

Utah Climate and Water Report

June 2016



Spooky SCAN station near Escalante, Utah

Photo by Kent Sutcliffe

Utah General Summary

June 1, 2016

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)

Valley precipitation in May averaged 1.3 inches across the state, bringing the seasonal (Oct-May) total to 8.6 inches. Precipitation ranged widely across the state; from 0.9 inches in the South Central to 3.3 inches in the Northern Mountains. Soil moisture conditions vary widely within the state; from near maximum levels in the Northern Mountains, to below minimum levels in the Western and Dixie region. Statewide soil moisture is at 43% – much lower than the 65% value for this time last year – a clear reflection of last year's exceptionally wet May. Soil temperatures rose rapidly in the last week of May and are near normal. Overall, precipitation-to-date totals are much higher this water year when compared to 2015 values.

Current Mountain Conditions (SNOTEL)

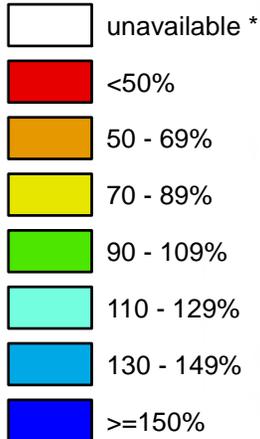
June 1 snowpack is hanging on by a thread at a few SNOTEL sites above 9000 feet with little to no snow at elevations below 8000 feet. We had some good weekly rain storms throughout May with over 4 inches of rain at many of the high elevation sites in Northern Utah and 1-3 inches throughout most of Southern Utah. Precipitation for the month of May ranged from 56% in Southwestern Utah to 181% in the Northeastern Uintas bringing the seasonal precipitation accumulation to 98% of average for the State of Utah. Melted-out sites are showing rising soil temperatures and declining soil moisture. Streamflow in Utah has peaked at low and mid elevation watersheds and the higher elevation streams will likely peak in the next few days. Storage in 48 of Utah's key irrigation reservoirs is at 64% of capacity, 1% less than last year. Reservoir storage by Basin: Bear – 52%, Weber – 78%, Provo – 69%, Duchesne – 77%, Price San Rafael – 56%, Upper Sevier – 64%, Southwestern Utah – 50% of capacity. Streamflows are expected to be below to near normal across the state.

Utah

SNOTEL Water Year (Oct 1) to Date Precipitation % of Normal

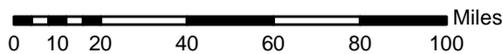
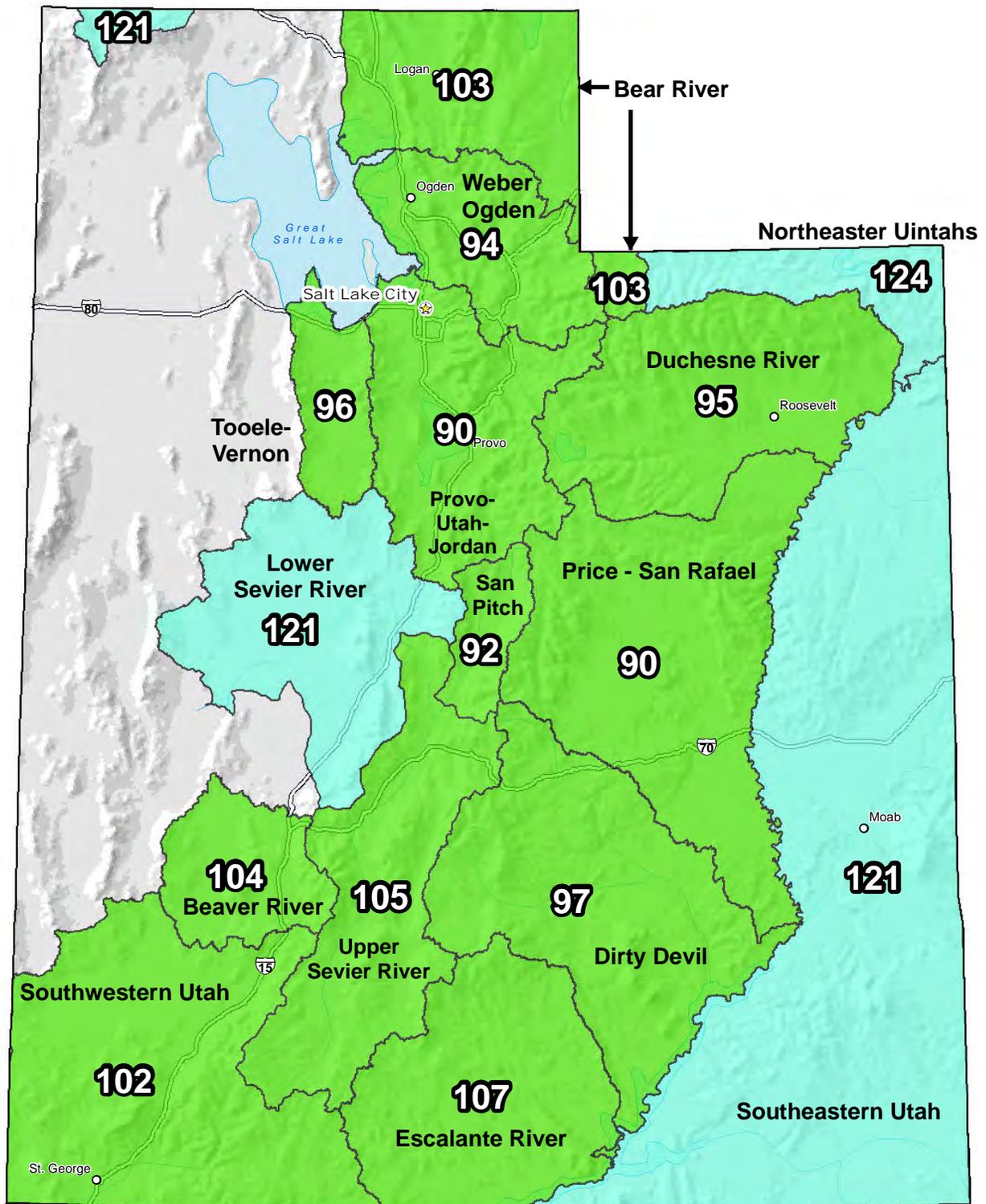
Jun 01, 2016

Water Year (Oct 1) to Date Precipitation Basin-wide Percent of 1981-2010 Average



* Data unavailable at time of posting or measurement is not representative at this time of year

**Provisional Data
Subject to Revision**

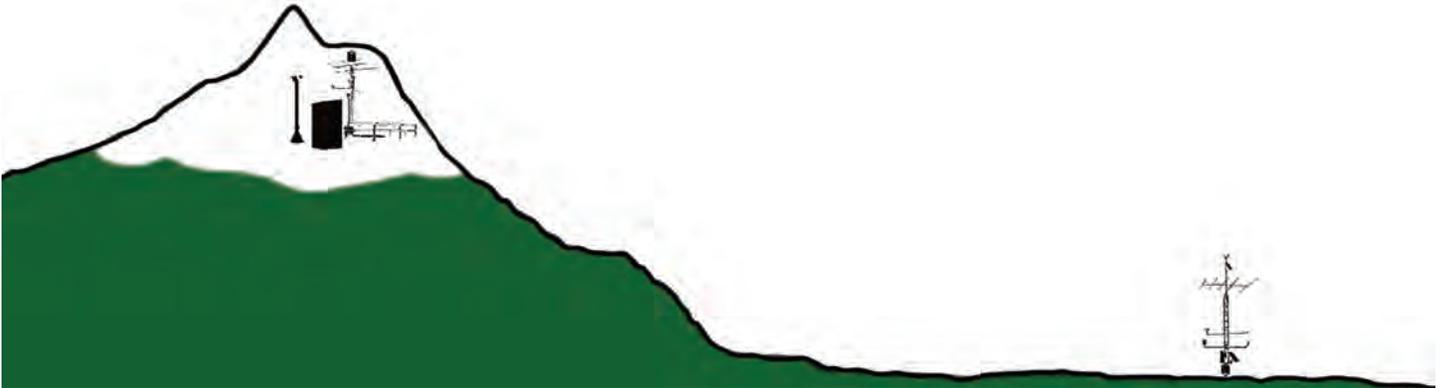


The water year to date precipitation percent of normal represents the accumulated precipitation found at selected SNOTEL sites in or near the basin compared to the average value for those sites on this day. Data based on the first reading of the day (typically 00:00).

