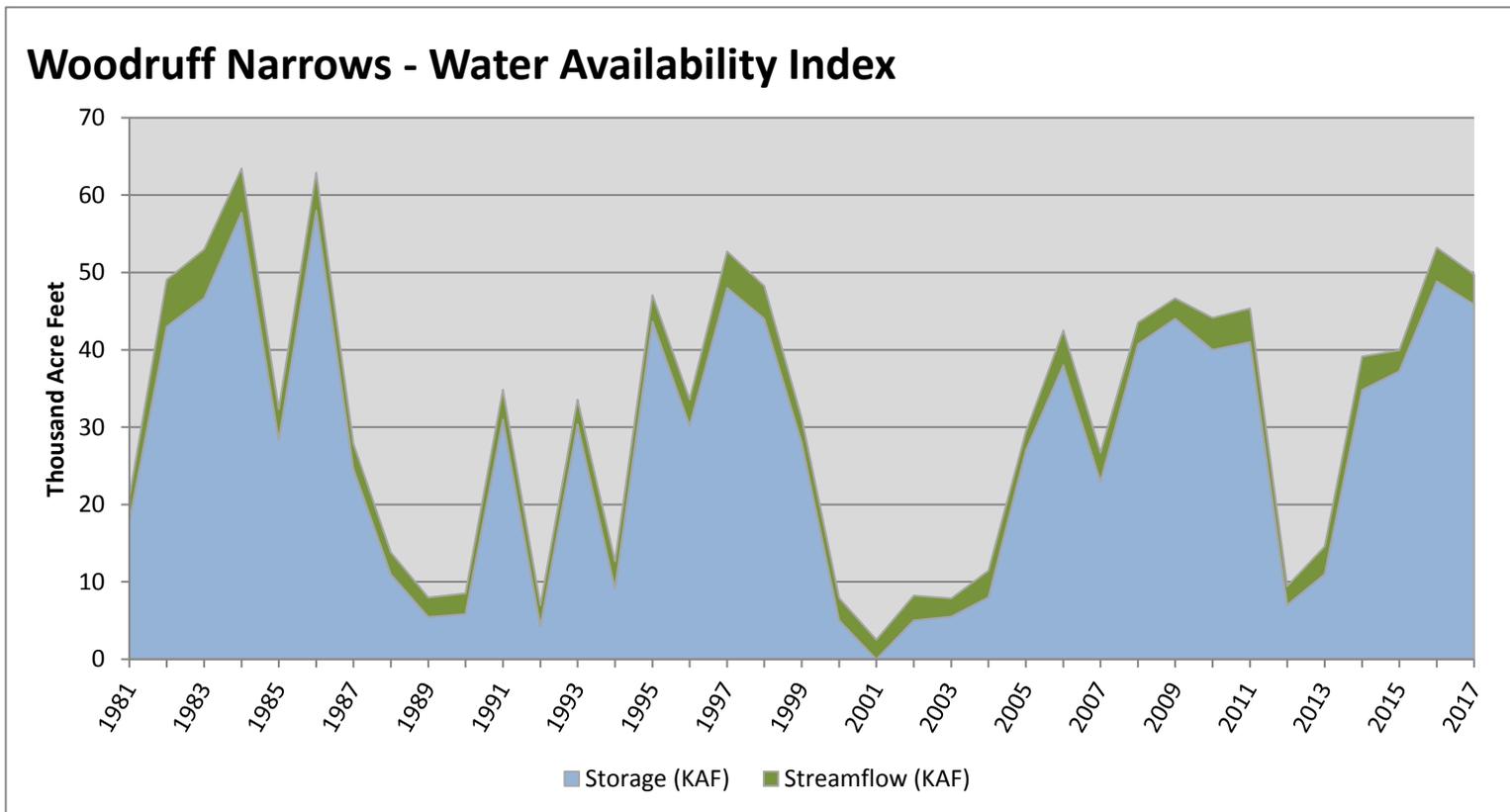


December 1, 2017

Water Availability Index

Basin or Region	Nov EOM [^] Storage	November Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Woodruff Narrows	45.83	3.94	49.77	84	2.85	98, 82, 97, 83

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

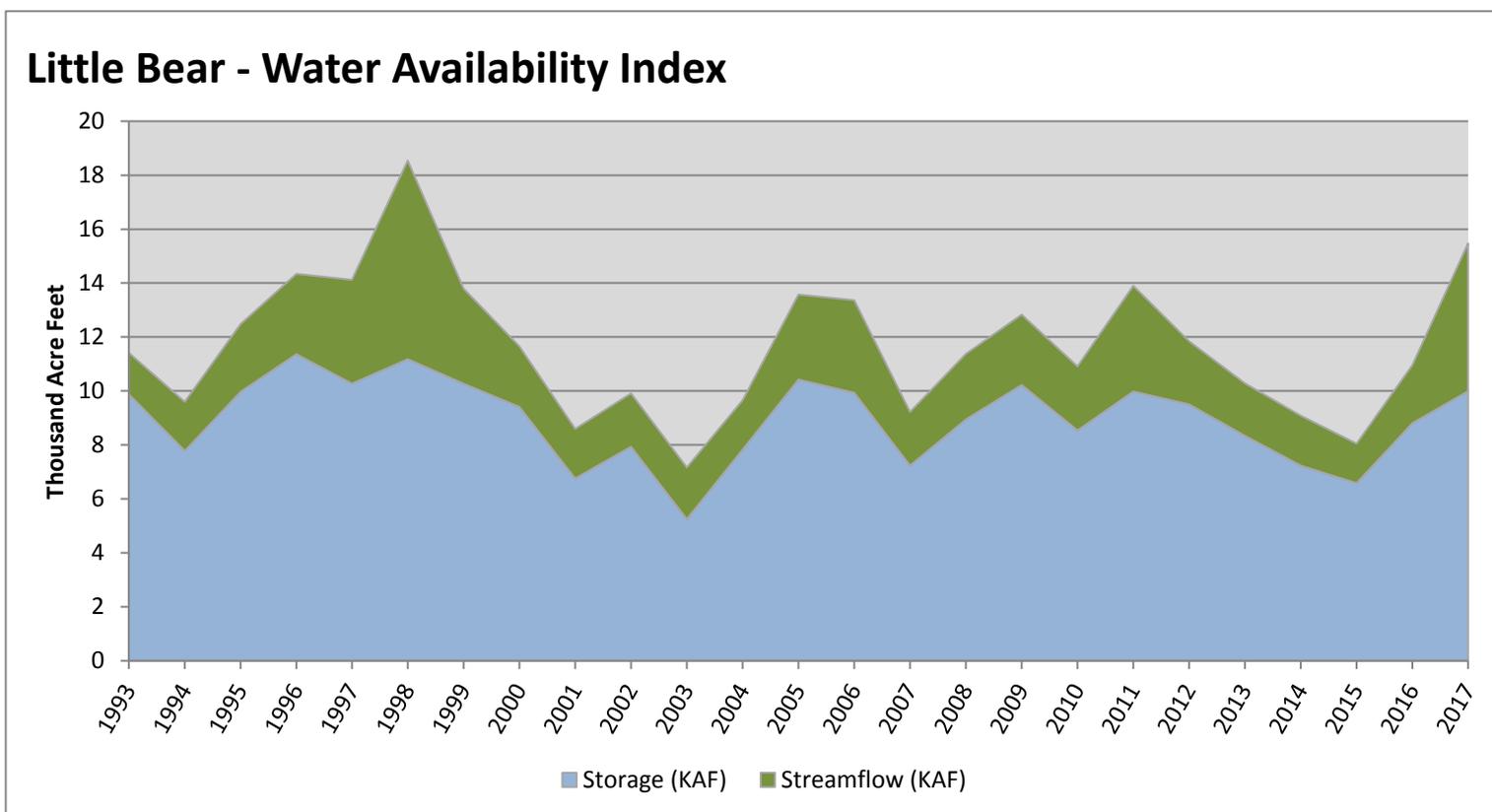


December 1, 2017

Water Availability Index

Basin or Region	Nov EOM [^] Storage	November Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Little Bear	9.99	5.48	15.47	92	3.53	98, 96, 97, 11

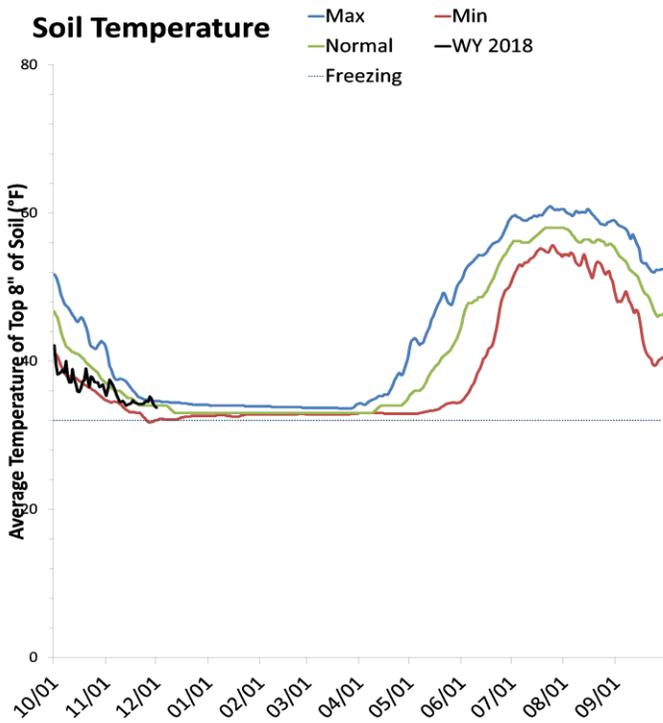
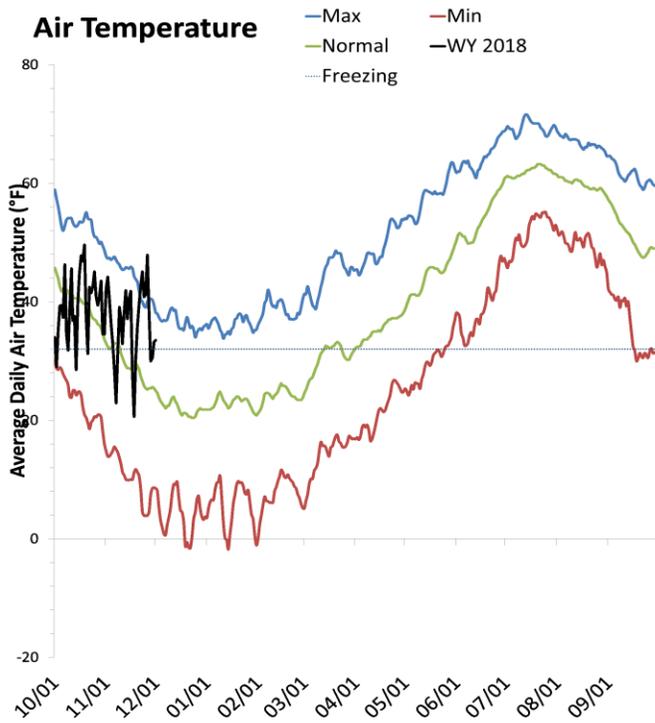
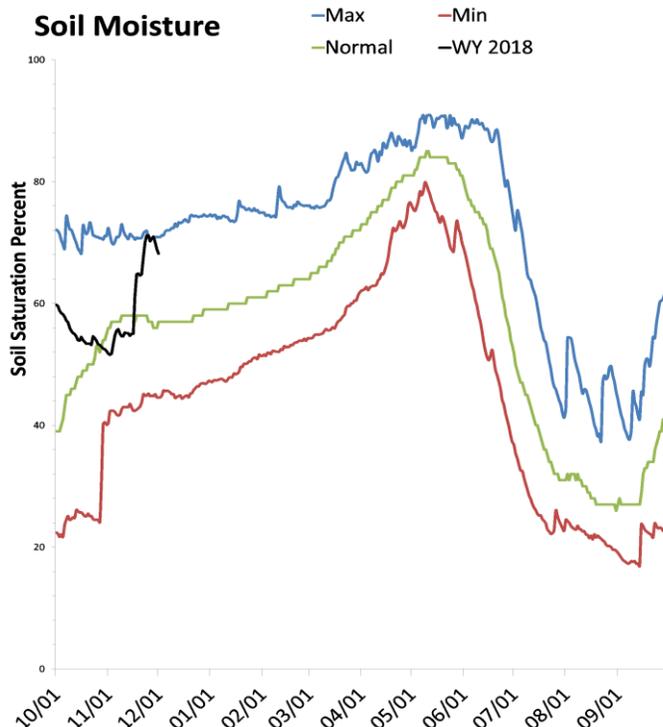
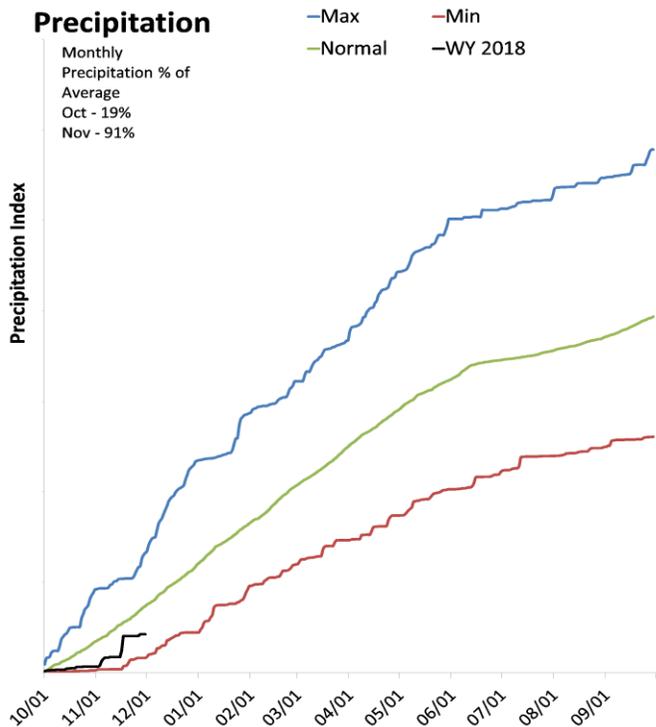
[^]EOM, end of month; [#]WAI, Water Availability Index; [^]KAF, thousand acre-feet.



Weber & Ogden River Basins

December 1, 2017

Precipitation in November was near average at 91%, which brings the seasonal accumulation (Oct-Nov) to 58% of average. Soil moisture is at 68% compared to 60% last year. Reservoir storage is at 71% of capacity, compared to 53% last year. The water availability index for the Ogden River is 71% and 86% for the Weber River.



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

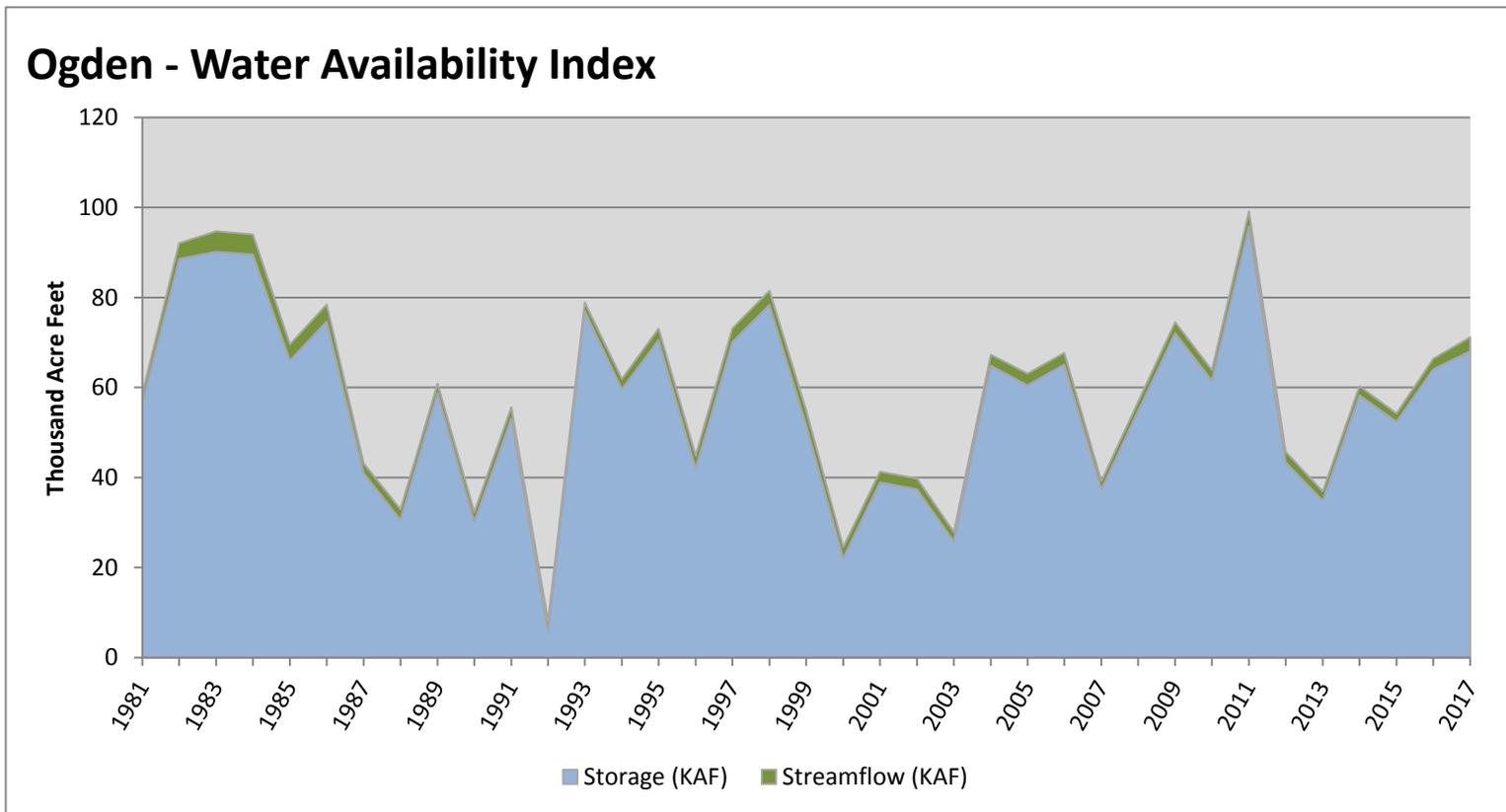
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

December 1, 2017

Water Availability Index

Basin or Region	Nov EOM [^] Storage	November Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Ogden	68.04	3.16	71.20	71	1.75	06, 85, 95, 97

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

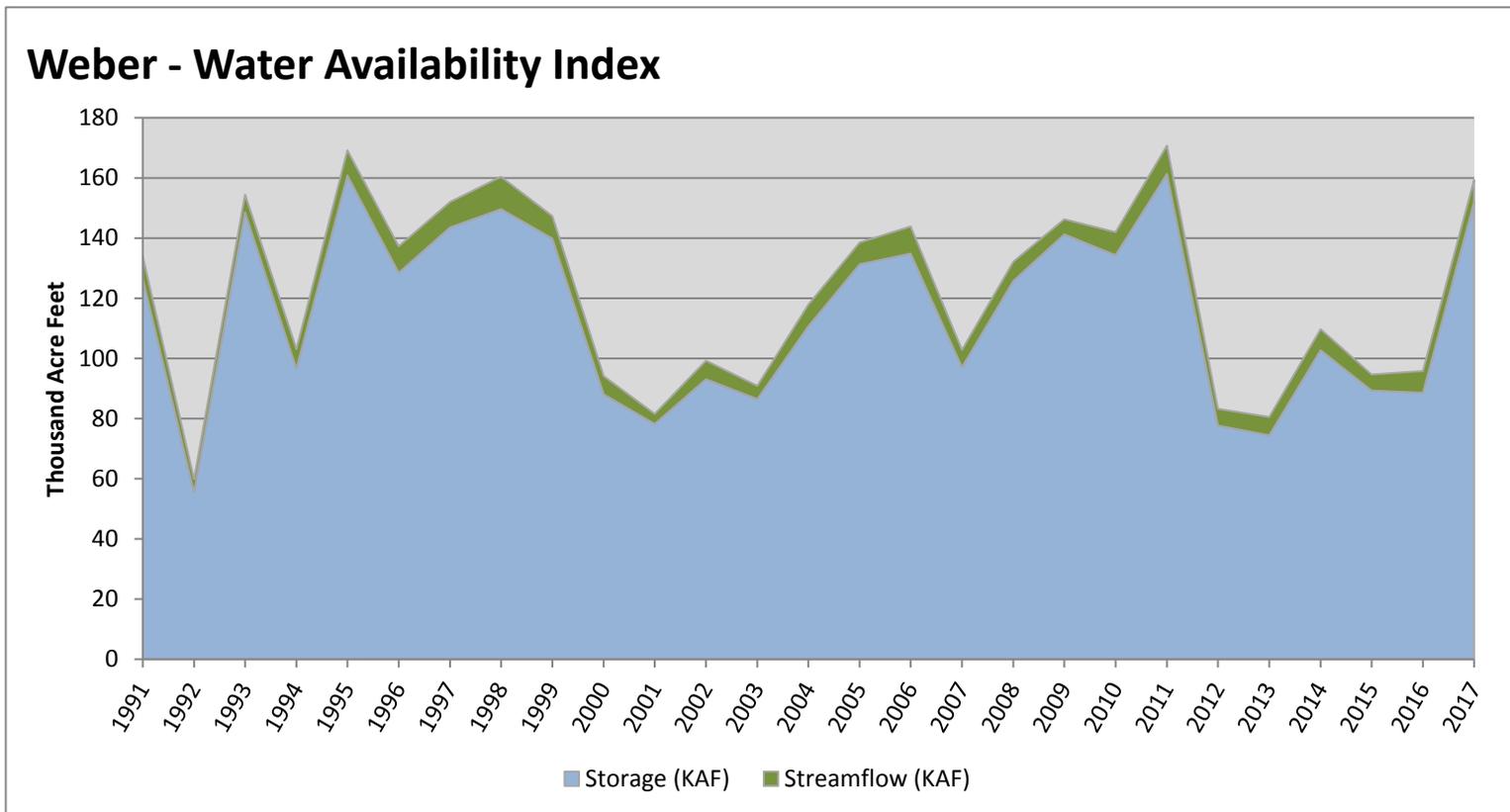


December 1, 2017

Water Availability Index

Basin or Region	Nov EOM [^] Storage	November Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Weber	152.05	7.32	159.37	86	2.98	97, 93, 98, 95

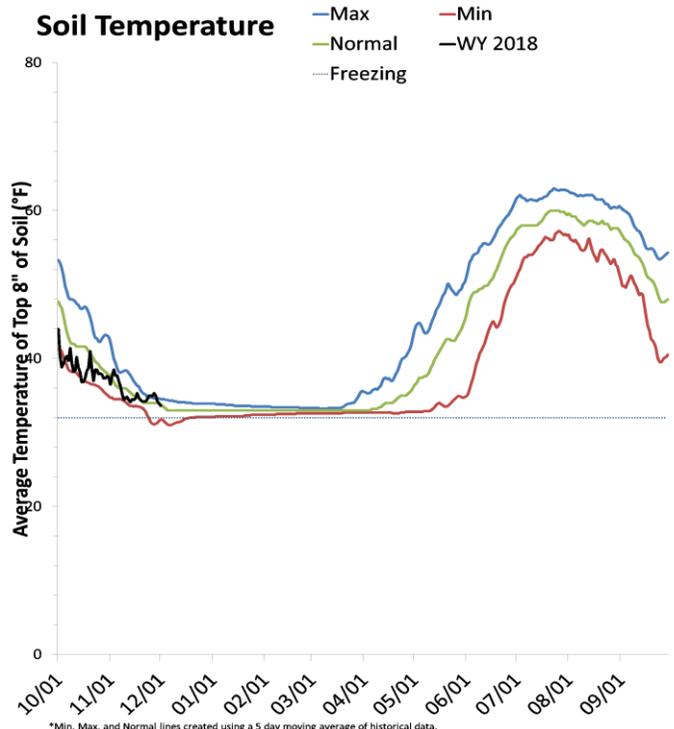
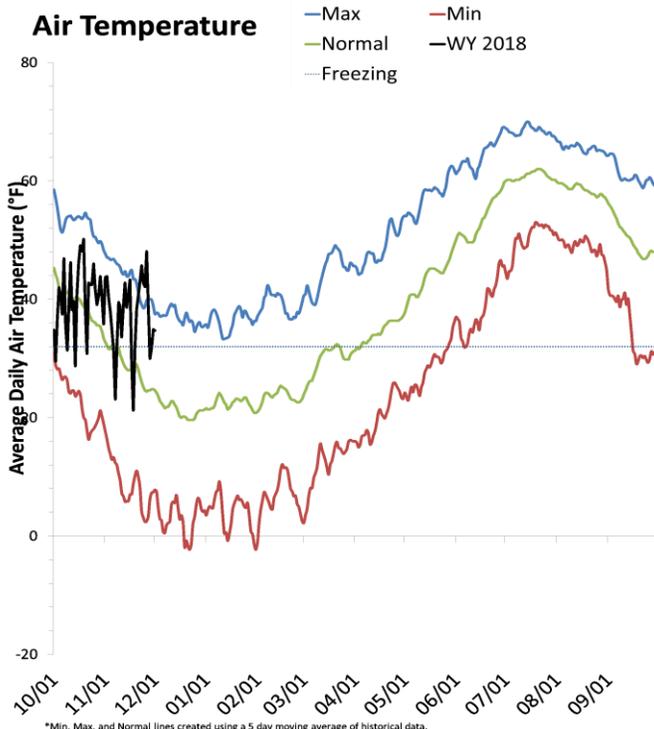
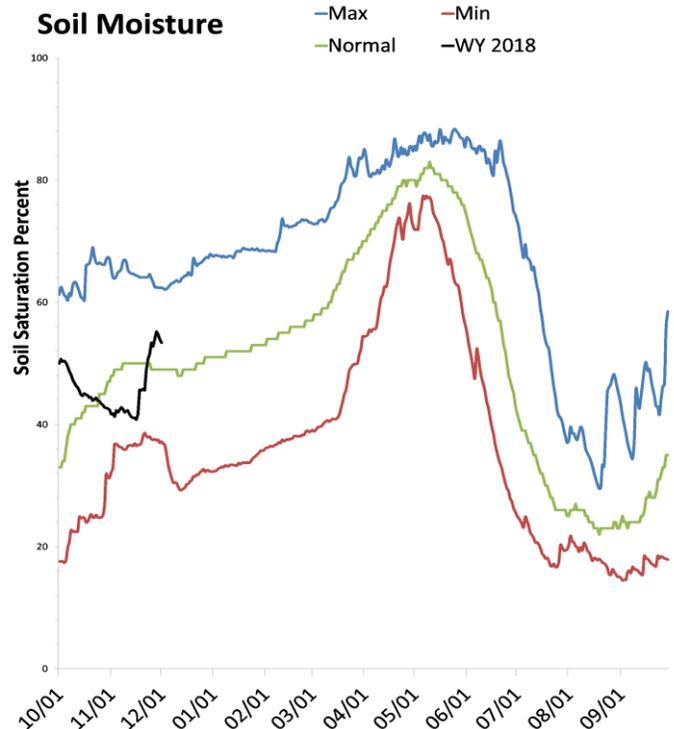
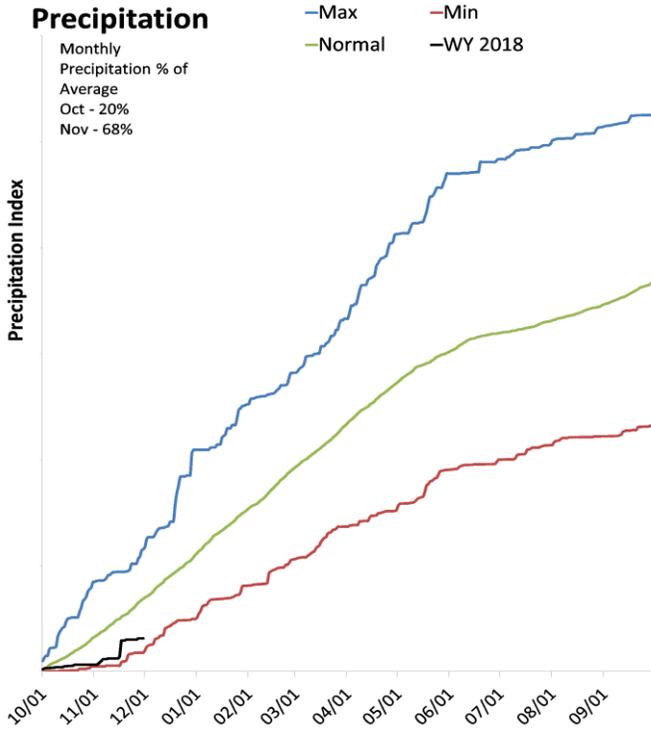
[^]EOM, end of month; [#]WAI, Water Availability Index; [^]KAF, thousand acre-feet.



Provo & Jordan River Basins

December 1, 2017

Precipitation in November was much below average at 68%, which brings the seasonal accumulation (Oct-Nov) to 46% of average. Soil moisture is at 54% compared to 53% last year. Reservoir storage is at 75% of capacity, compared to 56% 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.

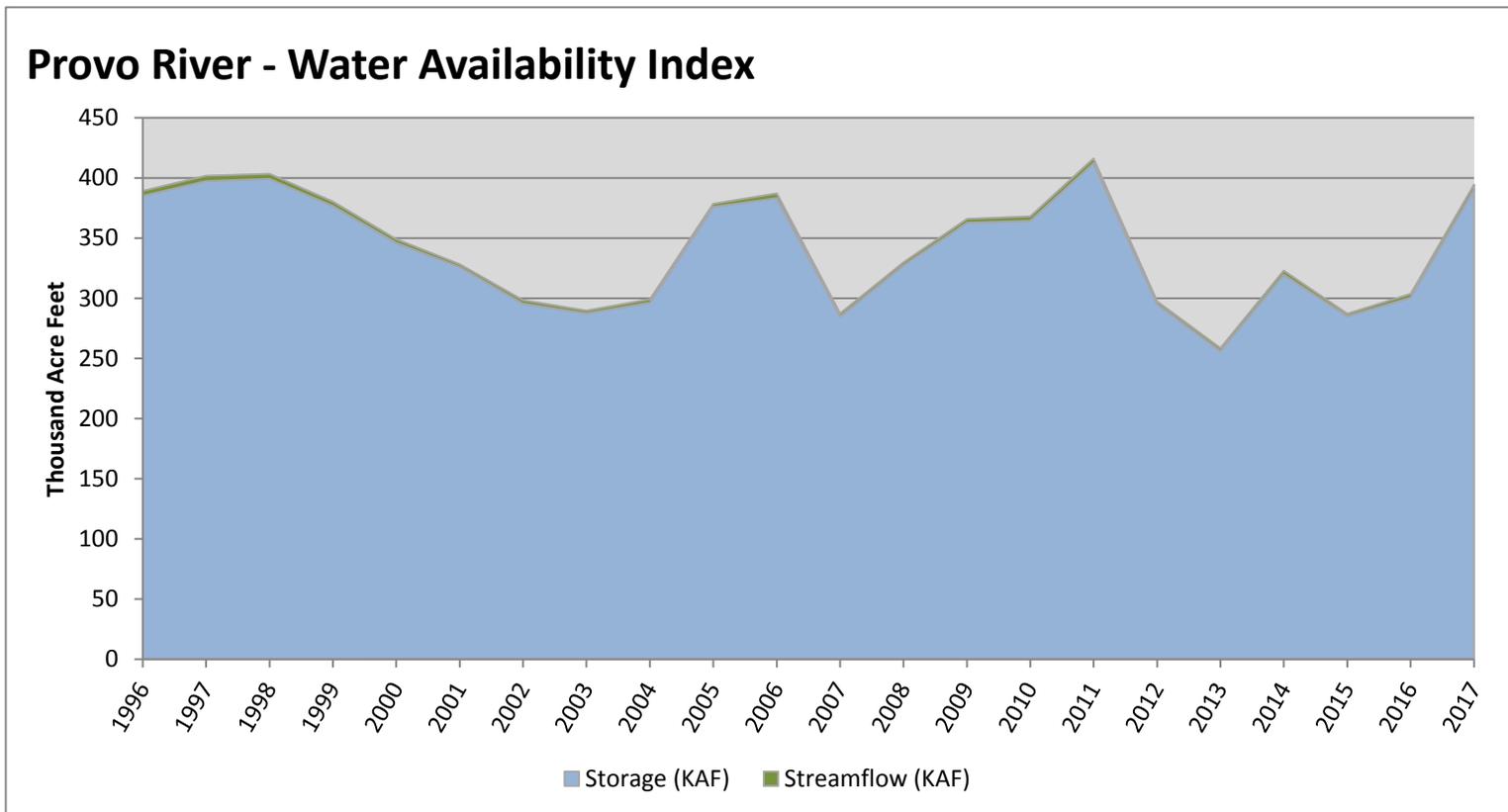
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

December 1, 2017

Water Availability Index

Basin or Region	Nov EOM [^] Storage	November Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Provo River	390.12	4.34	394.46	83	2.72	06, 96, 97, 98

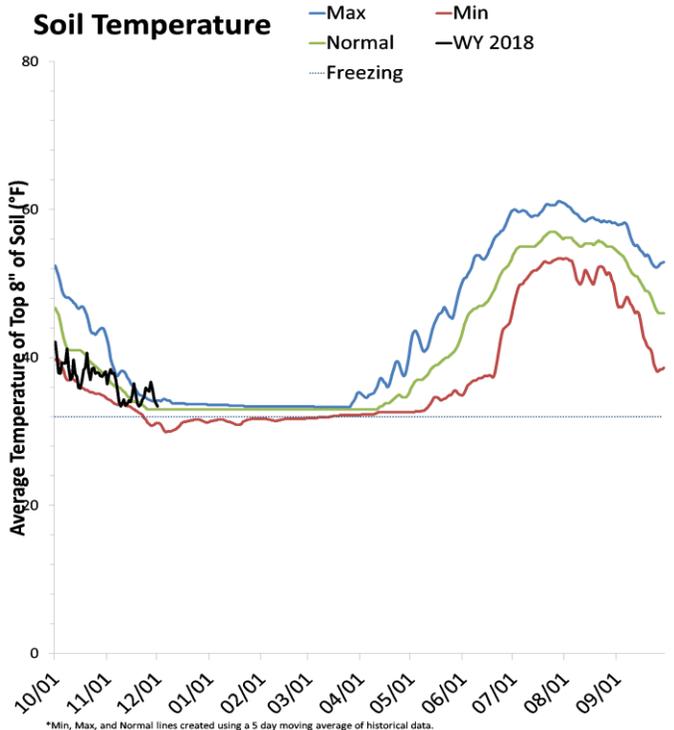
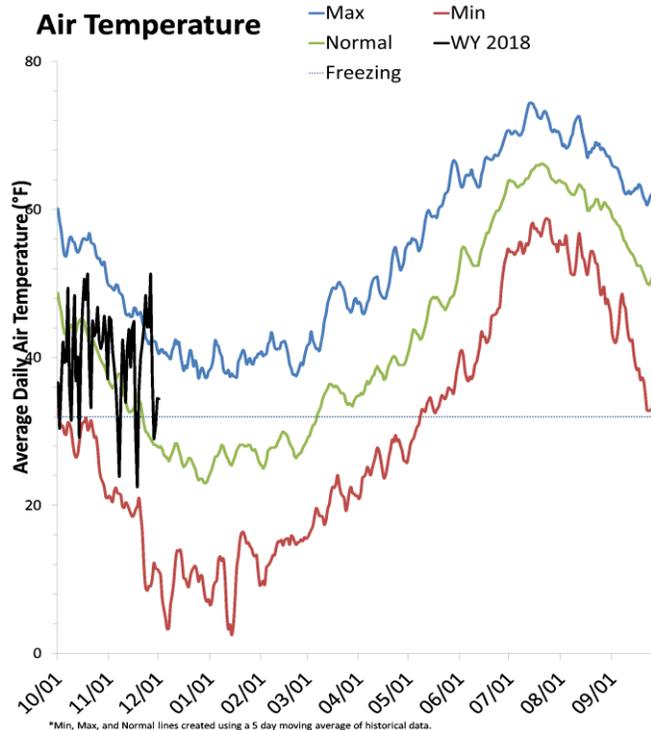
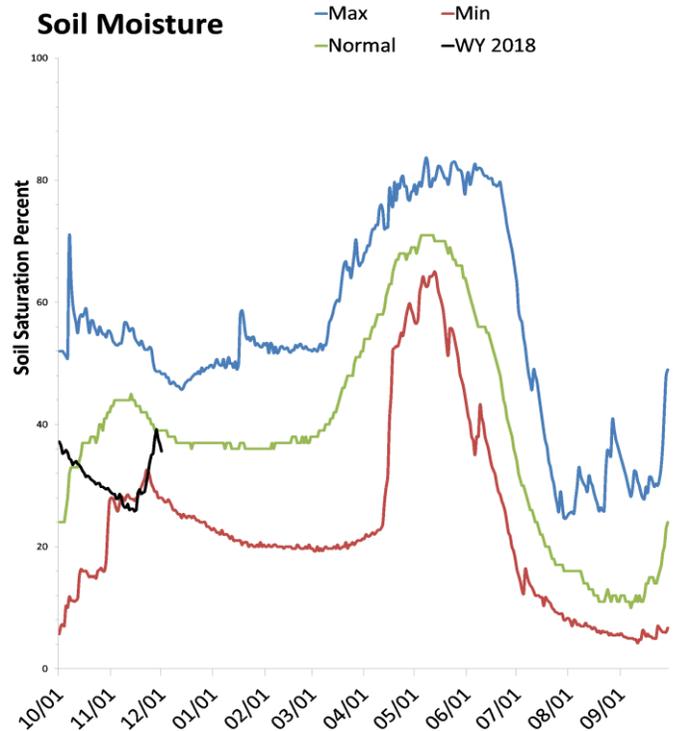
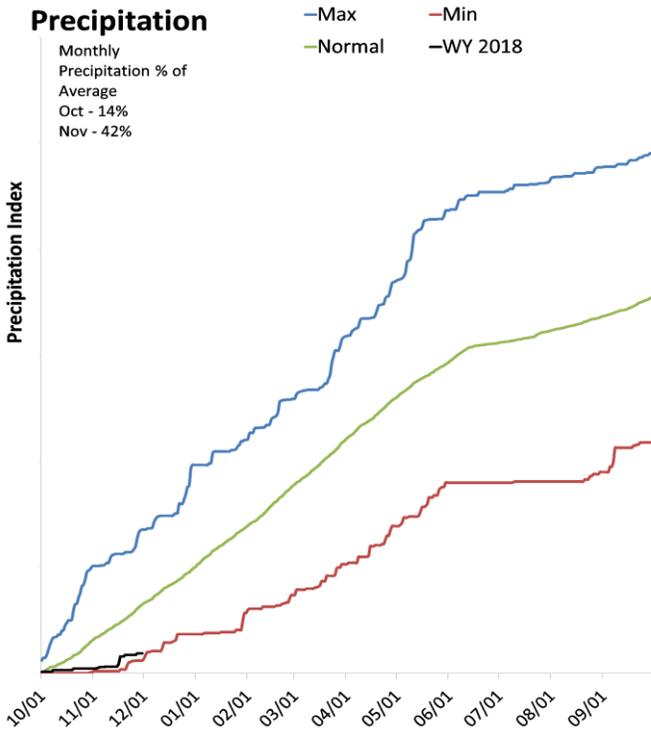
[^]EOM, end of month; [#]WAI, Water Availability Index; [^]KAF, thousand acre-feet.



Tooele Valley & West Desert Basins

December 1, 2017

Precipitation in November was much below average at 42%, which brings the seasonal accumulation (Oct-Nov) to 29% of average. Soil moisture is at 36% compared to 39% last year. Reservoir storage is at 34% of capacity, compared to 20% last year.