Prepared by:
USDA/NRCS National Water and Climate Center
Portland, Oregon
<http://www.wcc.nrcs.usda.gov>

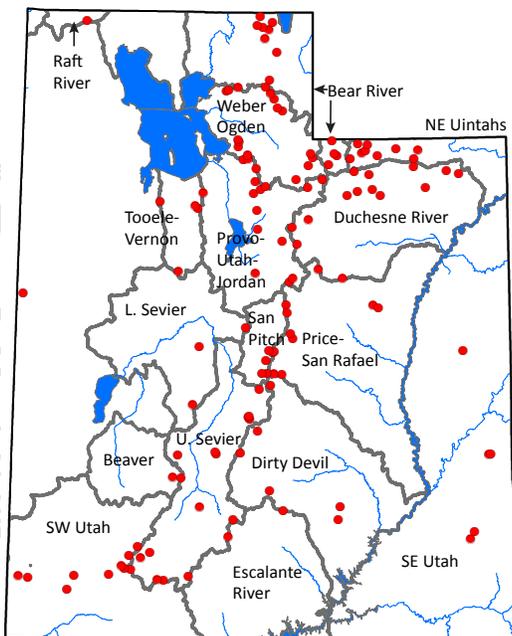
Utah Climate and Water Report

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.



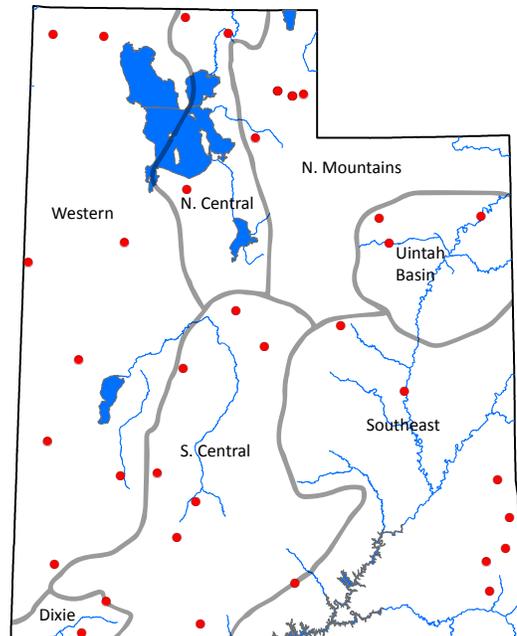
SNOTEL

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



SCAN

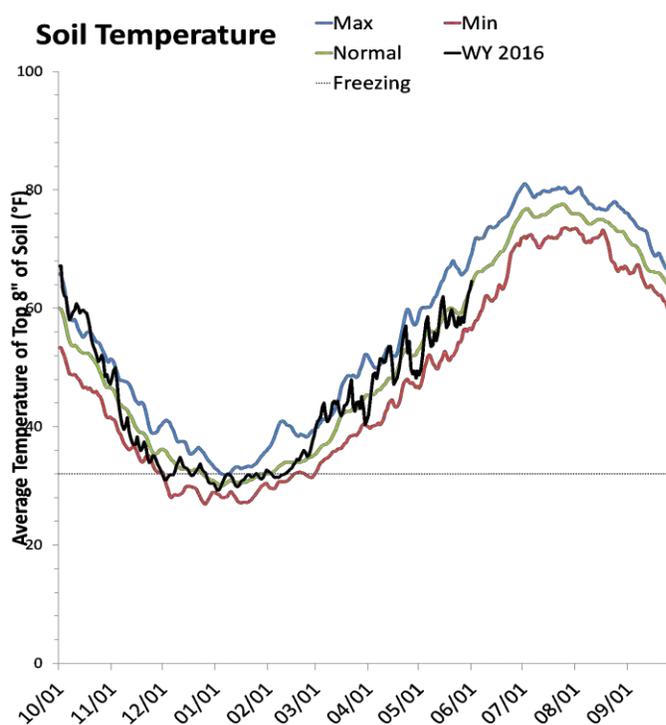
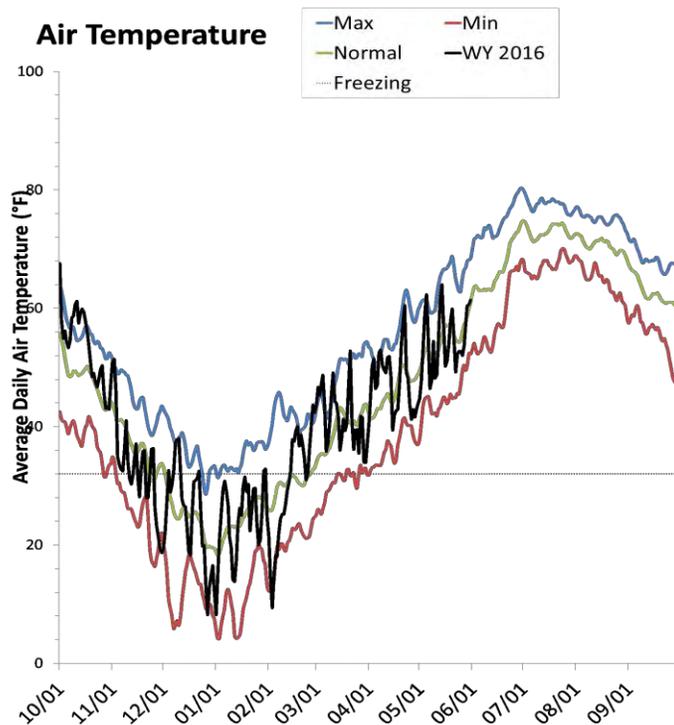
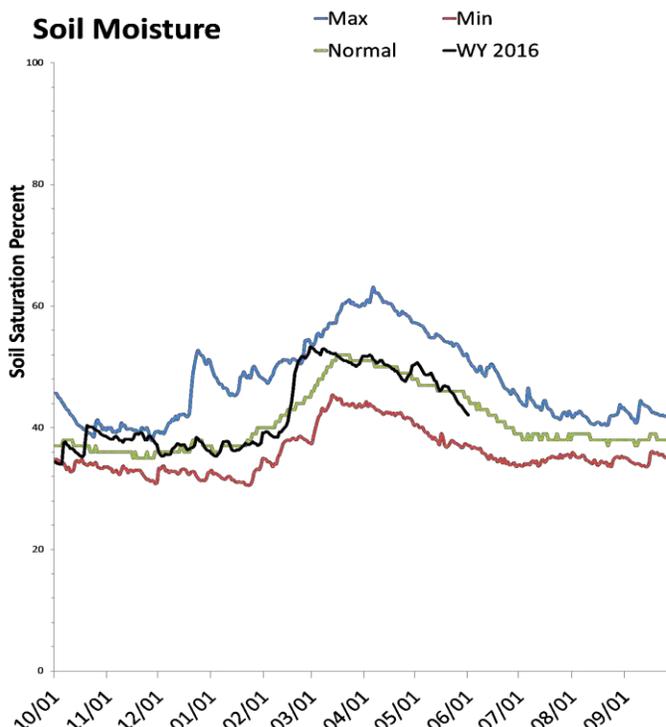
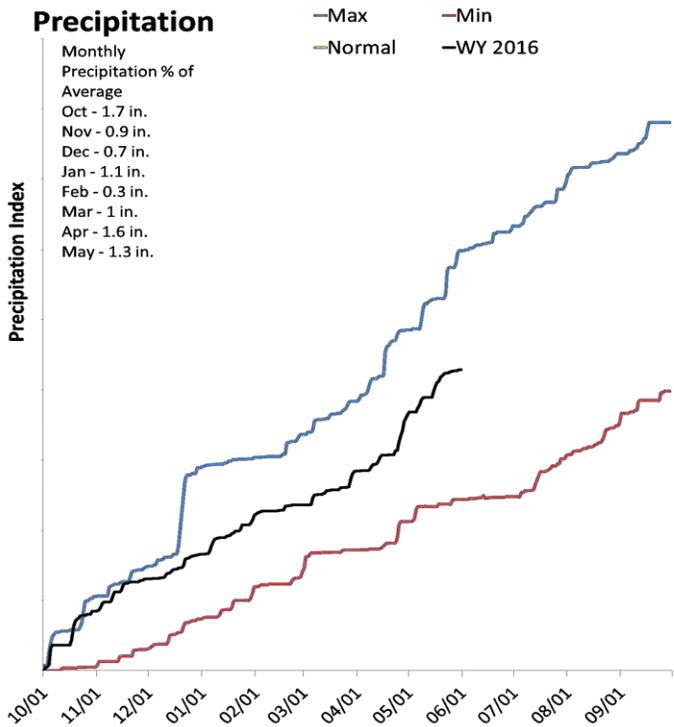
- Agricultural and range lands.
- Mid elevation (3 – 7,000 ft).
- Irrigation efficiency and rangeland productivity.
- Installed on spatially representative soils.