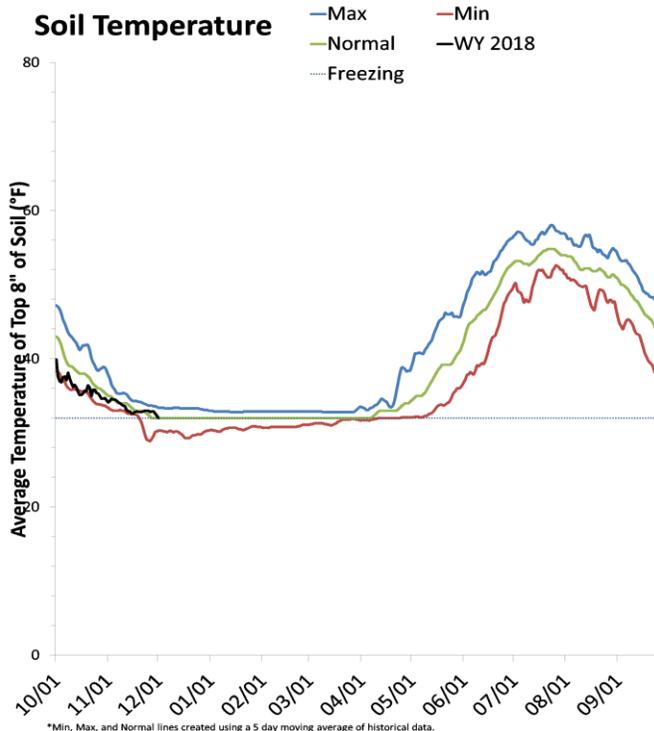
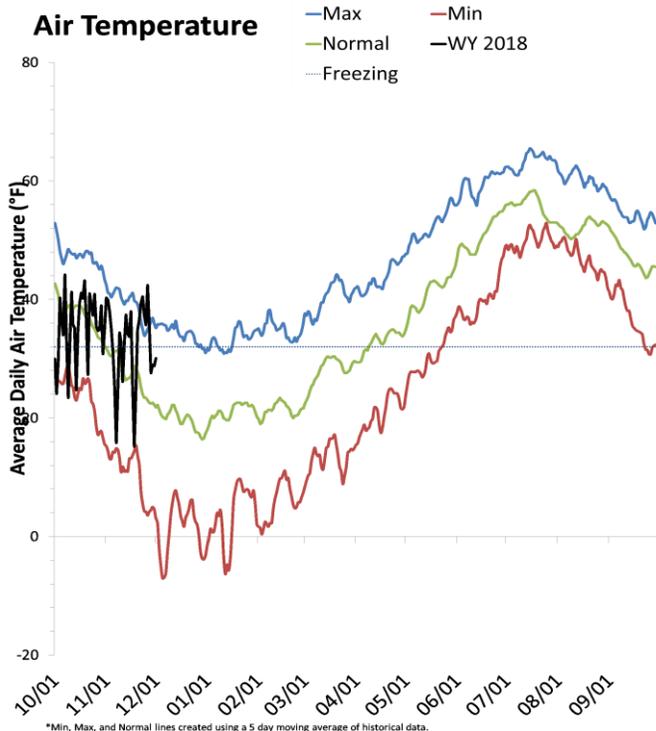
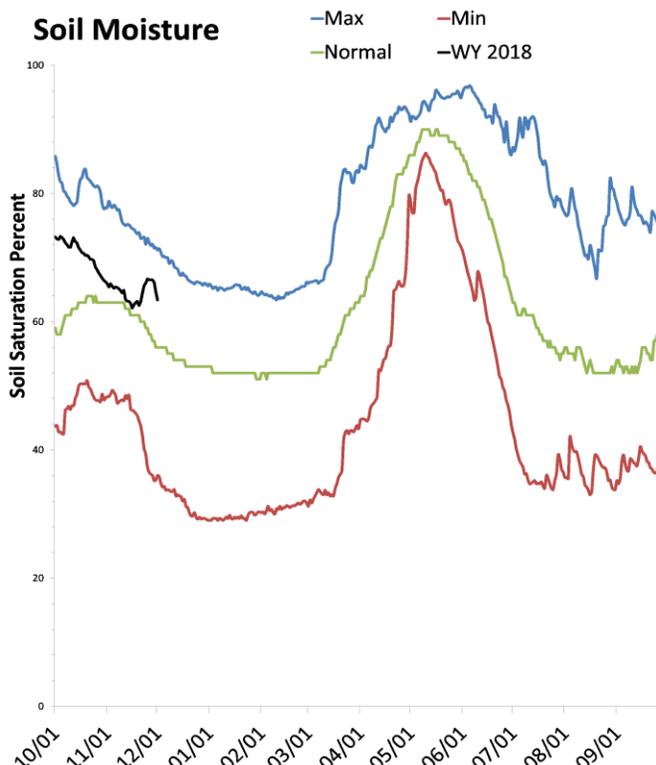
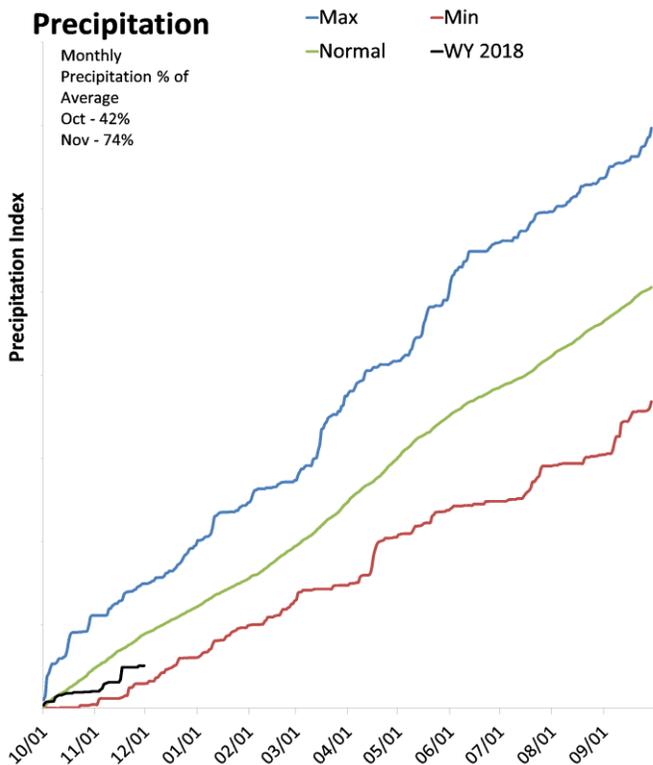
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

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

Northeastern Uinta Basin

December 1, 2017

Precipitation in November was below average at 73%, which brings the seasonal accumulation (Oct-Nov) to 57% of average. Soil moisture is at 62% compared to 64% last year. Reservoir storage is at 91% of capacity, compared to 84% last year. The water availability index for Blacks Fork is 54% and 56% for Smiths Creek.



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

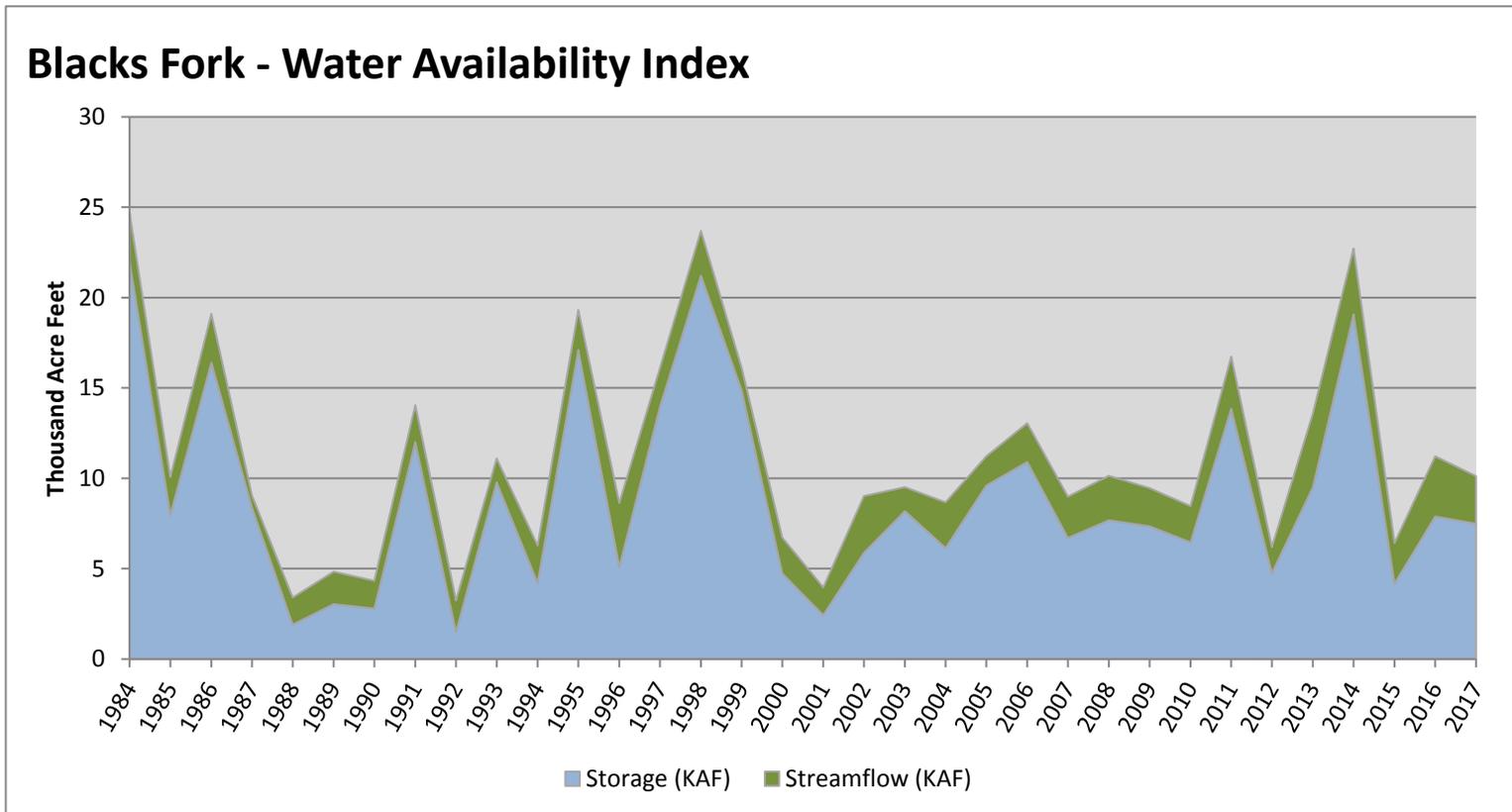
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

December 1, 2017

Water Availability Index

Basin or Region	Nov EOM [^] Storage	November Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Blacks Fork	7.48	2.64	10.12	54	0.36	03, 85, 08, 93

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

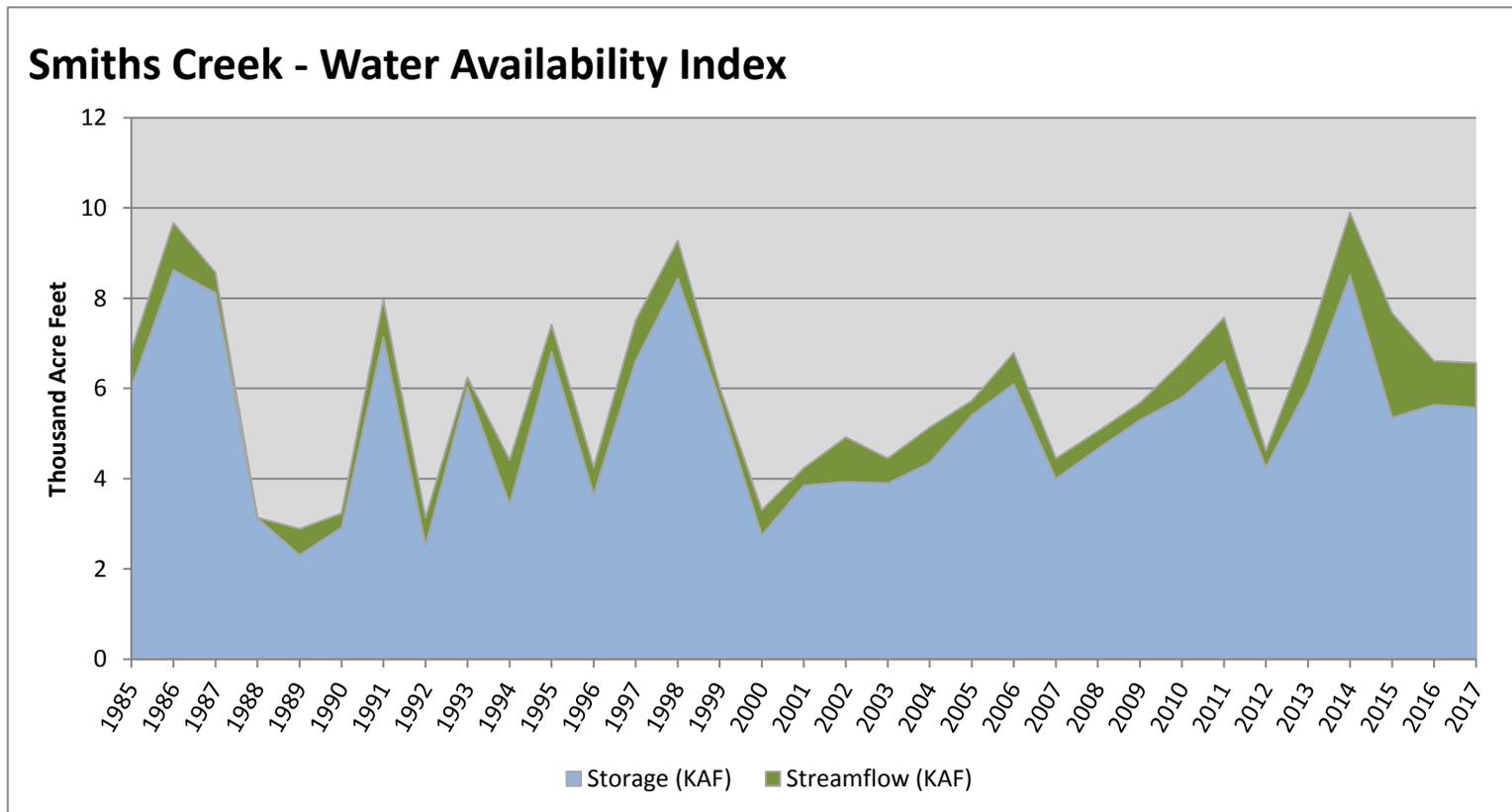


December 1, 2017

Water Availability Index

Basin or Region	Nov EOM [^] Storage	November Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Smiths Creek	5.58	0.99	6.57	56	0.49	99, 93, 10, 16

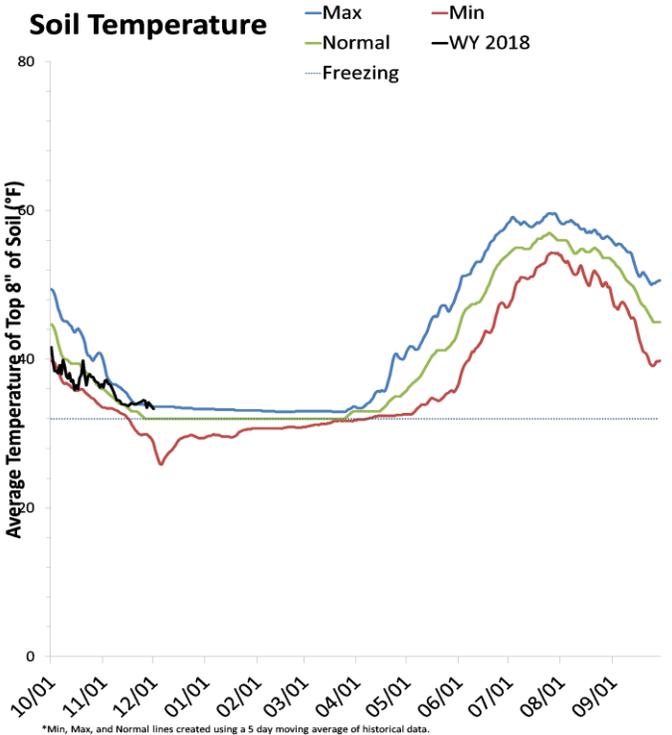
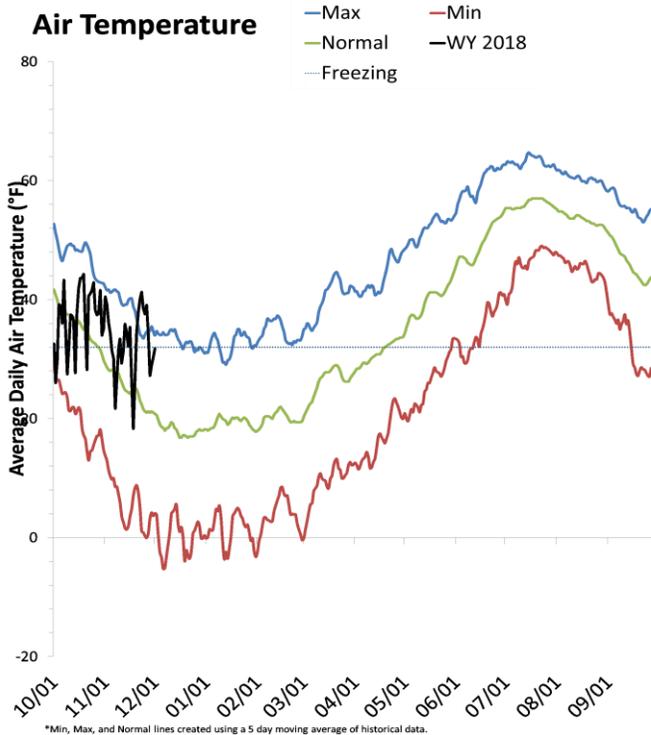
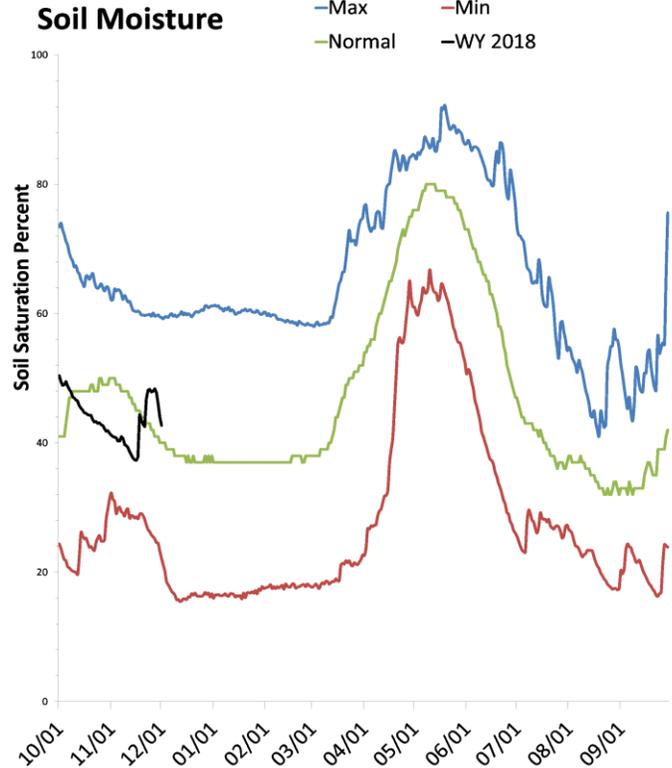
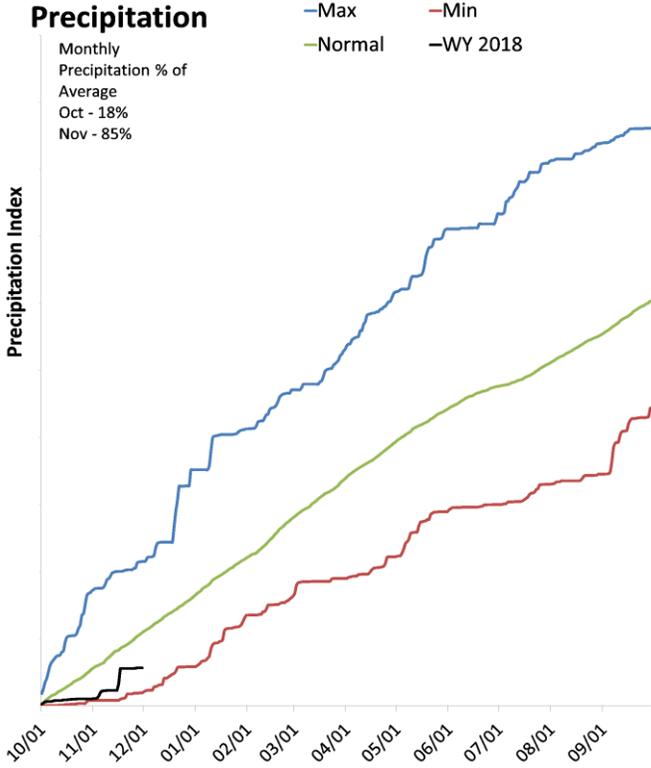
[^]EOM, end of month; [#]WAI, Water Availability Index; [^]KAF, thousand acre-feet.



Duchesne River Basin

December 1, 2017

Precipitation in November was below average at 85%, which brings the seasonal accumulation (Oct-Nov) to 51% of average. Soil moisture is at 43% compared to 50% last year. Reservoir storage is at 81% of capacity, compared to 69% last year. The water availability index for the Western Uintas is 87% and 39% for the Eastern Uintas.

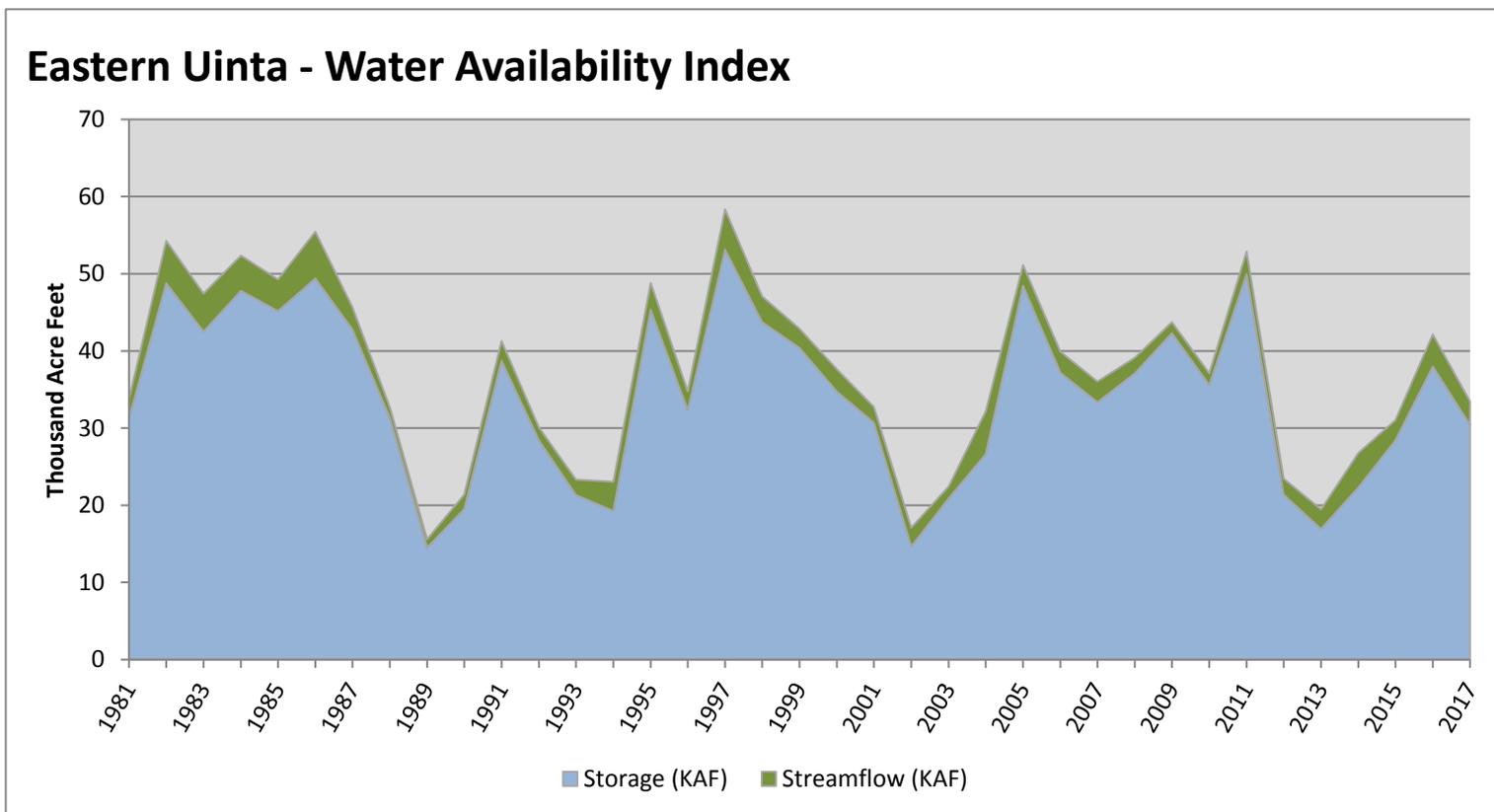


December 1, 2017

Water Availability Index

Basin or Region	Nov EOM [^] Storage	November Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Eastern Uinta	30.40	3.07	33.47	39	-0.88	88, 01, 81, 96

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

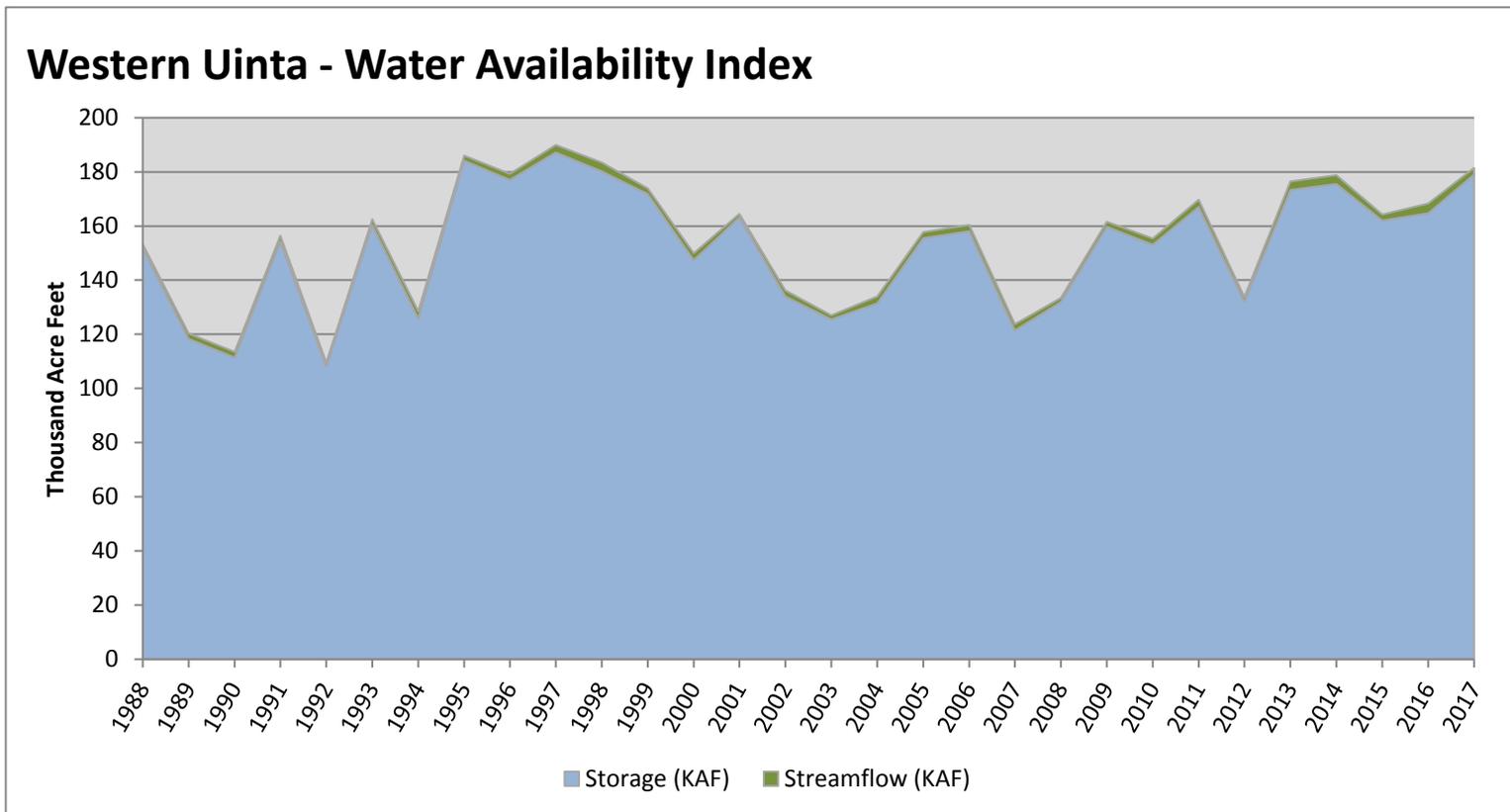


December 1, 2017

Water Availability Index

Basin or Region	Nov EOM [^] Storage	November Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Western Uinta	178.97	2.49	181.46	87	3.09	14, 96, 98, 95

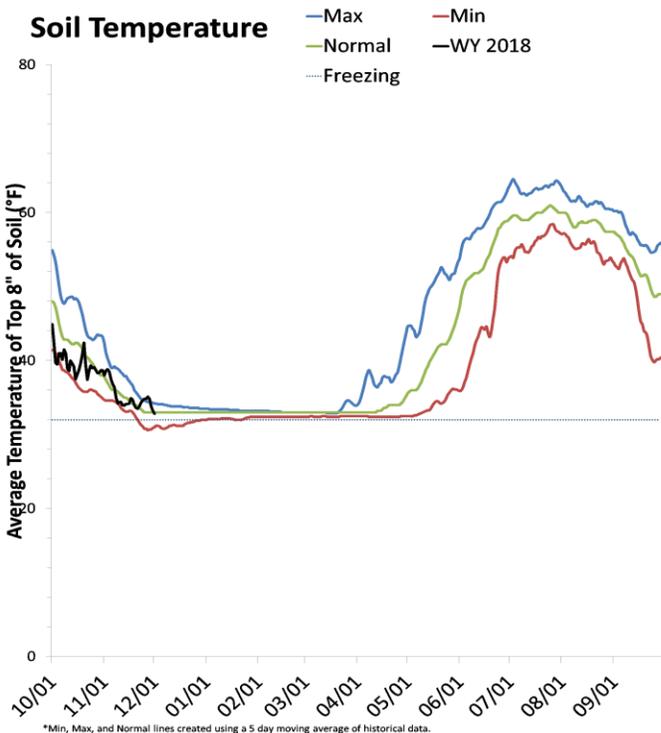
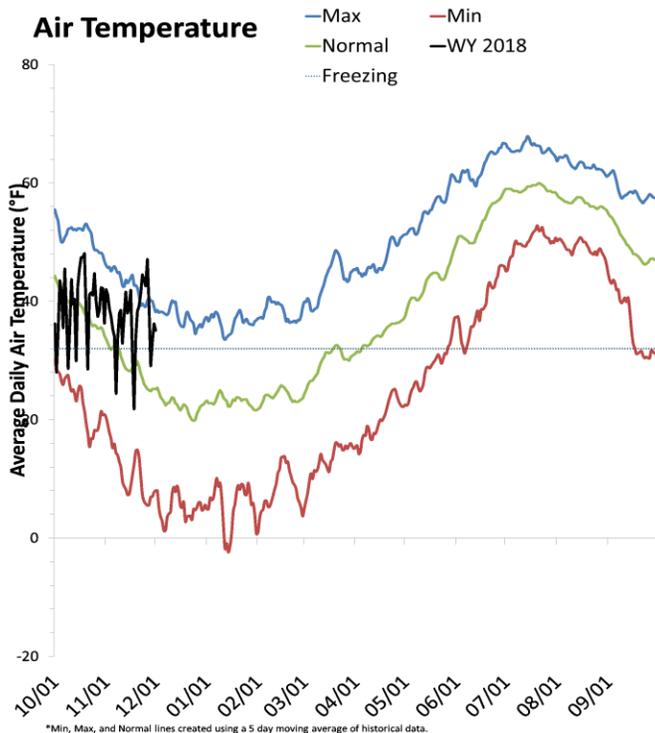
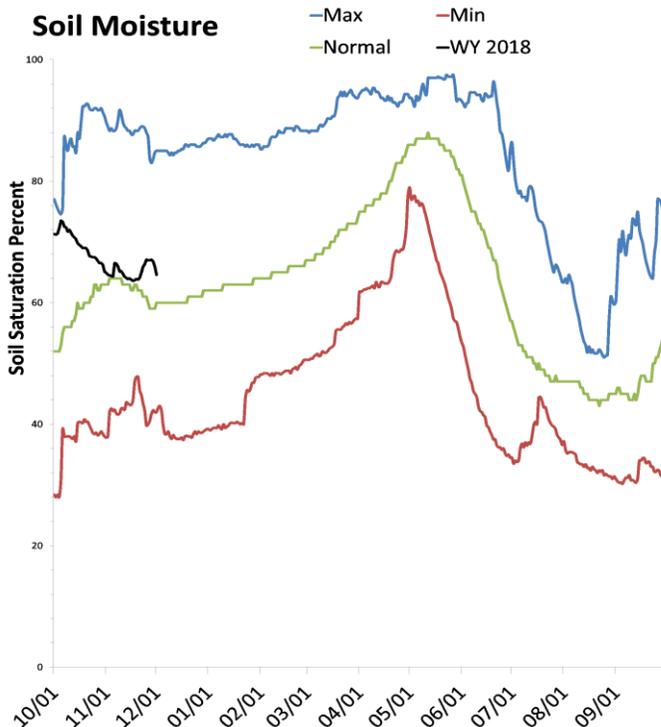
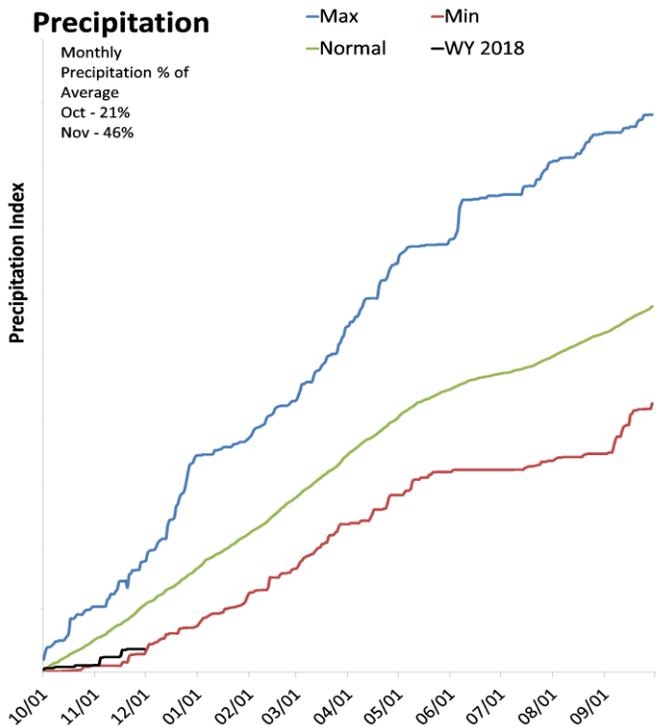
[^]EOM, end of month; [#]WAI, Water Availability Index; [^]KAF, thousand acre-feet.



San Pitch River Basin

December 1, 2017

Precipitation in November was much below average at 46%, which brings the seasonal accumulation (Oct-Nov) to 34% of average. Soil Moisture is at 65% compared to 72% last year. Reservoir storage is at 0% of capacity, compared to 1% last year. The water availability index for the San Pitch is 18%.



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

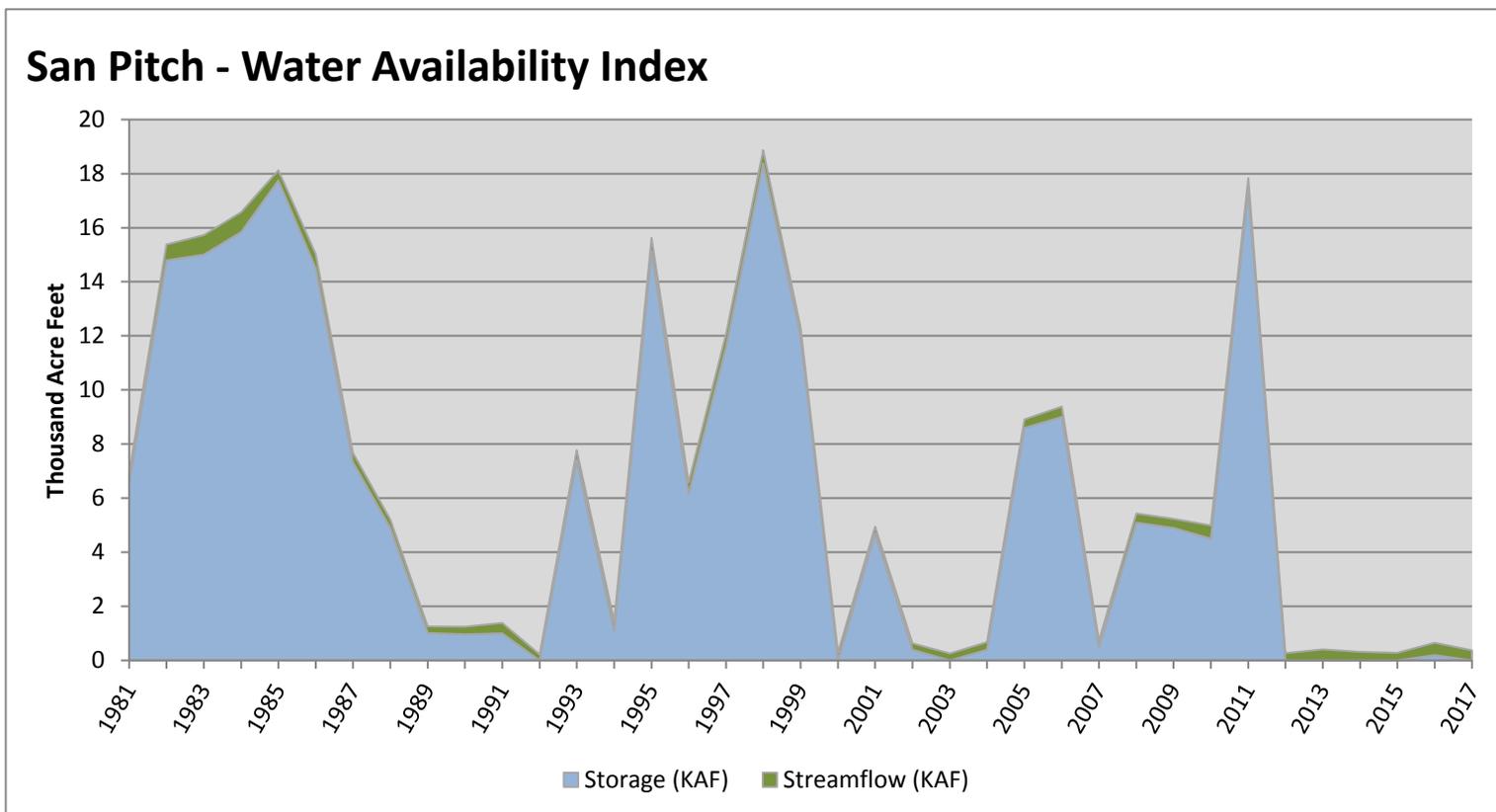
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

December 1, 2017

Water Availability Index

Basin or Region	Nov EOM [^] Storage	November Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
San Pitch	0.00	0.37	0.37	18	-2.63	00, 14, 13, 02

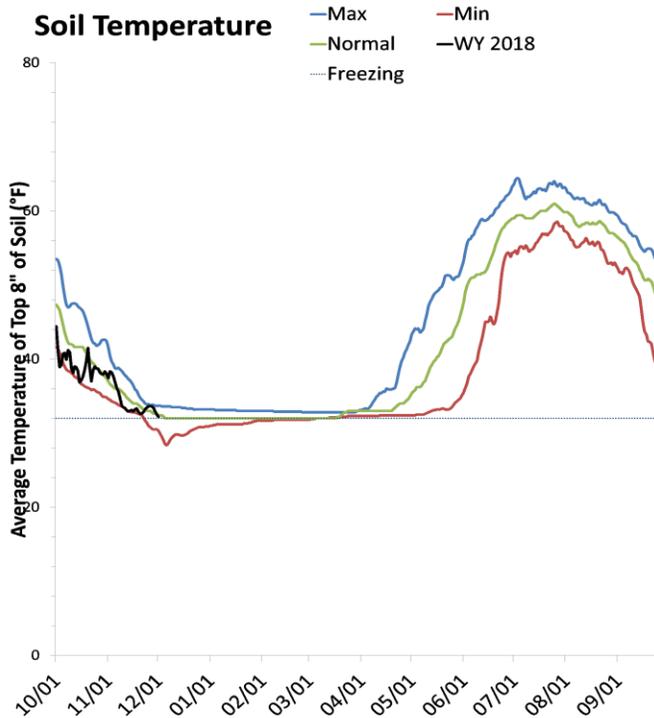
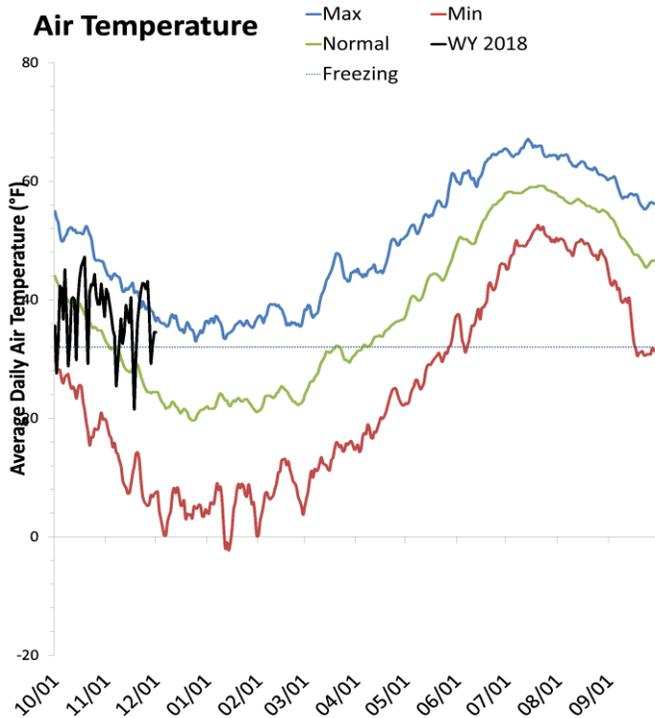
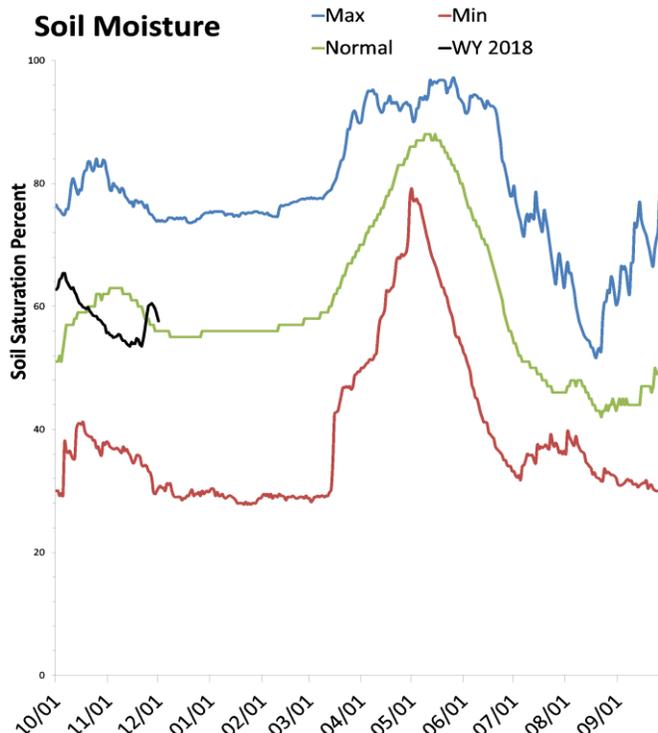
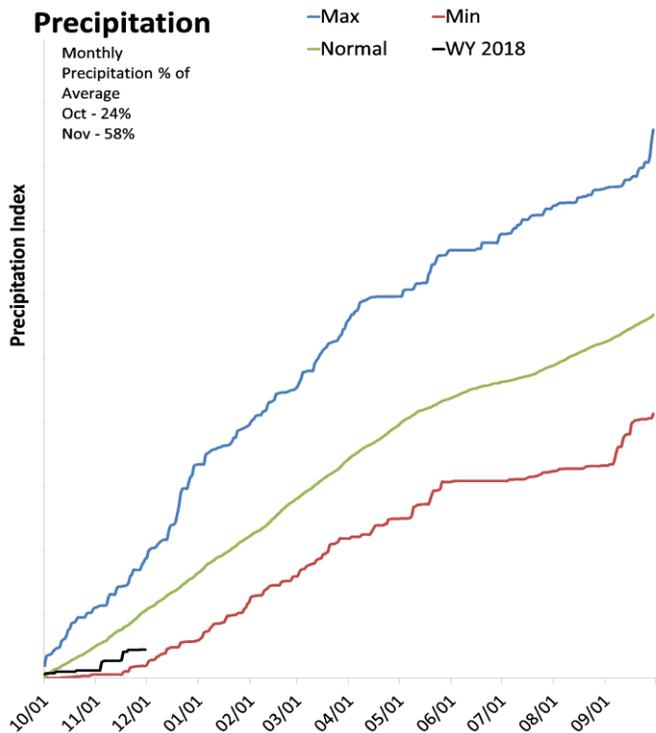
[^]EOM, end of month; [#]WAI, Water Availability Index; [^]KAF, thousand acre-feet.