Statewide SCAN

6/1/2016

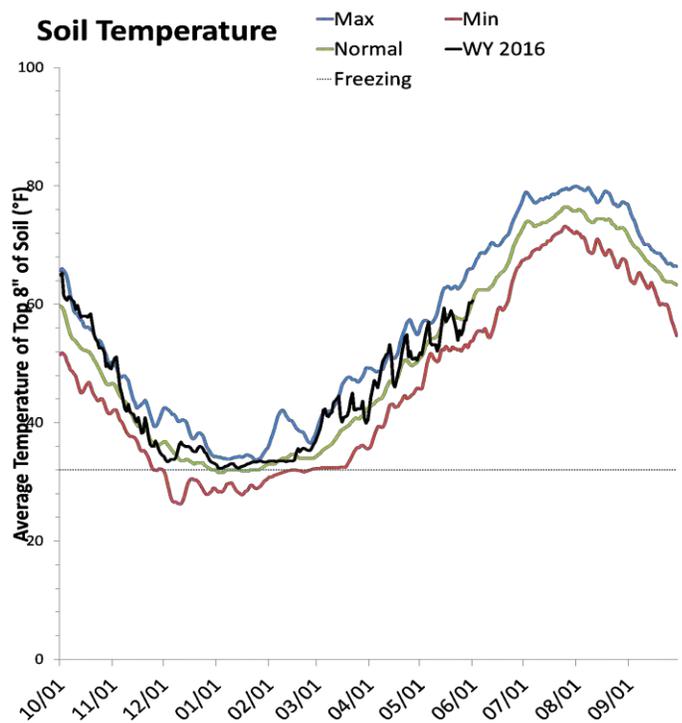
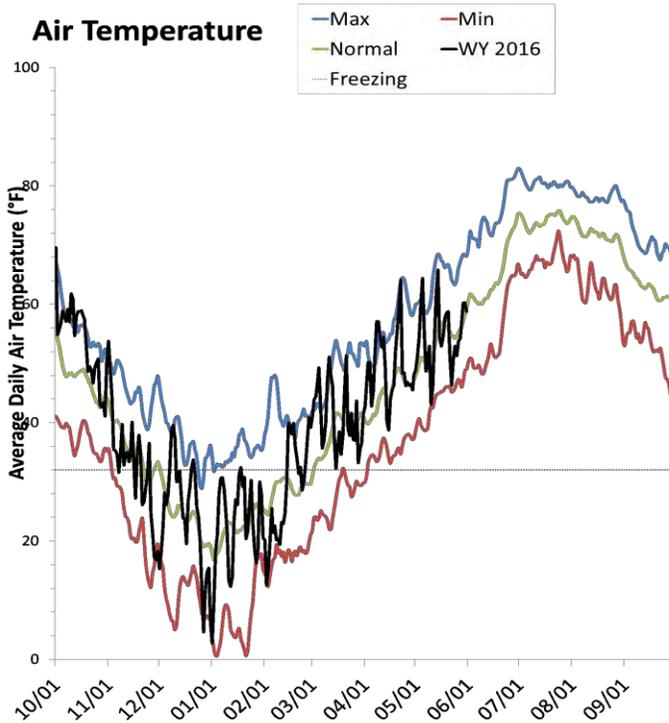
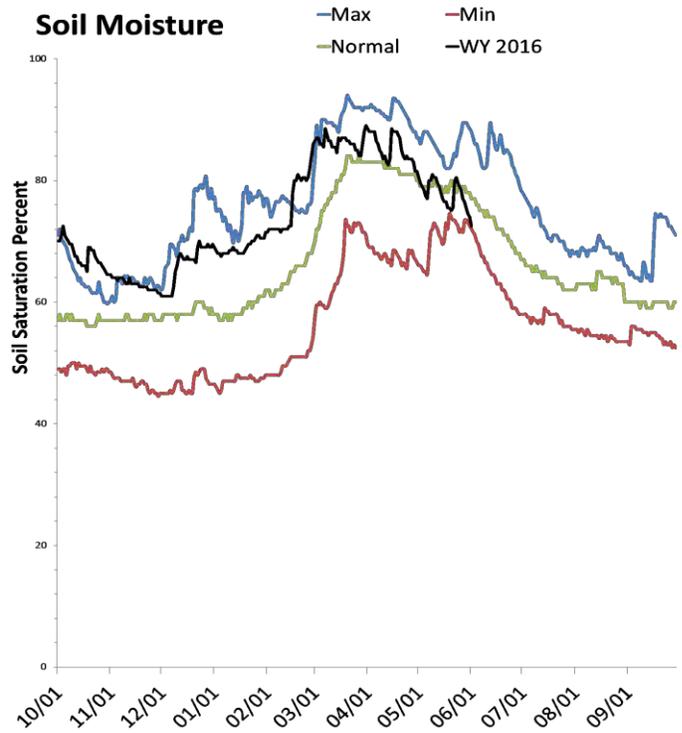
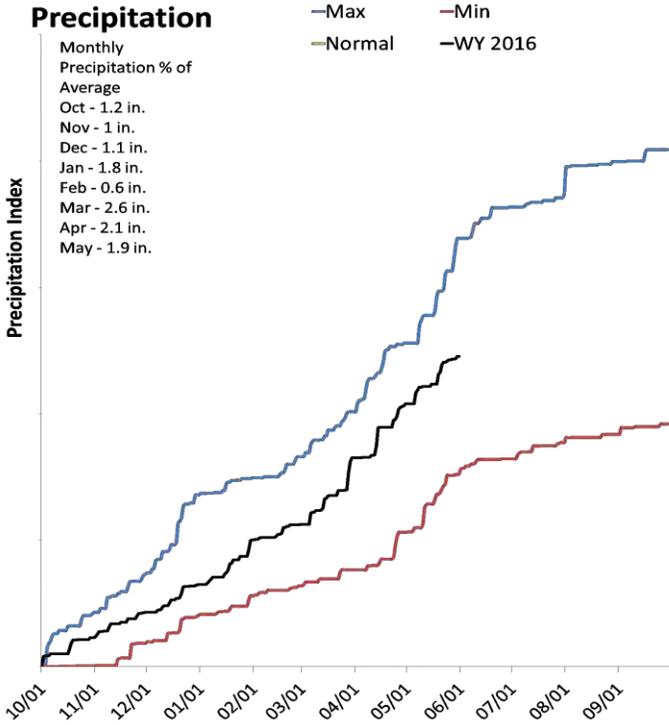
The average precipitation at SCAN sites within Utah was 1.3 inches in May, which brings the seasonal accumulation (Oct-May) to 8.6 inches. Soil moisture is at 43% compared to 65% last year.