Price & San Rafael Basins

December 1, 2017

Precipitation in November was much below average at 58%, which brings the seasonal accumulation (Oct-Nov) to 42% of average. Soil moisture is at 58% compared to 70% last year. Reservoir storage is at 66% of capacity, compared to 35% last year. The water availability index for the Price River is 92%, and 76% for Joe's Valley.



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

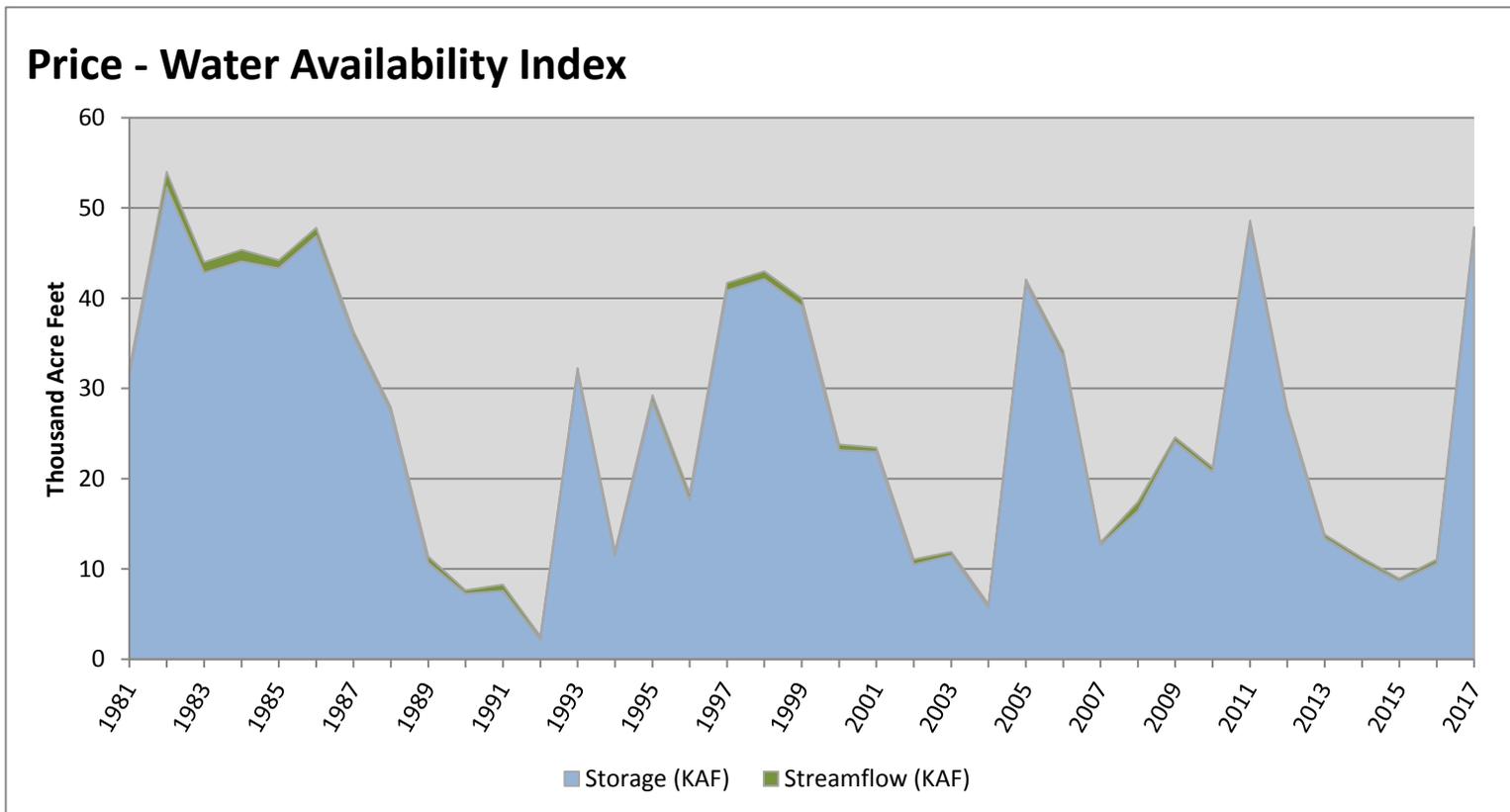
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

December 1, 2017

Water Availability Index

Basin or Region	Nov EOM [^] Storage	November Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Price	47.29	0.59	47.88	92	3.51	84, 86, 11, 82

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

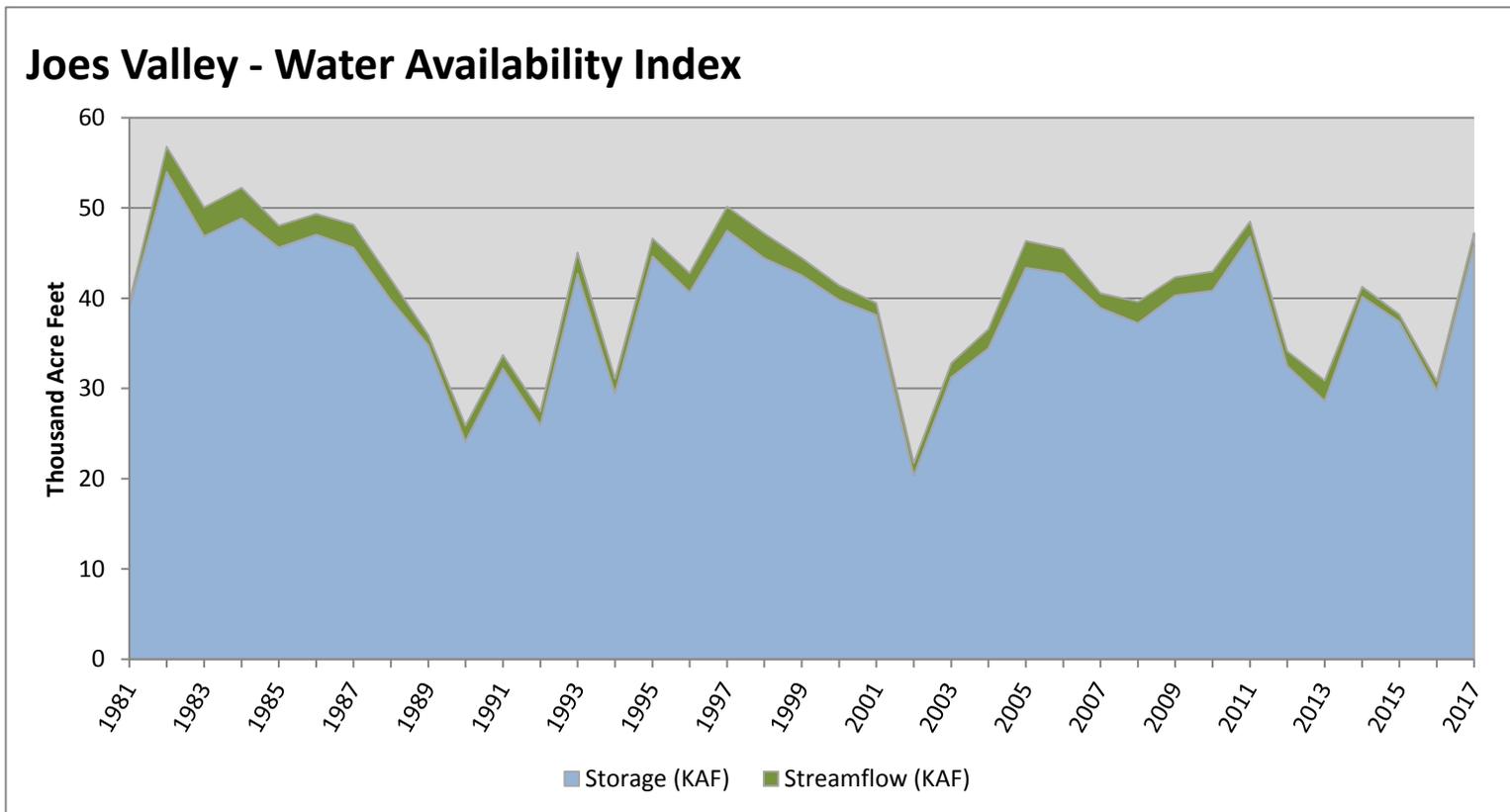


December 1, 2017

Water Availability Index

Basin or Region	Nov EOM [^] Storage	November Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Joes Valley	45.97	1.25	47.22	76	2.19	95, 98, 85, 87

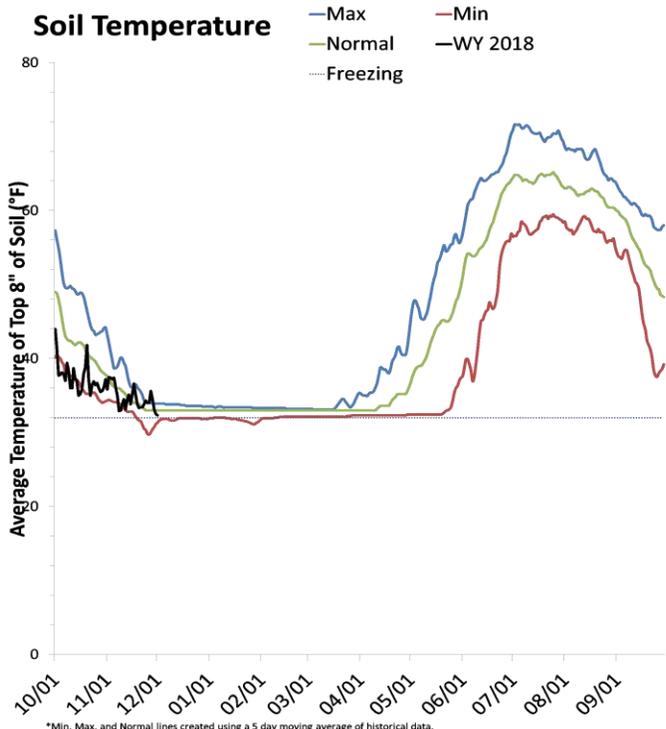
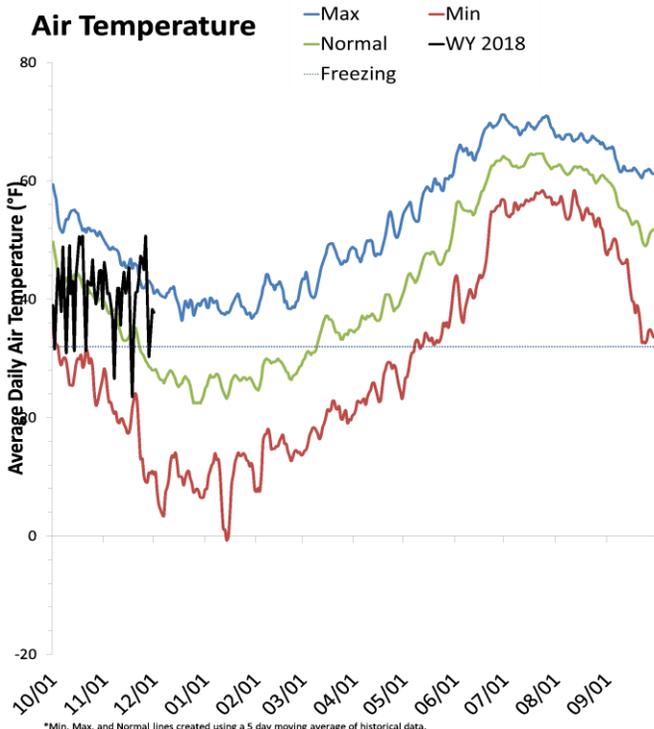
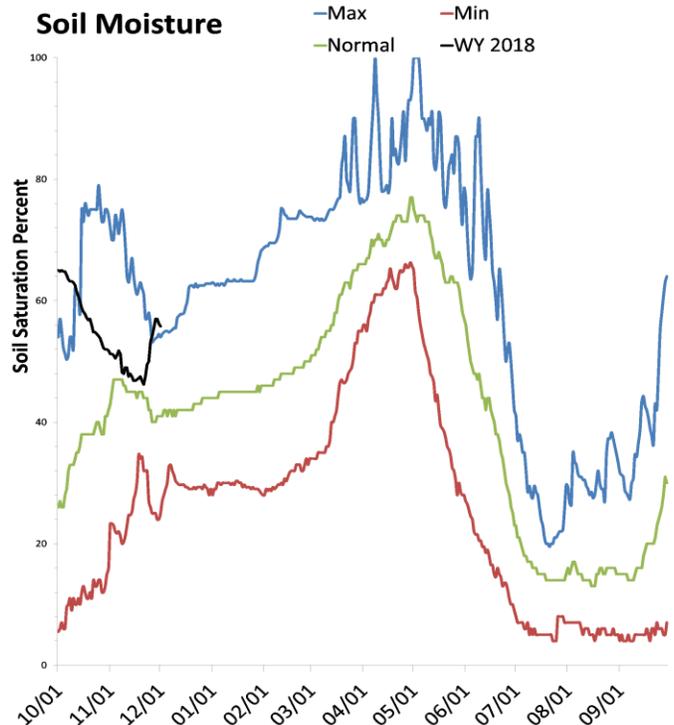
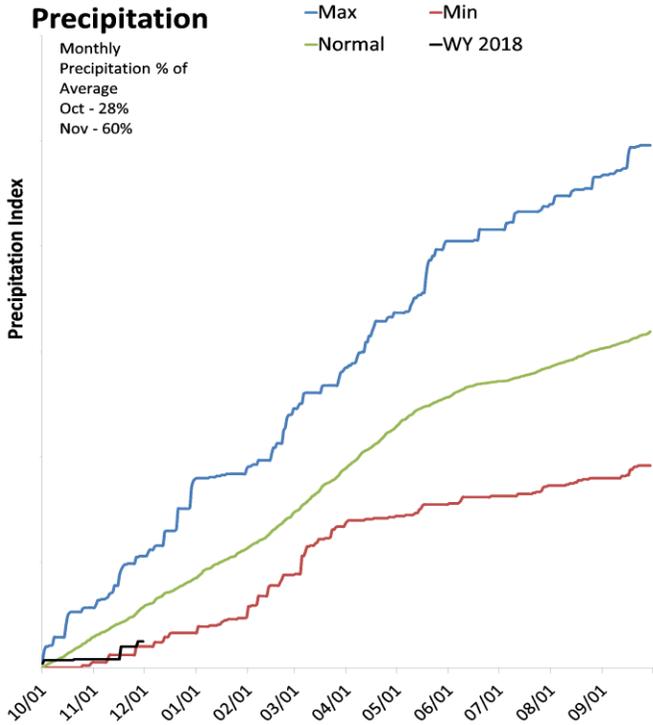
[^]EOM, end of month; [#]WAI, Water Availability Index; [^]KAF, thousand acre-feet.



Lower Sevier Basin

December 1, 2017

Precipitation in November was much below average at 61%, which brings the seasonal accumulation (Oct-Nov) to 44% of average. Soil moisture is at 55% compared to 45% last year. Reservoir storage is at 15% of capacity, compared to 4% last year. The water availability index for the Lower Sevier is 8%.



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

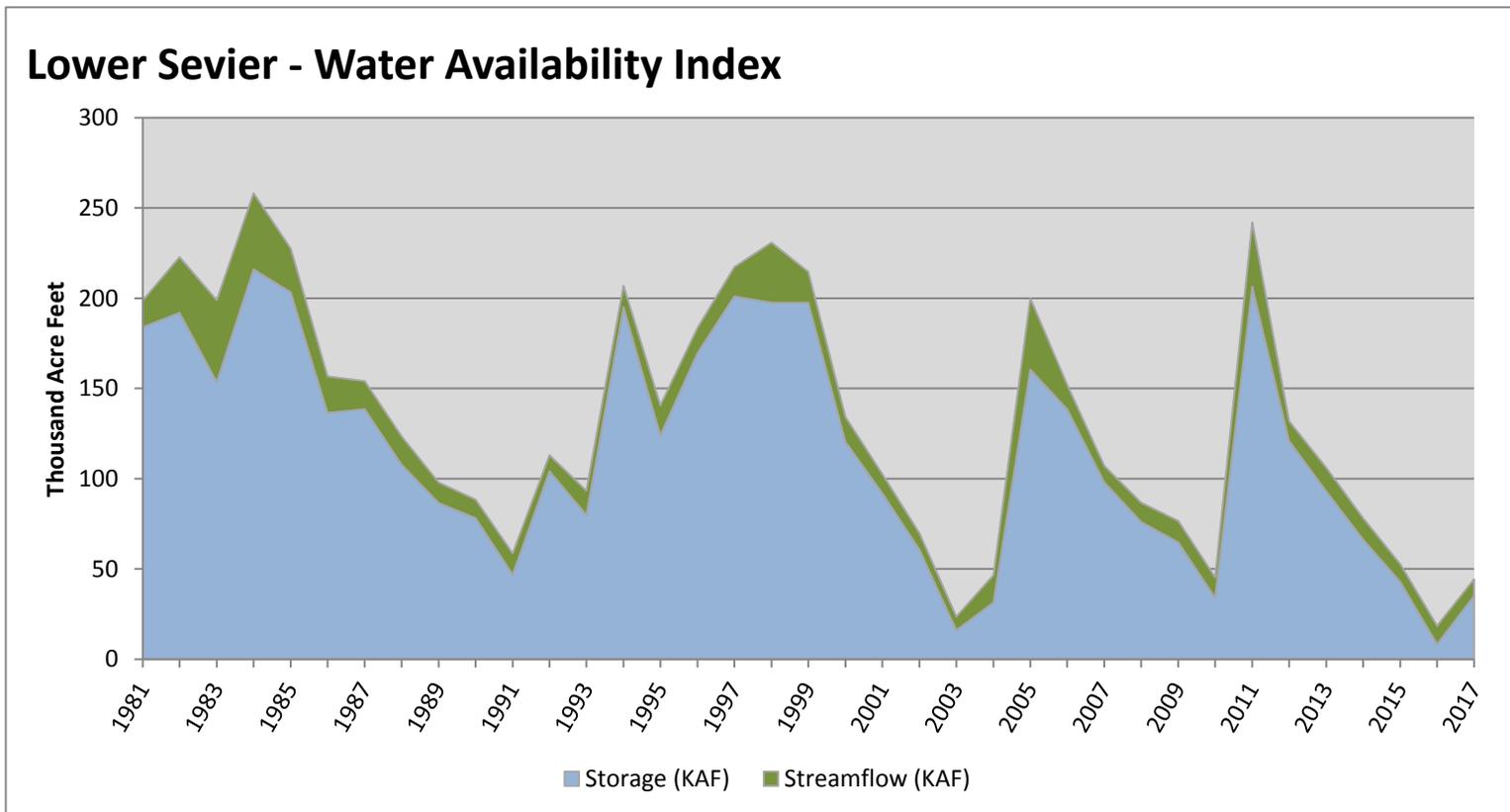
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

December 1, 2017

Water Availability Index

Basin or Region	Nov EOM [^] Storage	November Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Lower Sevier	35.08	9.27	44.35	8	-3.51	16, 03, 10, 04

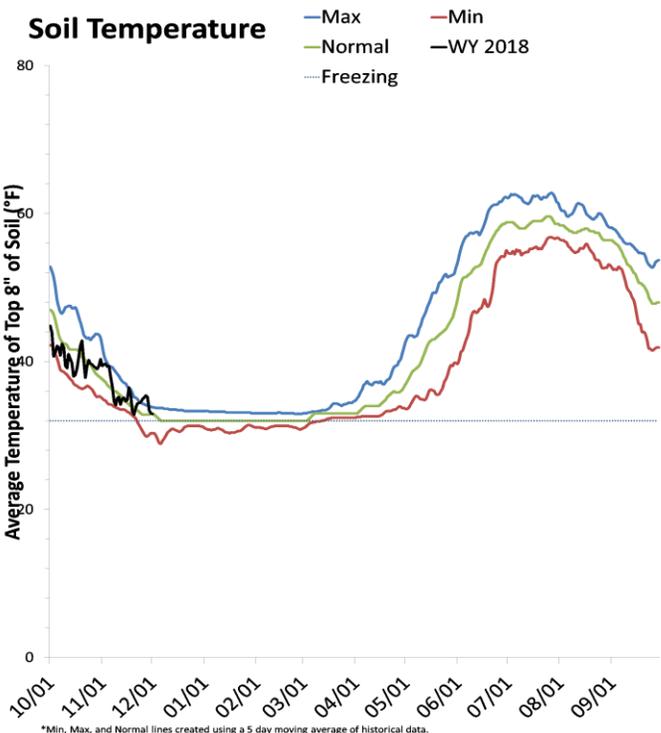
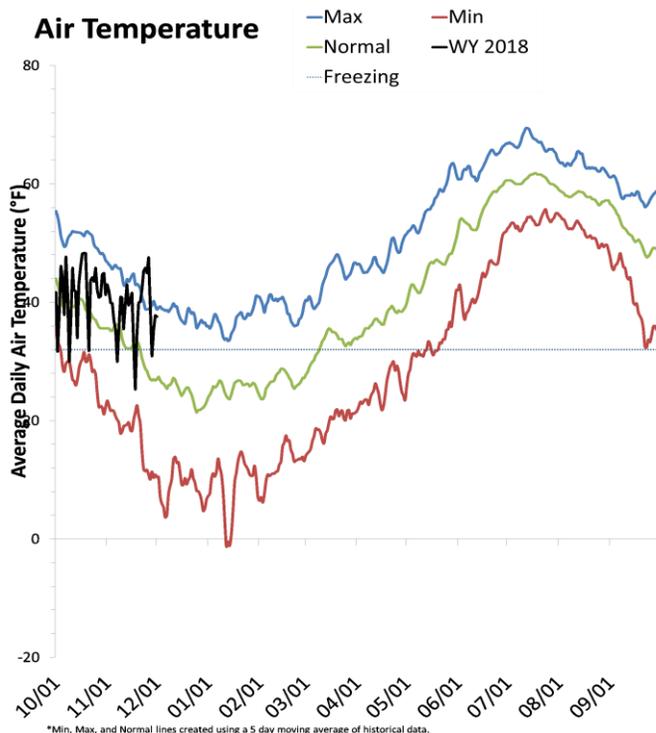
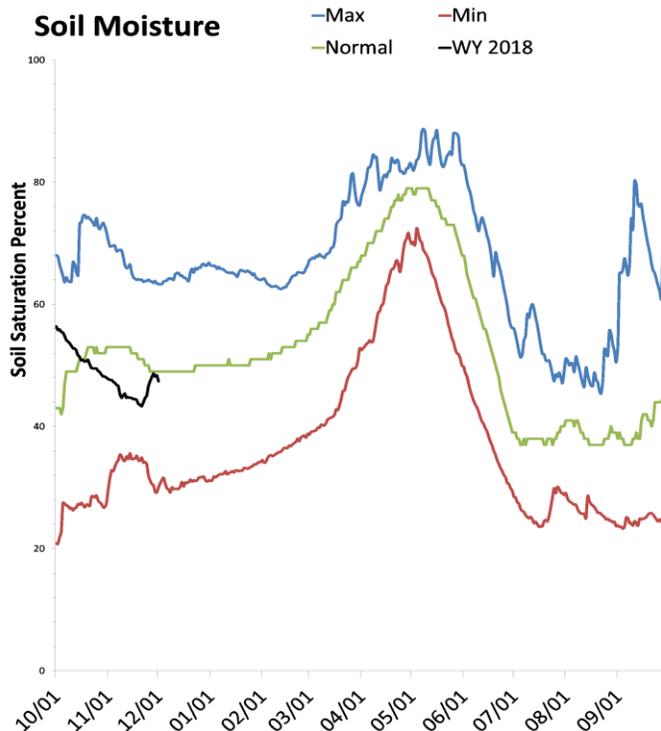
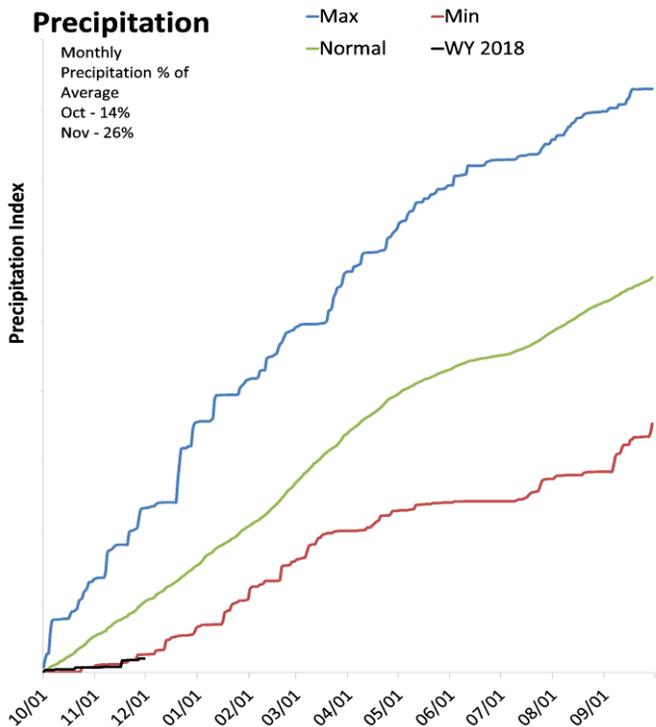
[^]EOM, end of month; [#]WAI, Water Availability Index; [^]KAF, thousand acre-feet.



Upper Sevier Basin

December 1, 2017

Precipitation in November was much below average at 26%, which brings the seasonal accumulation (Oct-Nov) to 20% of average. Soil moisture is at 47% compared to 46% last year. Reservoir storage is at 41% of capacity, compared to 22% last year. The water availability index for the Upper Sevier is 50%.



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

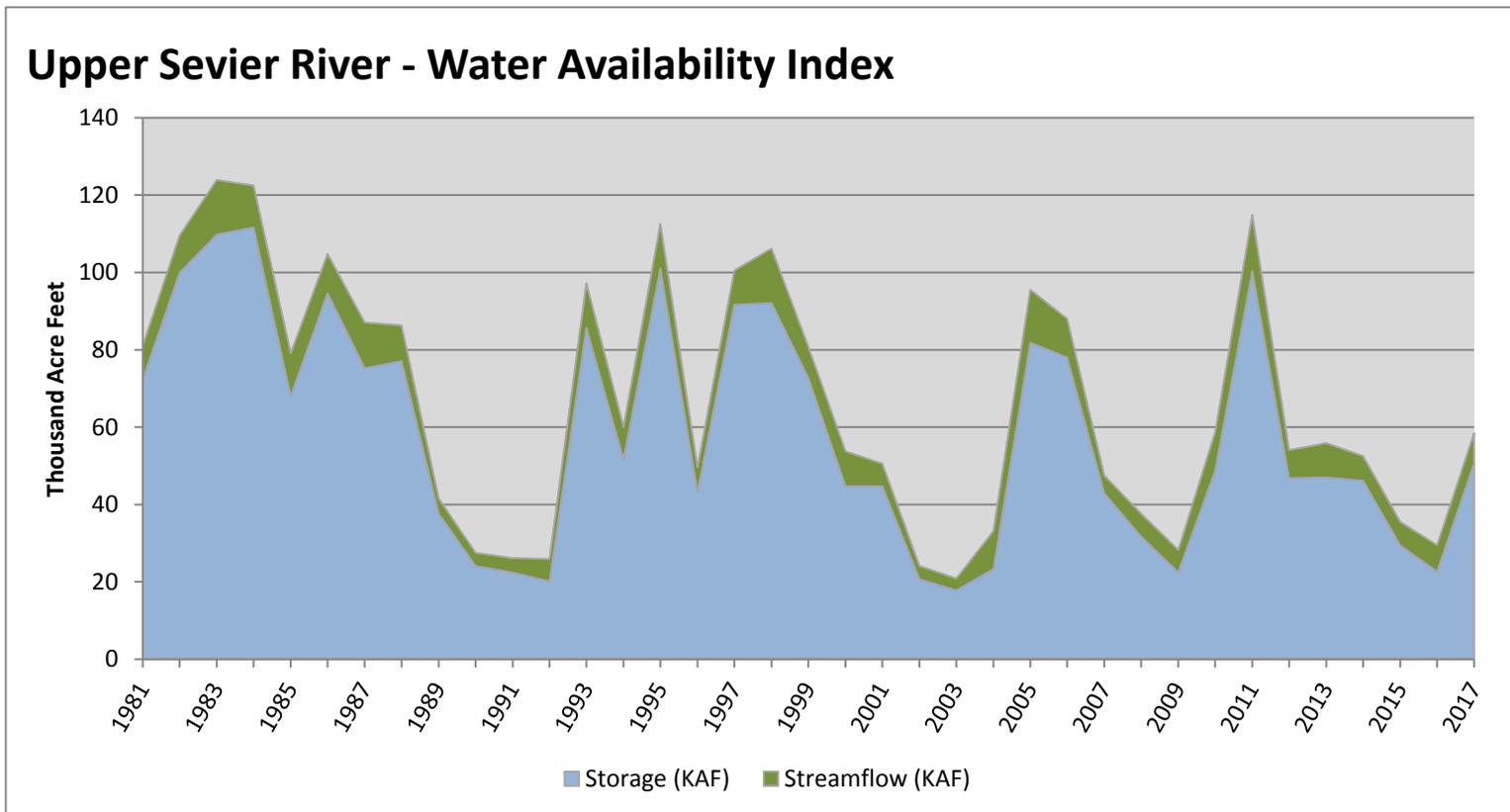
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

December 1, 2017

Water Availability Index

Basin or Region	Nov EOM [^] Storage	November Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Upper Sevier River	50.66	7.77	58.43	50	0	12, 13, 10, 94

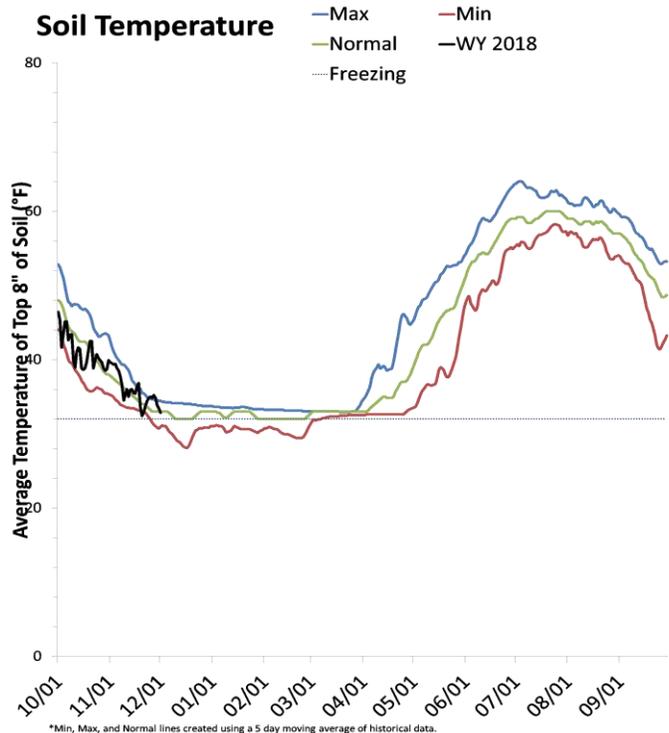
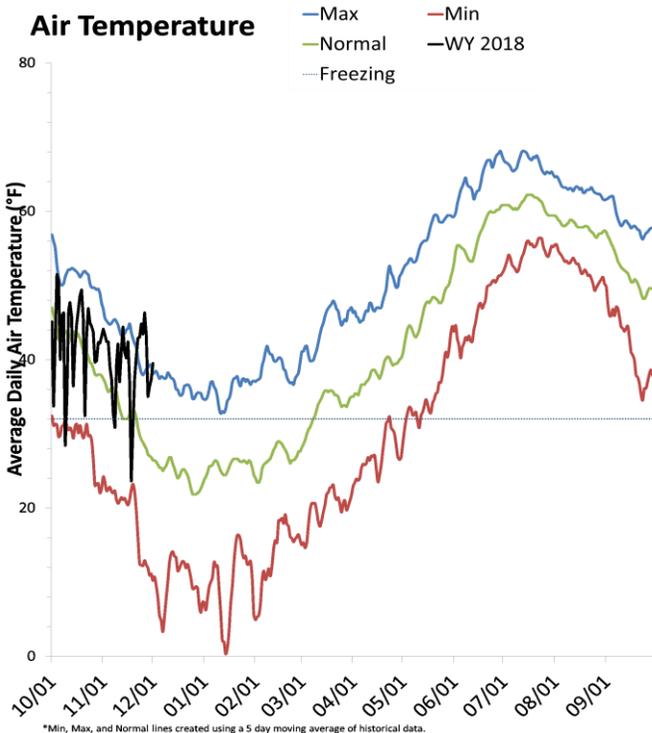
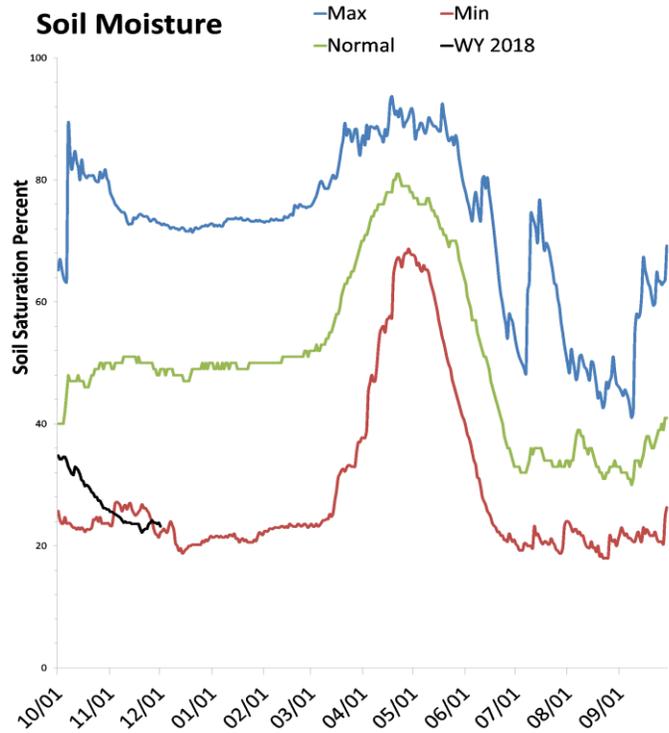
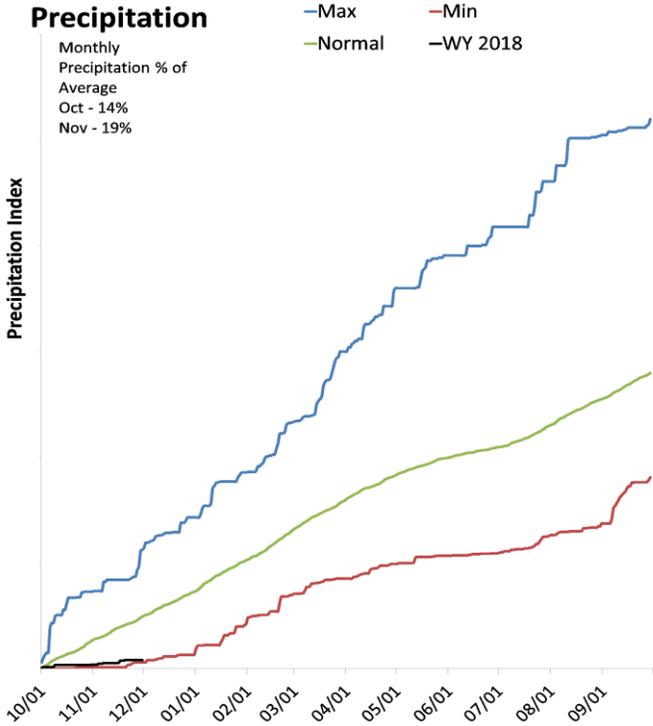
[^]EOM, end of month; [#]WAI, Water Availability Index; [^]KAF, thousand acre-feet.



Southeastern Utah

December 1, 2017

Precipitation in November was much below average at 19%, which brings the seasonal accumulation (Oct-Nov) to 16% of average. Soil moisture is at 23% compared to 54% last year. Reservoir storage is at 51% of capacity, compared to 72% last year. The water availability index for Moab is 71%.



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

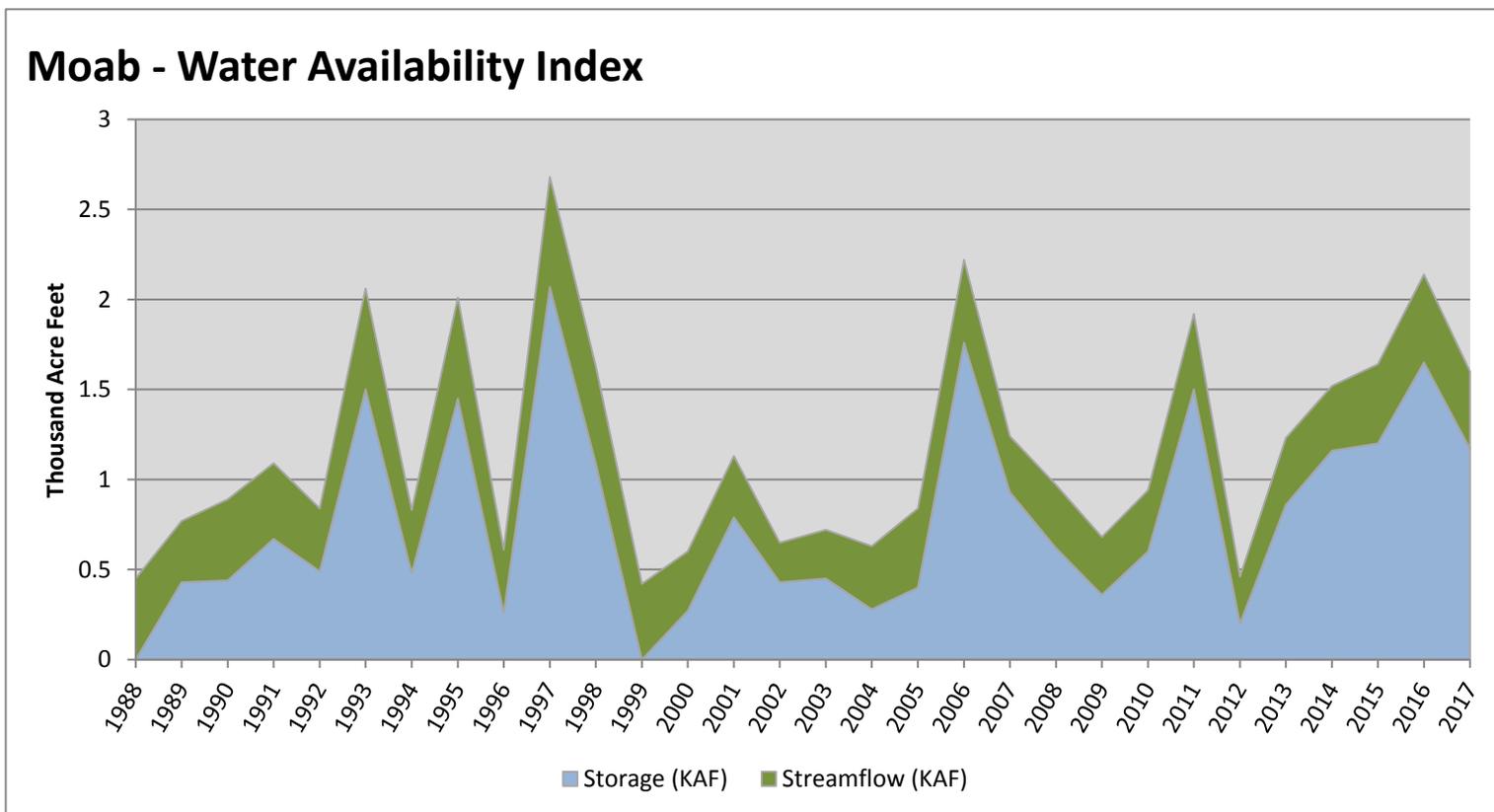
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

December 1, 2017

Water Availability Index

Basin or Region	Nov EOM [^] Storage	November Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Moab	1.17	0.43	1.60	71	1.75	07, 14, 98, 15