North Central

6/1/2016

The average precipitation in May at SCAN sites within the basin was 1.9 inches, which brings the seasonal accumulation (Oct-May) to 12.3 inches. Soil moisture is at 73% compared to 65% last year.



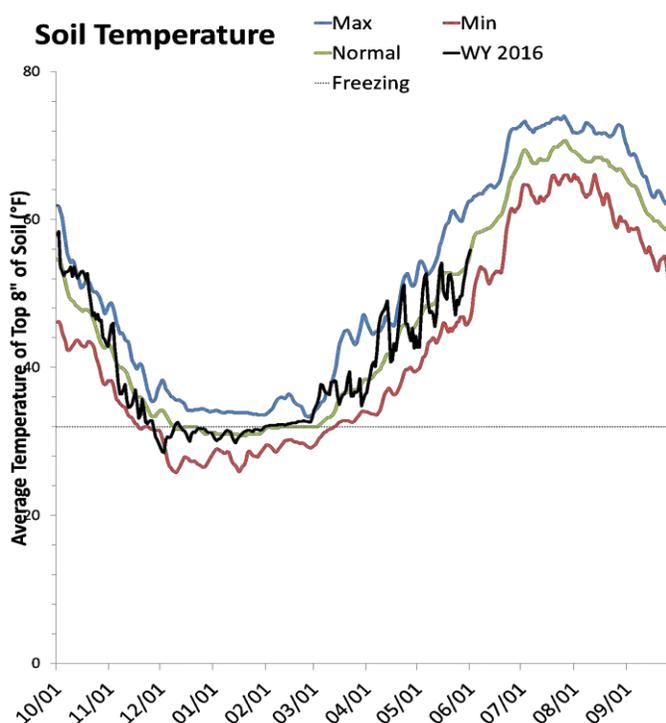
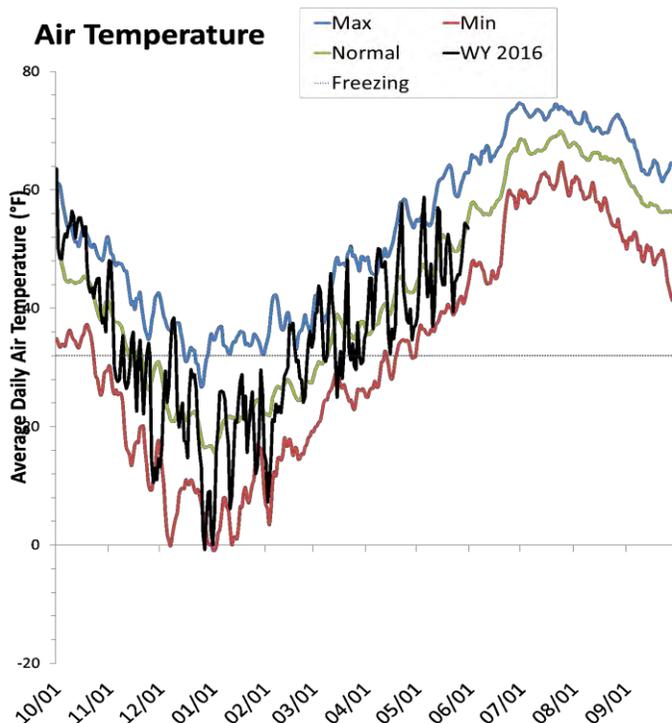
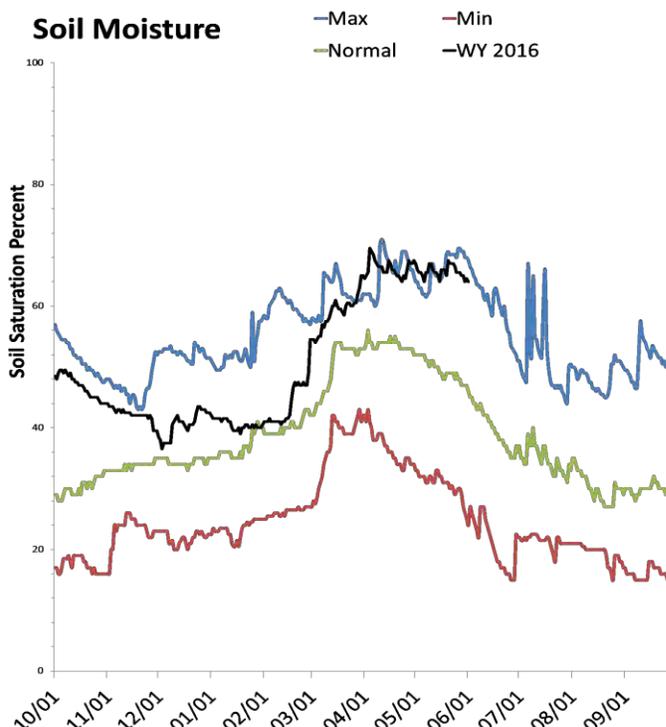
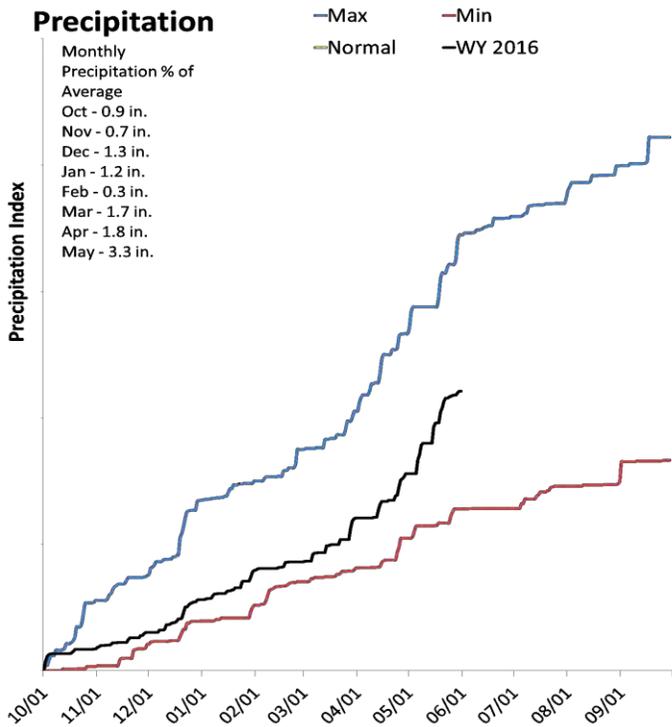
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

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

Northern Mountains

6/1/2016

The average precipitation in May at SCAN sites within the basin was 3.3 inches, which brings the seasonal accumulation (Oct-May) to 11.1 inches. Soil moisture is at 62% compared to 65% last year.



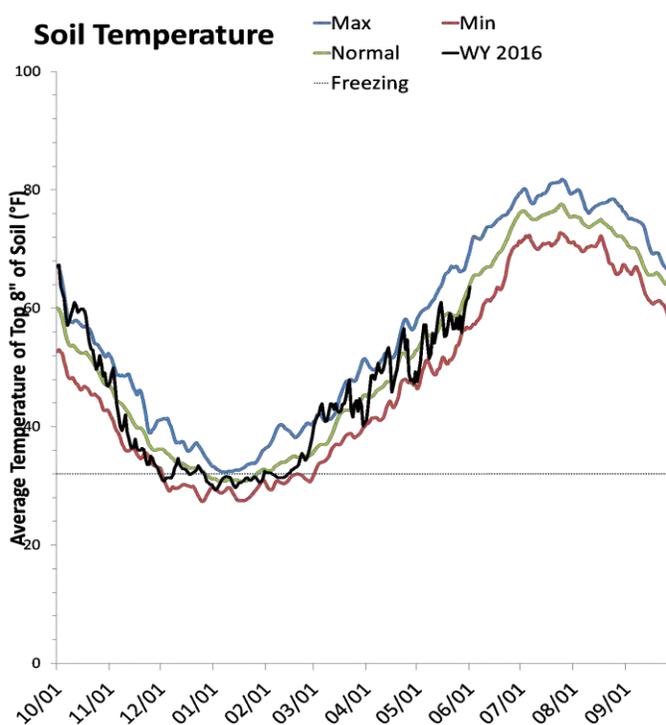
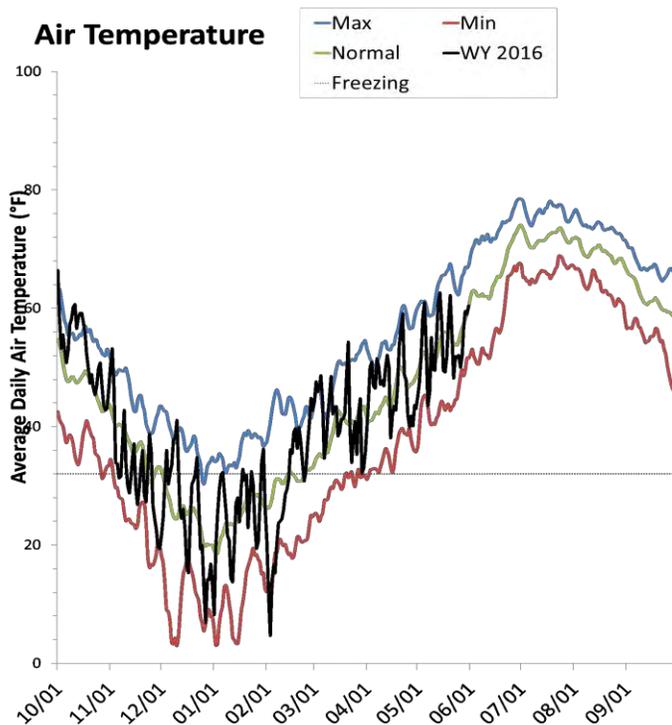
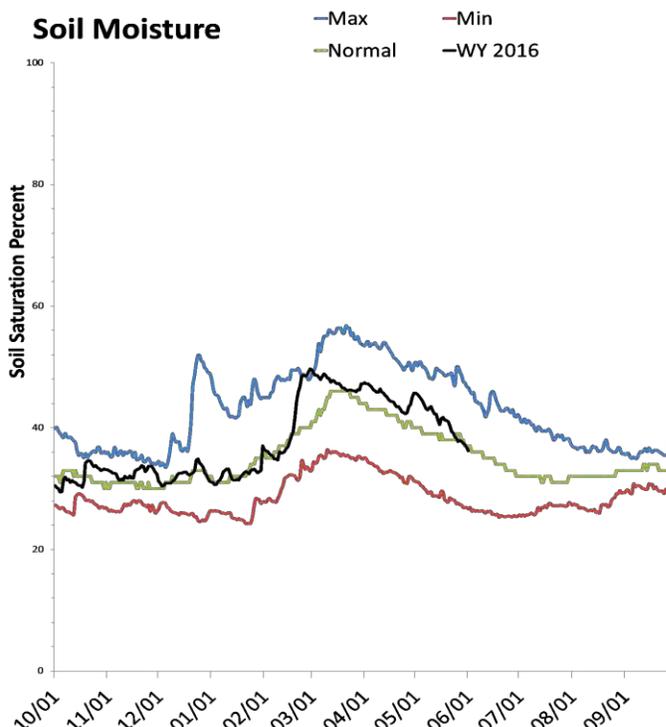
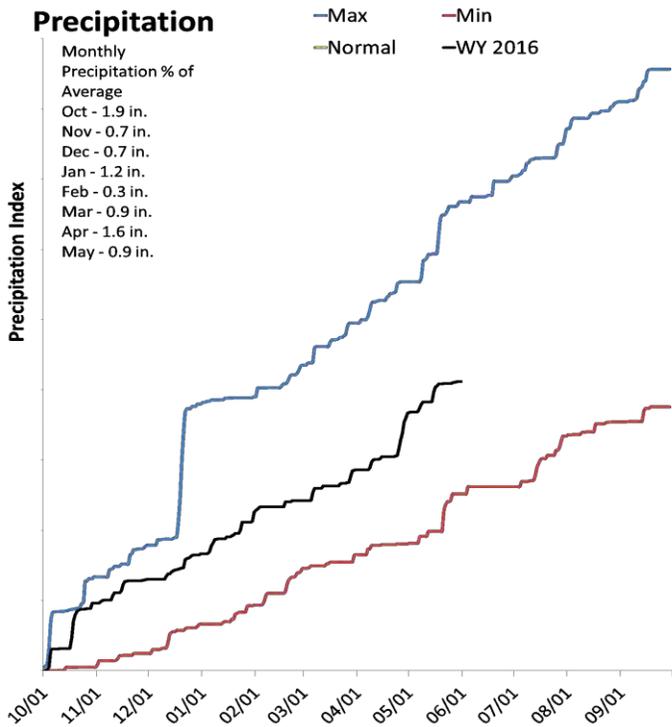
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

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South Central

6/1/2016

The average precipitation in May at SCAN sites within the basin was 0.9 inches, which brings the seasonal accumulation (Oct-May) to 8.2 inches. Soil moisture is at 37% compared to 65% last year.