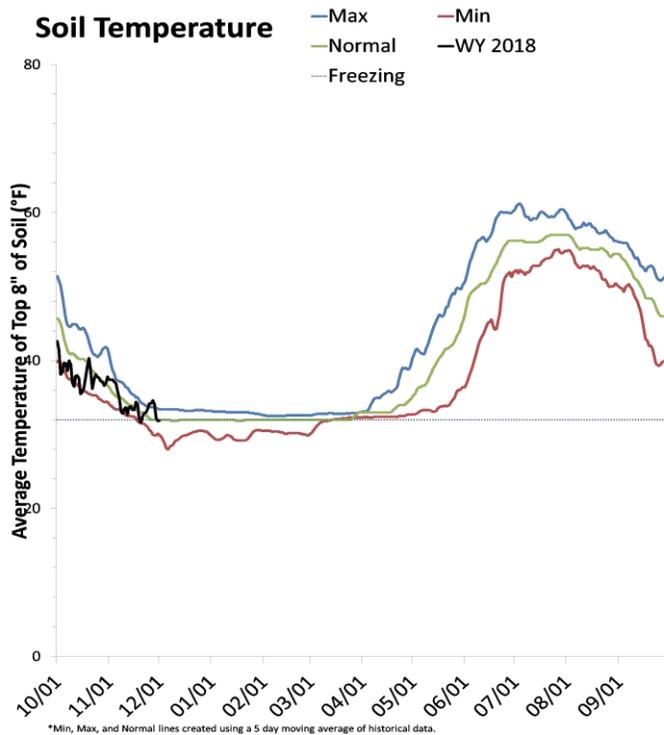
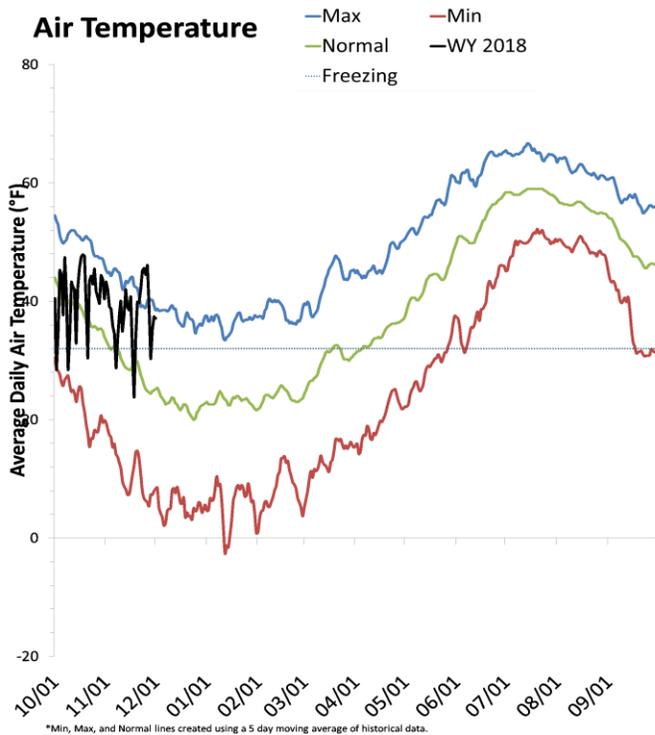
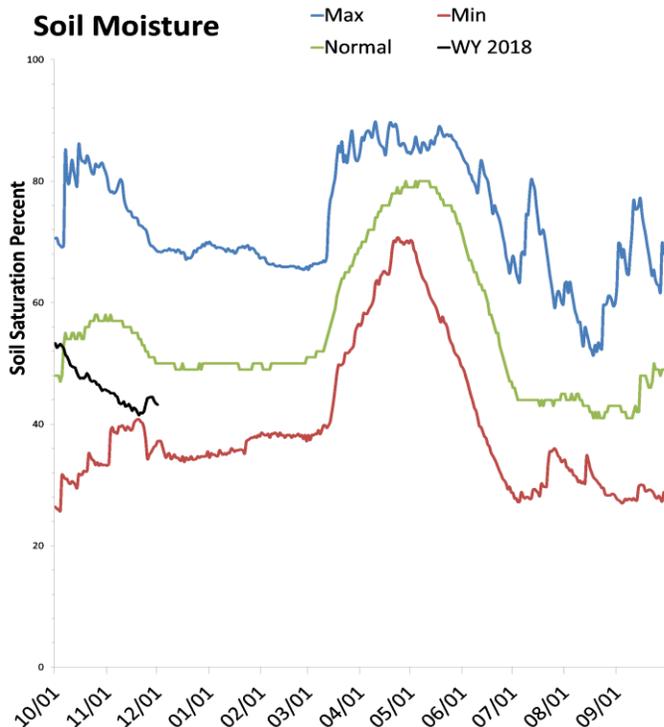
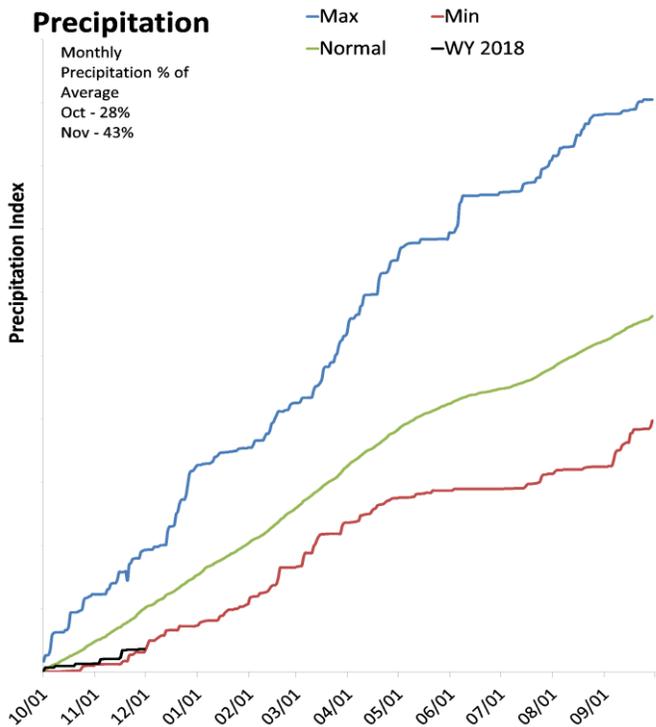
[^]EOM, end of month; [#]WAI, Water Availability Index; [^]KAF, thousand acre-feet.



Dirty Devil Basin

December 1, 2017

Precipitation in November was much below average at 43%, which brings the seasonal accumulation (Oct-Nov) to 36% of average. Soil moisture is at 43% compared to 48% last year.



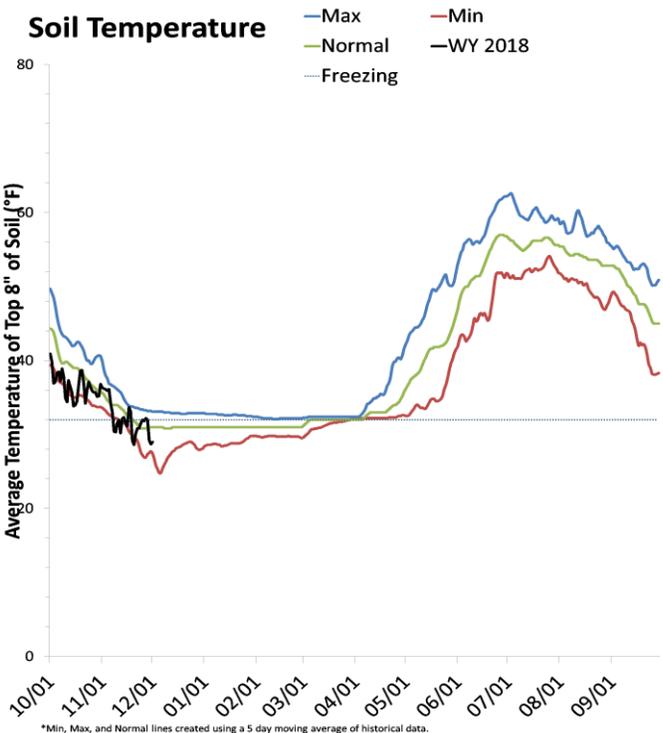
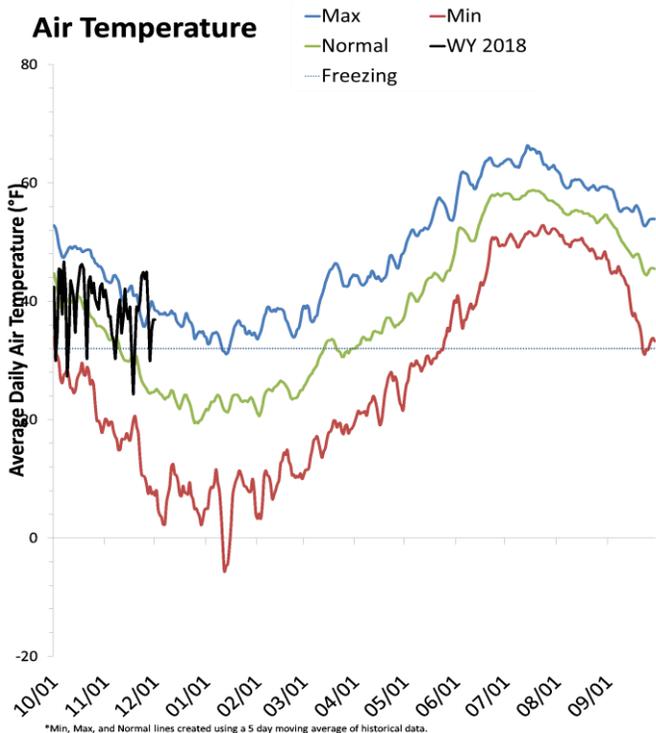
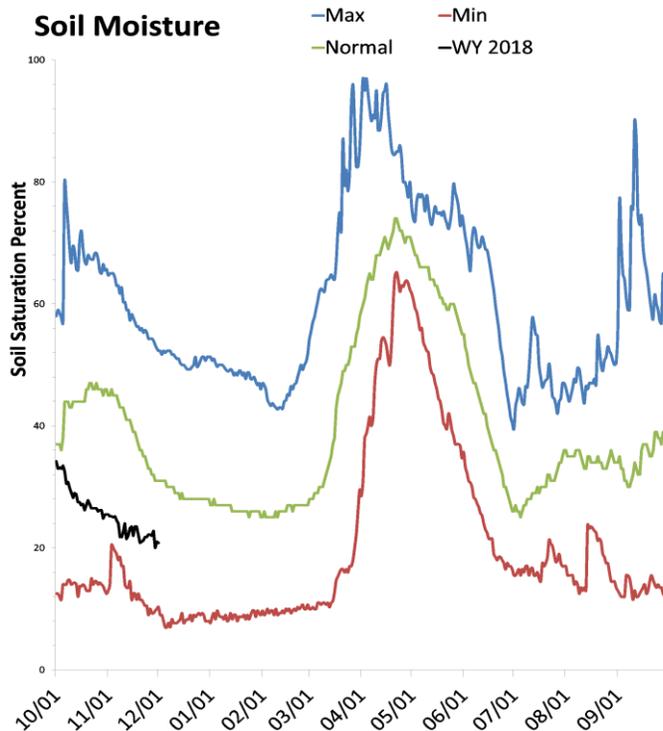
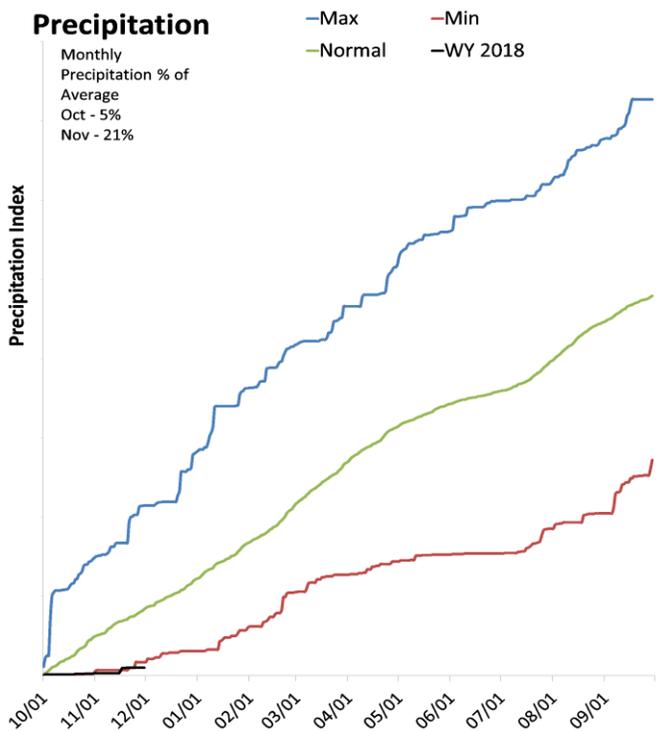
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

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

Escalante River Basin

December 1, 2017

Precipitation in November was much below average at 21%, which brings the seasonal accumulation (Oct-Nov) to 12% of average. Soil moisture is at 21% compared to 33% last year.



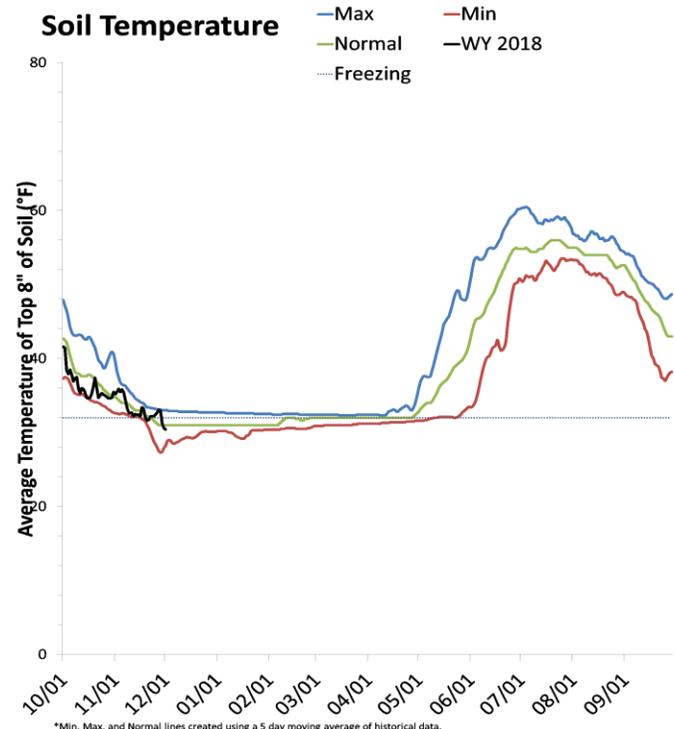
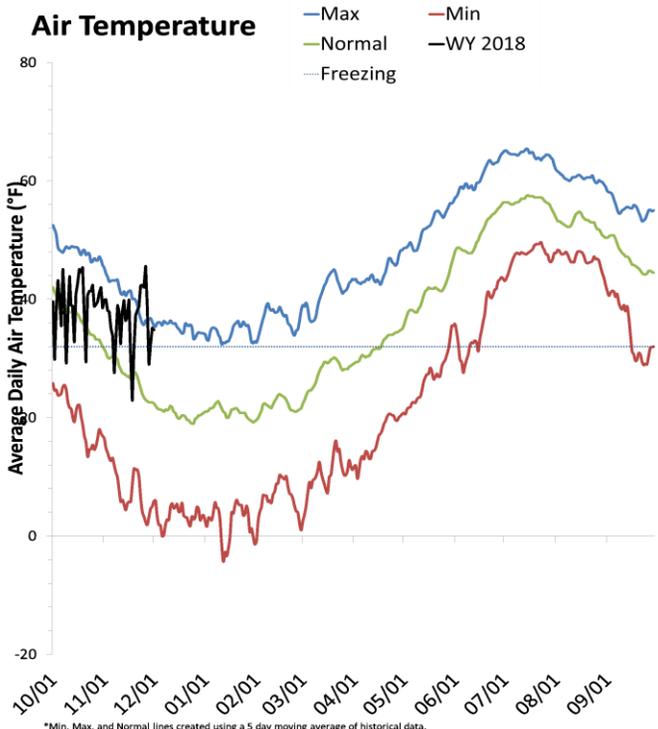
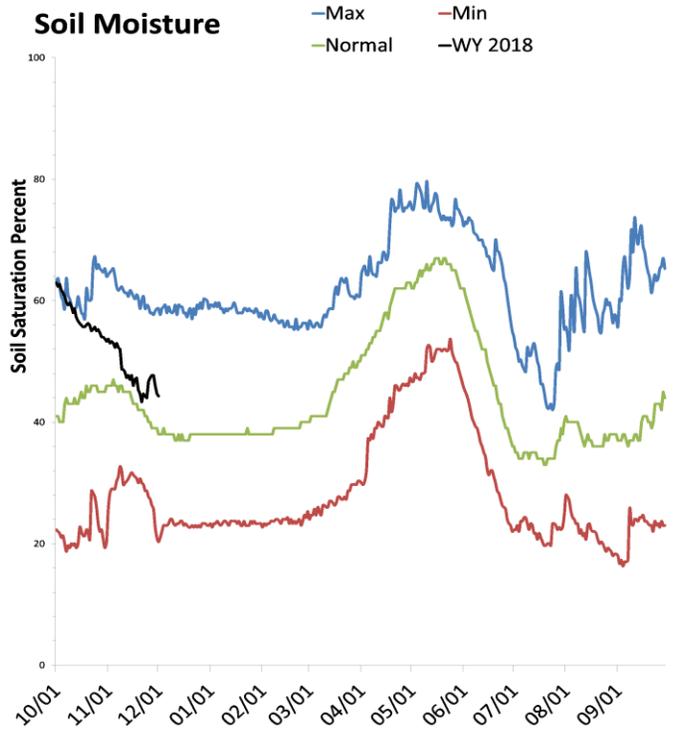
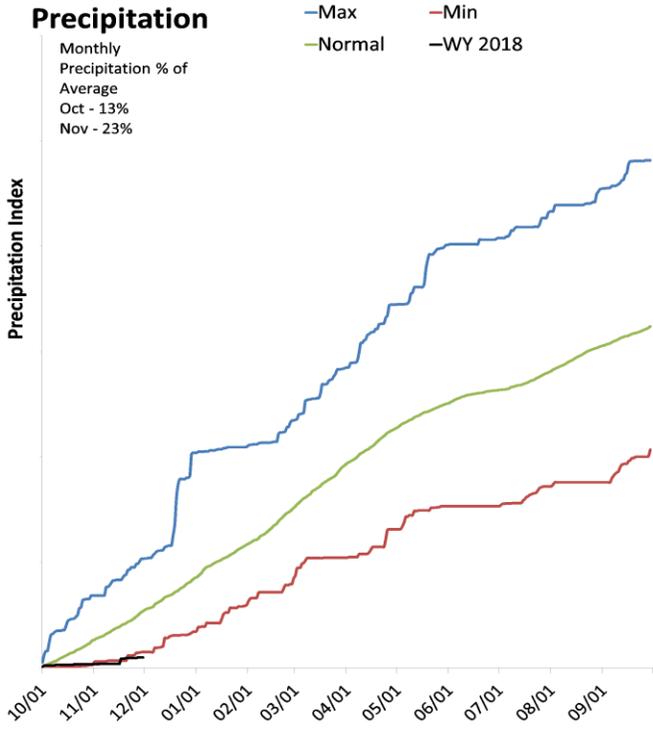
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

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

Beaver River Basin

December 1, 2017

Precipitation in November was much below average at 23%, which brings the seasonal accumulation (Oct-Nov) to 18% of average. Soil moisture is at 45% compared to 35% last year. Reservoir storage is at 28% of capacity, compared to 19% 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.