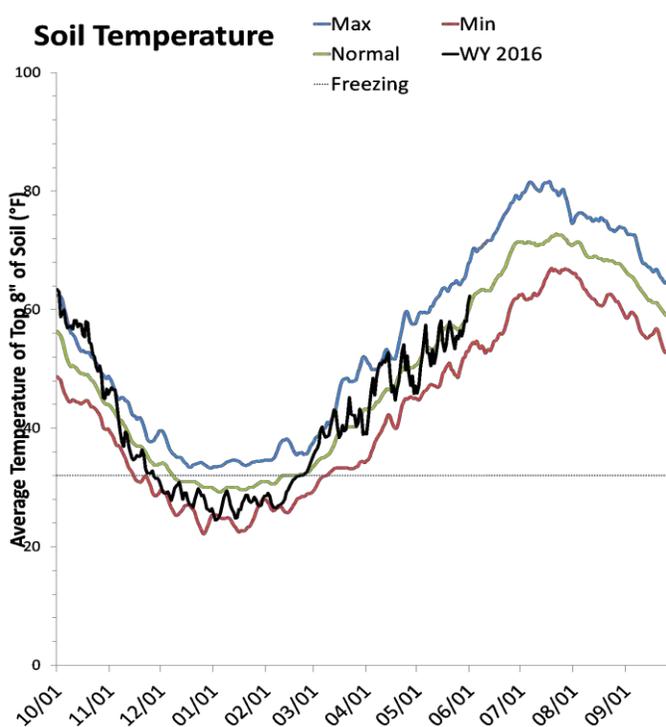
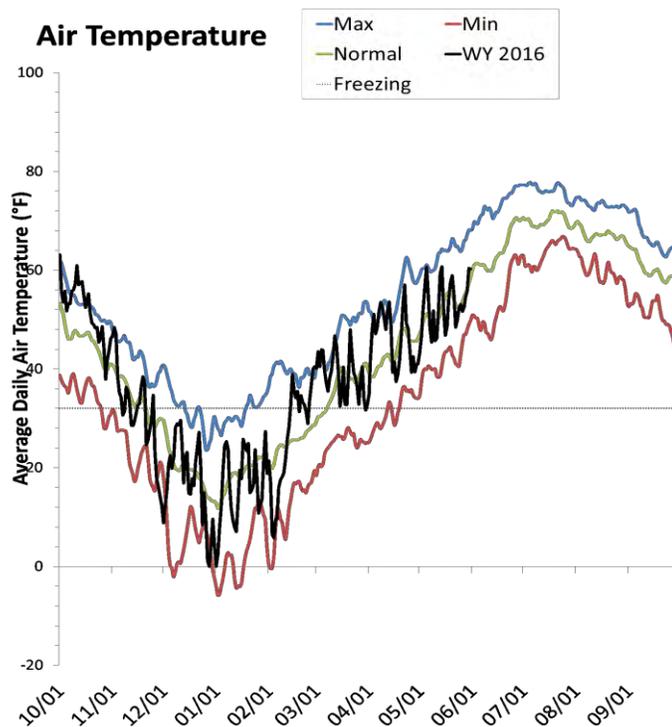
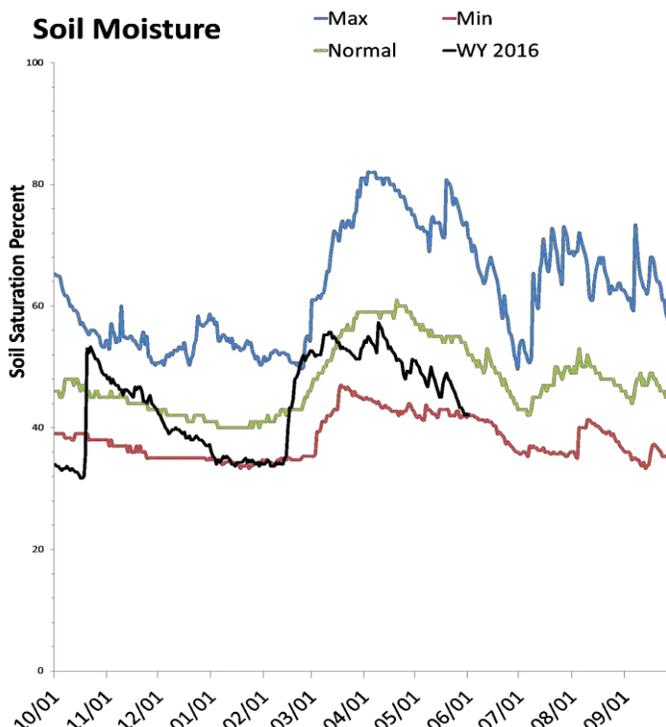
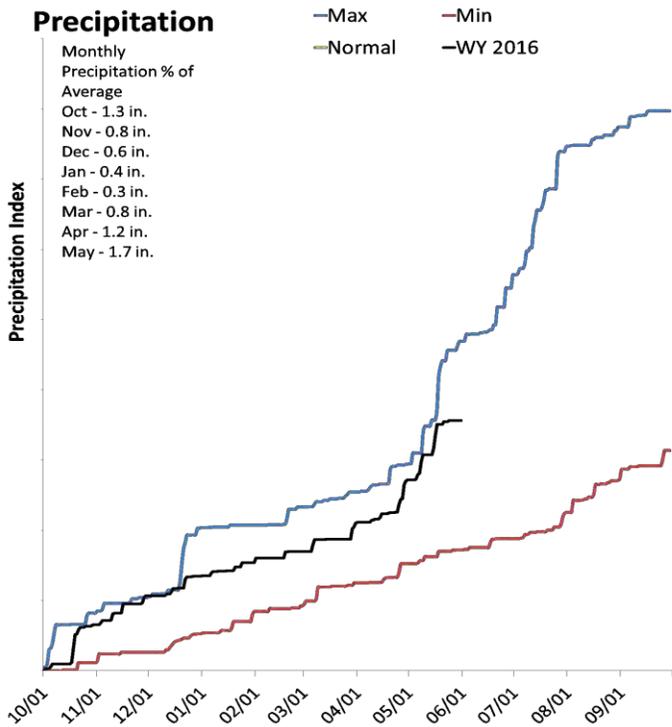
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

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Uintah Basin

6/1/2016

The average precipitation in May at SCAN sites within the basin was 1.7 inches, which brings the seasonal accumulation (Oct-May) to 7.1 inches. Soil moisture is at 42% compared to 65% last year.



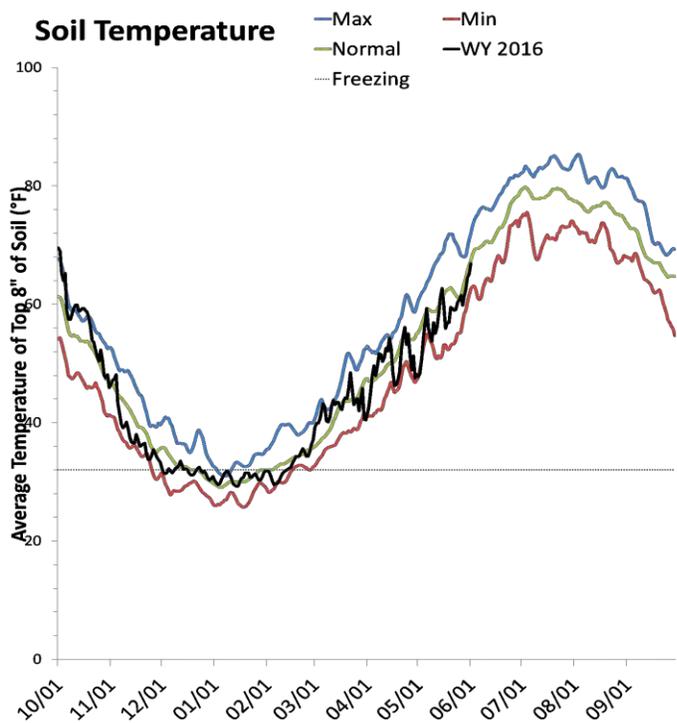
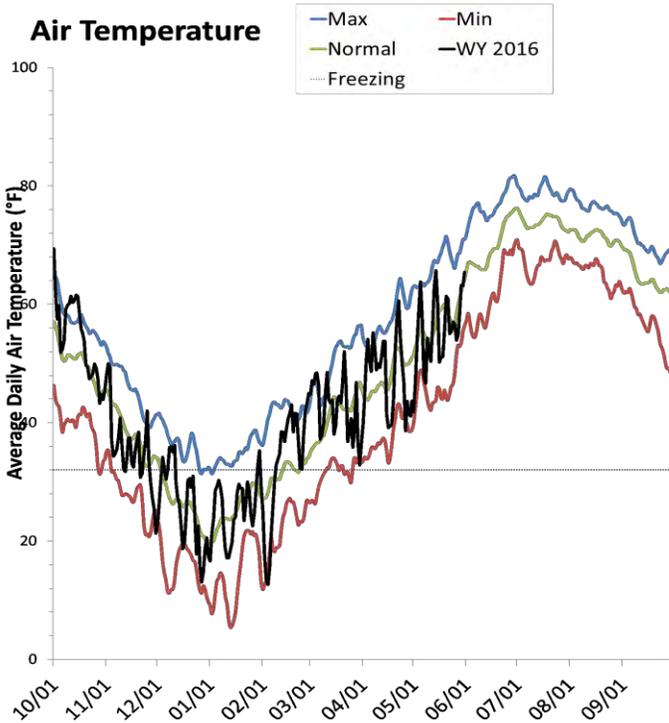
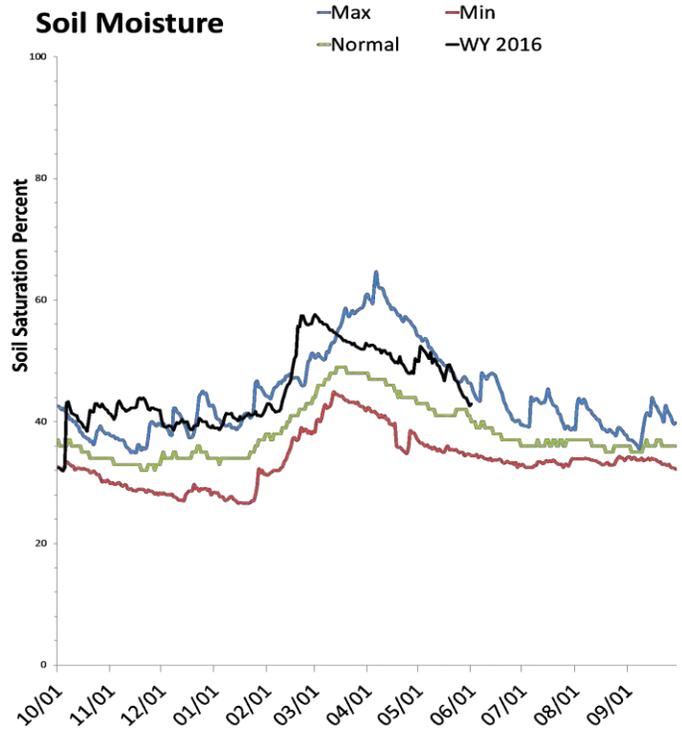
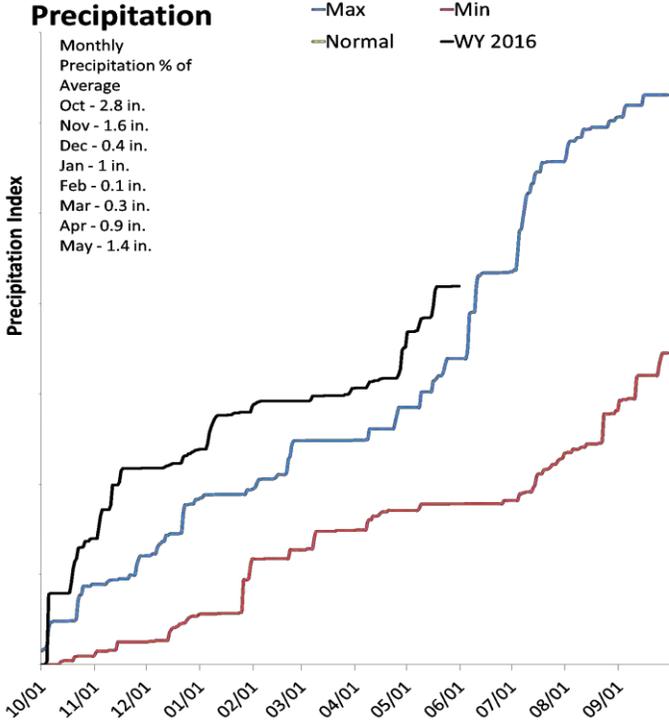
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

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Southeast

6/1/2016

The average precipitation in May at SCAN sites within the basin was 1.4 inches, which brings the seasonal accumulation (Oct-May) to 8.4 inches. Soil moisture is at 43% compared to 65% last year.



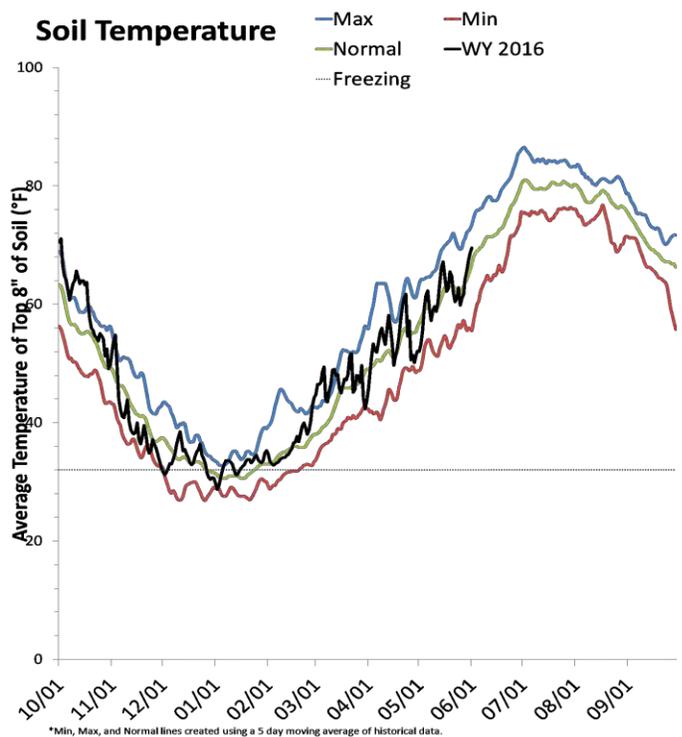
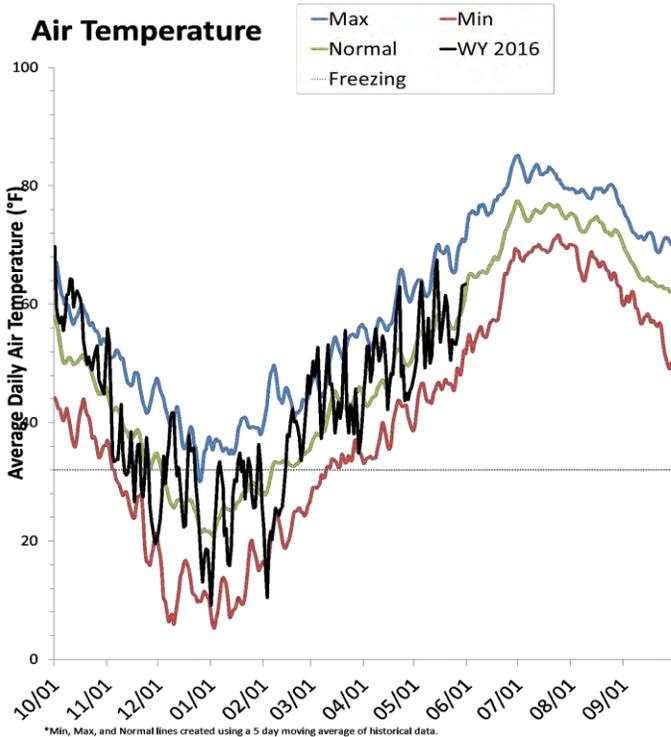
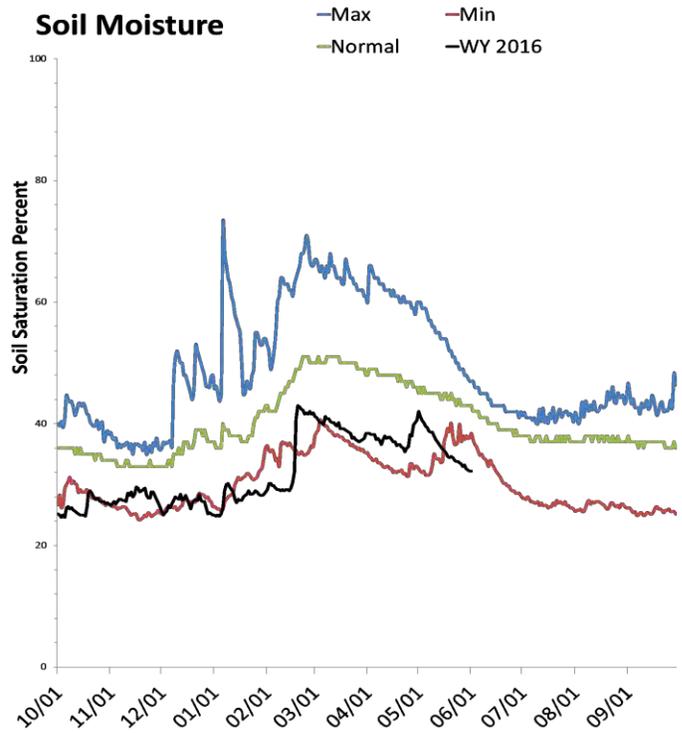
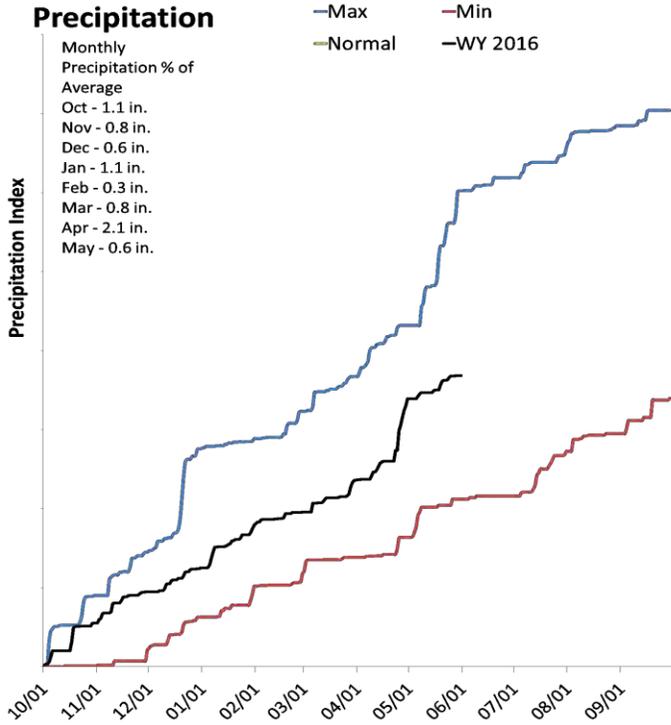
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