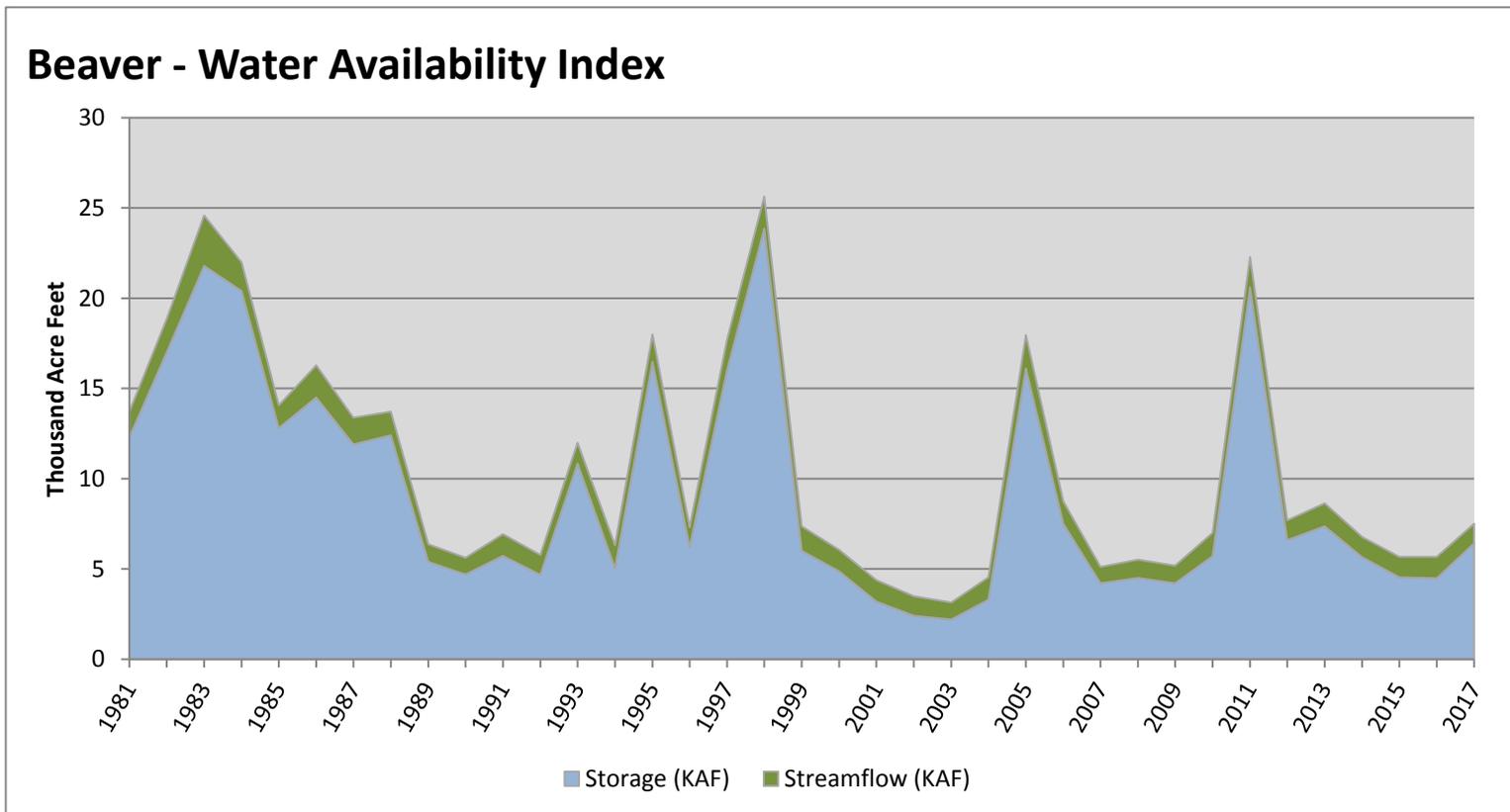
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

December 1, 2017

Water Availability Index

Basin or Region	Nov EOM [^] Storage	November Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Beaver	6.43	1.07	7.50	53	0.22	96, 99, 12, 13

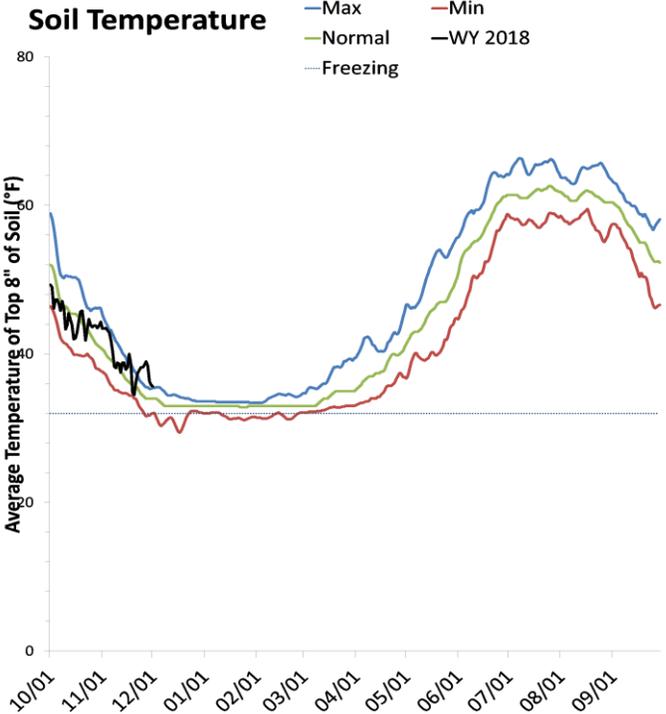
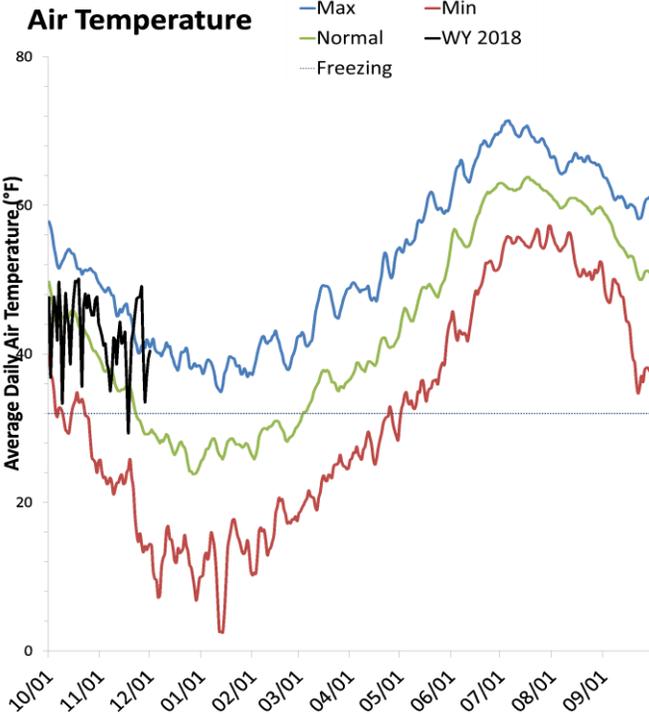
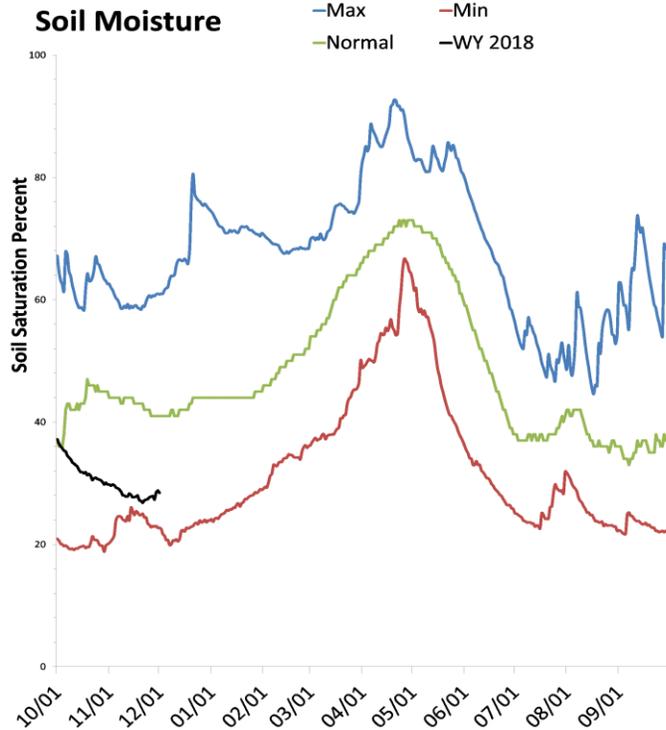
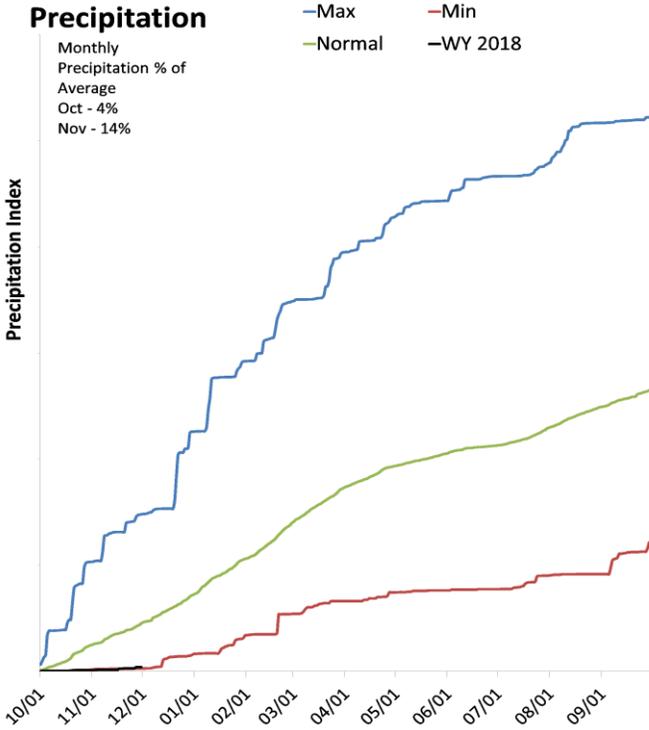
[^]EOM, end of month; [#]WAI, Water Availability Index; [^]KAF, thousand acre-feet.



Southwestern Utah

December 1, 2017

Precipitation in November was much below average at 14%, which brings the seasonal accumulation (Oct-Nov) to 9% of average. Soil moisture is at 28% compared to 37% last year. Reservoir storage is at 59% of capacity, compared to 51% last year. The water availability index for the Virgin River is 52%.



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

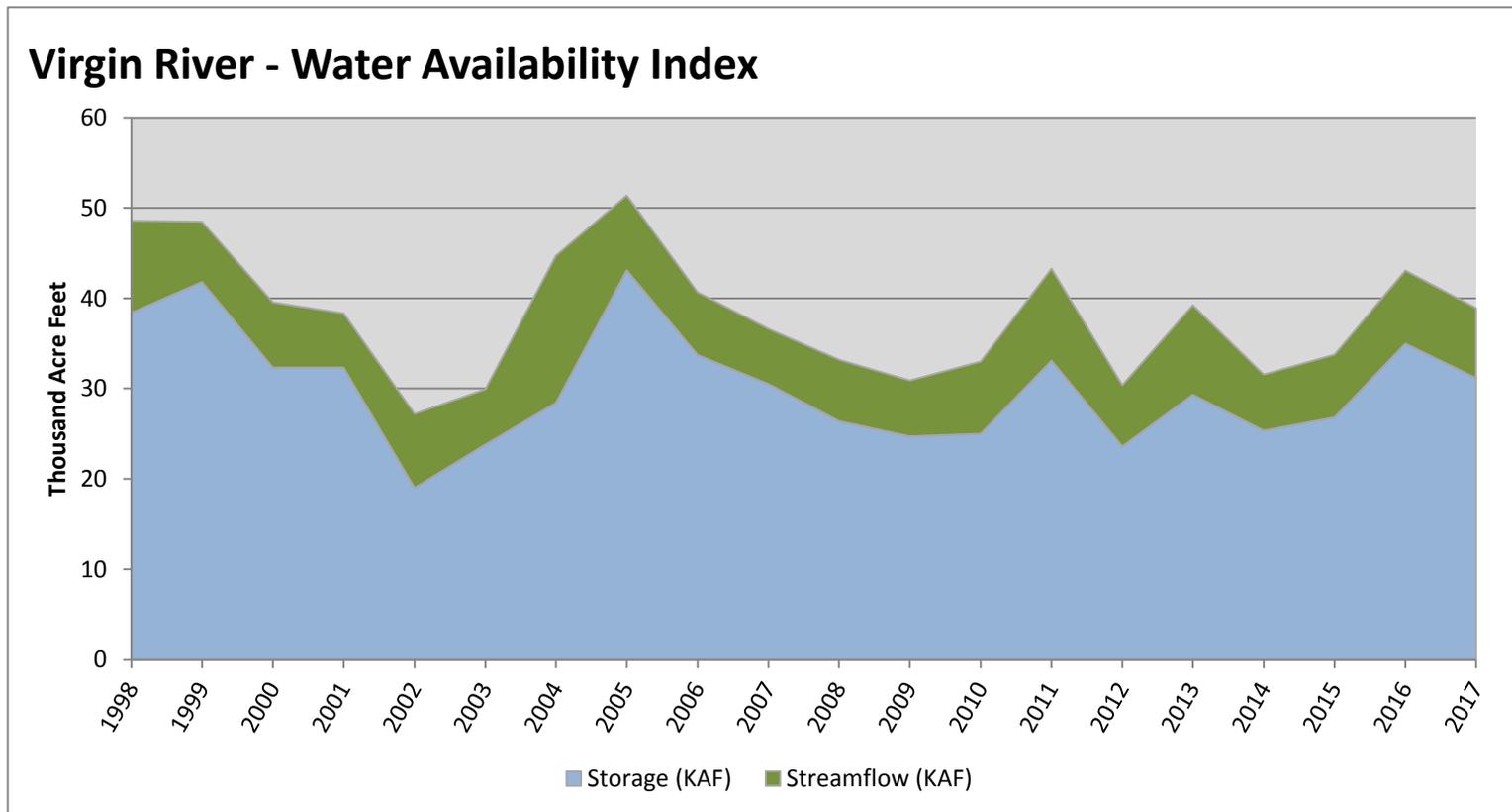
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

December 1, 2017

Water Availability Index

Basin or Region	Nov EOM [^] Storage	November Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Virgin River	31.18	7.73	38.91	52	0.2	07, 01, 13, 00

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



December 1, 2017

Water Availability Index

Basin or Region	Nov EOM* Storage	November Flow	Storage + Flow	Percentile	WAI#	Years with similiar WAI
	KAF^	KAF^	KAF^	%		
Bear River	1059	3.9	1063	92	3.5	84, 98, 83, 82
Woodruff Narrows	45.8	3.9	49.8	84	2.9	98, 82, 97, 83
Little Bear	10.0	5.5	15.5	92	3.5	98, 96, 97, 11
Ogden	68.0	3.2	71.2	71	1.8	06, 85, 95, 97
Weber	152.1	7.3	159.4	86	3.0	97, 93, 98, 95
Provo River	390.1	4.3	394.5	83	2.7	06, 96, 97, 98
Western Uinta	179.0	2.5	181.5	87	3.1	14, 96, 98, 95
Eastern Uinta	30.4	3.1	33.5	39	-0.9	88, 01, 81, 96
Blacks Fork	7.5	2.6	10.1	54	0.4	03, 85, 08, 93
Price	47.3	0.6	47.9	92	3.5	84, 86, 11, 82
Smiths Creek	5.6	1.0	6.6	56	0.5	99, 93, 10, 16
Joes Valley	46.0	1.3	47.2	76	2.2	95, 98, 85, 87
Moab	1.2	0.4	1.6	71	1.8	07, 14, 98, 15
Upper Sevier River	50.7	7.8	58.4	50	0.0	12, 13, 10, 94
San Pitch	0.0	0.4	0.4	18	-2.6	00, 14, 13, 02
Lower Sevier	35.1	9.3	44.4	8	-3.5	16, 03, 10, 04
Beaver	6.4	1.1	7.5	53	0.2	96, 99, 12, 13
Virgin River	31.2	7.7	38.9	52	0.2	07, 01, 13, 00

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

What is a Water Availability Index?

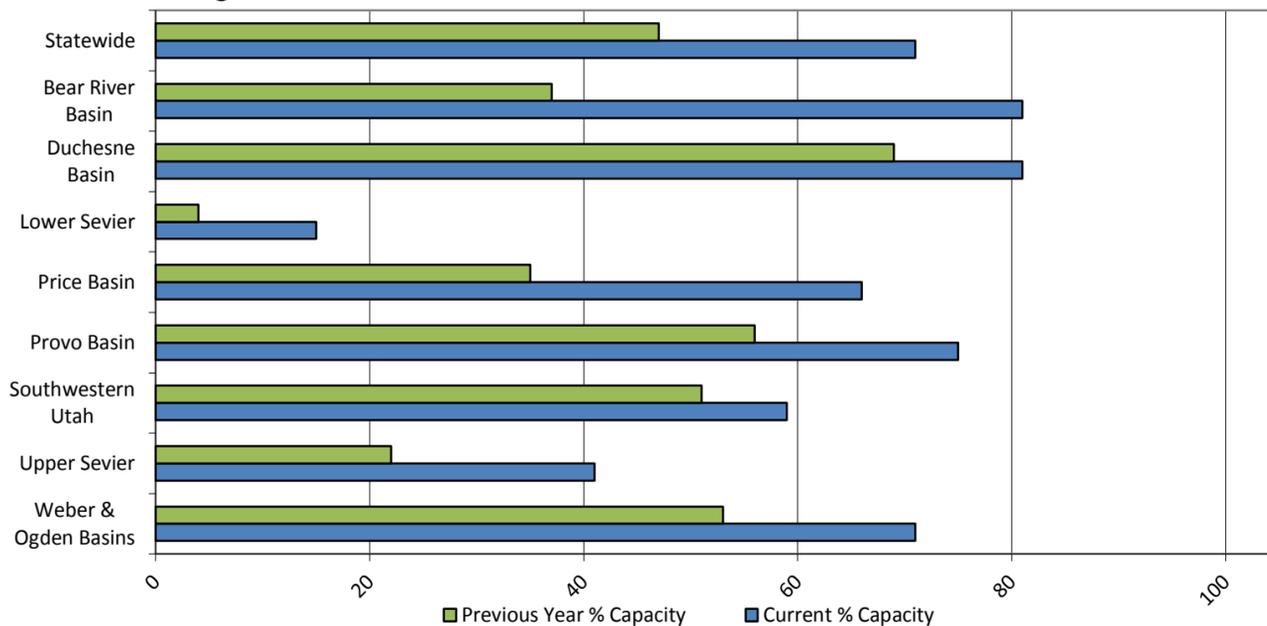
The Water Availability Index (WAI) is an observed hydrologic indicator of current surface water availability within a watershed. The index is calculated by combining current reservoir storage with the previous months streamflow. WAI values are scaled from +4.1 (abundant supply) to -4.1 (extremely dry) 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 November 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	17.3	17.2		25.7	67%	67%			
Causey Reservoir	4.0	3.6	3.0	7.1	57%	51%	42%	135%	120%
Cleveland Lake	2.5	1.3		5.4	46%	24%			
Currant Creek Reservoir	14.7	14.4	14.8	15.5	95%	93%	95%	99%	97%
Deer Creek Reservoir	132.1	114.3	98.6	149.7	88%	76%	66%	134%	116%
East Canyon Reservoir	37.5	22.1	33.3	49.5	76%	45%	67%	113%	66%
Echo Reservoir	41.2	21.6	39.0	73.9	56%	29%	53%	106%	55%
Grantsville Reservoir	1.1	0.6	1.1	3.3	33%	17%	34%	97%	49%
Gunlock	5.4	4.6	5.8	10.4	52%	44%	56%	94%	79%
Gunnison Reservoir	0.0	0.2	7.5	20.3	0%	1%	37%	0%	3%
Huntington North Reservoir	3.1	1.8	1.9	4.2	74%	42%	45%	164%	93%
Hyrum Reservoir	10.0	8.8	9.0	15.3	65%	58%	59%	111%	98%
Joes Valley Reservoir	46.0	29.8	39.5	61.6	75%	48%	64%	116%	75%
Jordanelle Reservoir	258.0	186.2	246.3	320.0	81%	58%	77%	105%	76%
Ken's Lake	1.2	1.7	0.8	2.3	51%	72%	34%	148%	209%
Kolob Reservoir	3.6	5.4		5.6	64%	97%			
Lost Creek Reservoir	17.8	14.3	12.5	22.5	79%	63%	56%	143%	114%
Lower Enterprise	0.8	0.3	0.5	2.6	31%	12%	19%	163%	61%
Miller Flat Reservoir	3.5	1.6		5.2	67%	31%			
Millsite	1.2	9.8	8.7	16.7	7%	59%	52%	13%	113%
Minersville Reservoir	6.4	4.5	10.1	23.3	28%	19%	43%	64%	44%
Moon Lake Reservoir	21.9	19.7	20.4	35.8	61%	55%	57%	108%	97%
Otter Creek Reservoir	28.8	22.6	28.7	52.5	55%	43%	55%	100%	79%
Panguitch Lake	9.5	9.9	10.2	22.3	43%	44%	46%	93%	97%
Pineview Reservoir	64.0	60.5	52.9	110.1	58%	55%	48%	121%	114%
Piute Reservoir	21.9	0.0	33.1	71.8	30%	0%	46%	66%	0%
Porcupine Reservoir	10.9	5.3	5.8	11.3	96%	47%	51%	188%	91%
Quail Creek	25.7	30.4	23.4	40.0	64%	76%	59%	110%	130%
Red Fleet Reservoir	18.6	20.0	17.2	25.7	72%	78%	67%	108%	116%
Rockport Reservoir	50.7	25.2	36.3	60.9	83%	41%	60%	140%	69%
Sand Hollow Reservoir	44.3	45.5		50.0	89%	91%			
Scofield Reservoir	47.3	10.6	27.2	65.8	72%	16%	41%	174%	39%
Settlement Canyon Reservoir	0.4	0.3	0.6	1.0	35%	30%	56%	63%	54%
Sevier Bridge Reservoir	35.1	8.3	127.1	236.0	15%	4%	54%	28%	7%
Smith And Morehouse Reservoir	4.8	5.4	3.7	8.1	59%	67%	46%	129%	146%
Starvation Reservoir	139.9	132.6	130.6	165.3	85%	80%	79%	107%	102%
Stateline Reservoir	5.6	5.6	5.6	12.0	47%	47%	47%	100%	101%
Steinaker Reservoir	11.8	17.9	18.0	33.4	35%	54%	54%	66%	100%
Strawberry Reservoir	920.8	764.6	656.9	1105.9	83%	69%	59%	140%	116%
Upper Enterprise	1.6	0.4	2.1	10.0	16%	4%	21%	76%	17%
Upper Stillwater Reservoir	17.2	12.3	11.4	32.5	53%	38%	35%	151%	108%
Utah Lake	520.3	303.8	684.5	870.9	60%	35%	79%	76%	44%
Vernon Creek Reservoir		0.1	0.3	0.6		20%	45%		44%
Willard Bay	166.4	138.0	129.2	215.0	77%	64%	60%	129%	107%
Woodruff Creek	1.2	2.0	1.1	4.0	30%	49%	27%	112%	182%
Woodruff Narrows Reservoir	45.8	48.9	24.2	57.3	80%	85%	42%	189%	202%
Meeks Cabin Reservoir	7.5	7.9	10.0	32.5	23%	24%	31%	75%	79%
Bear Lake	1058.6	446.8	586.4	1302.0	81%	34%	45%	181%	76%
Basin-wide Total	3816.8	2537.3	3178.9	5380.3	71%	47%	59%	120%	80%
# of reservoirs	42	42	42	42	42	42	42	42	42

Reservoir Storage



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