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Western and Dixie

6/1/2016

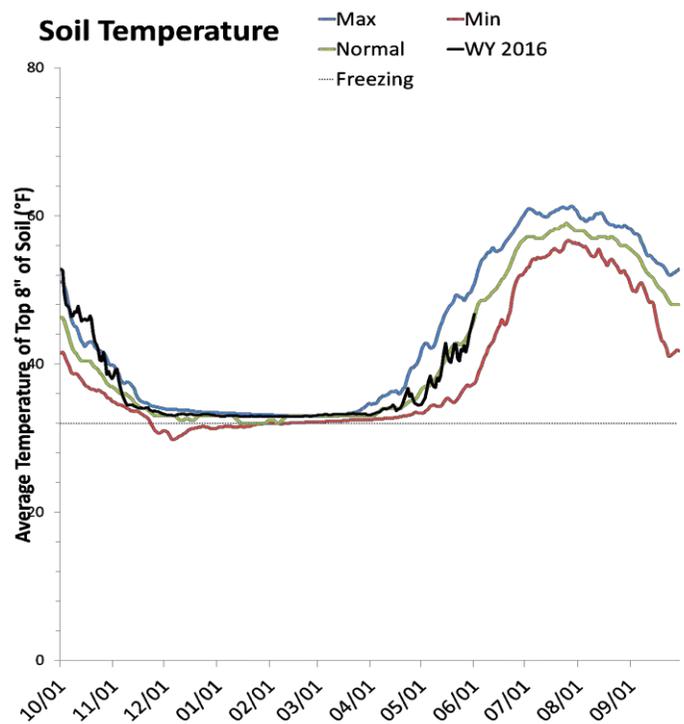
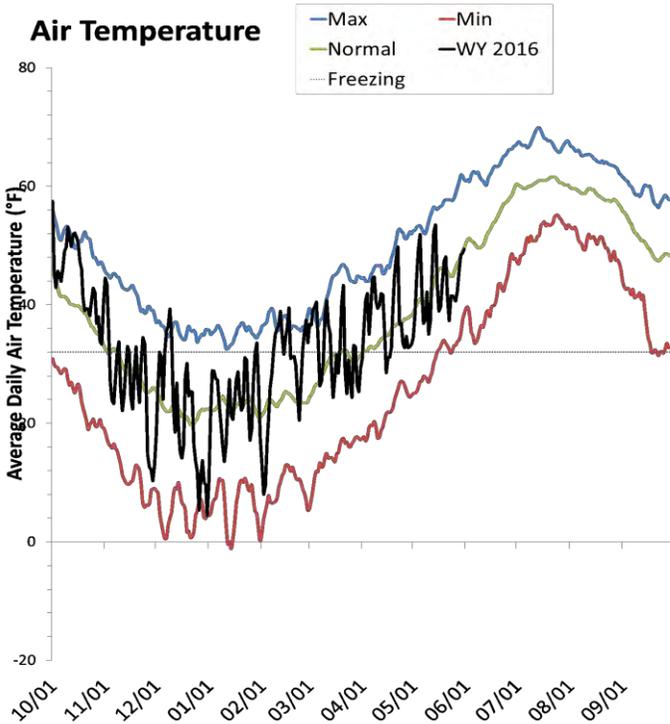
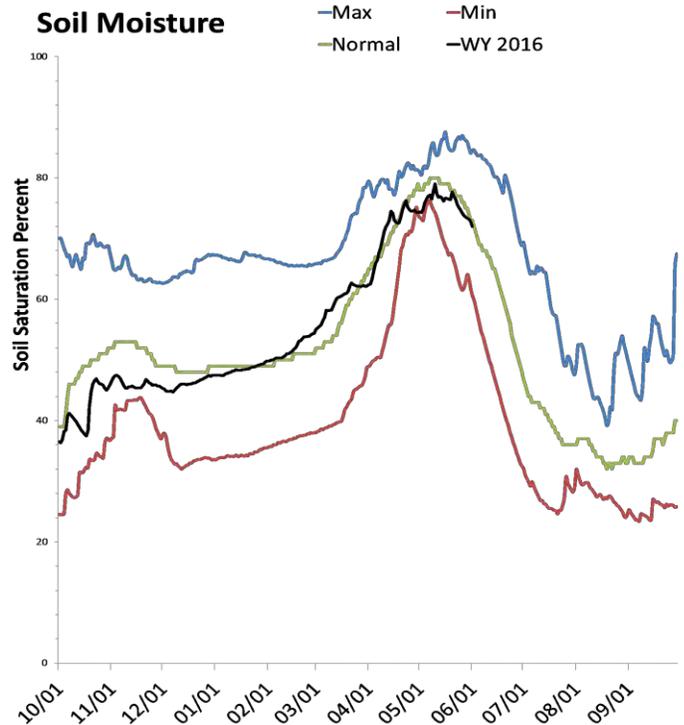
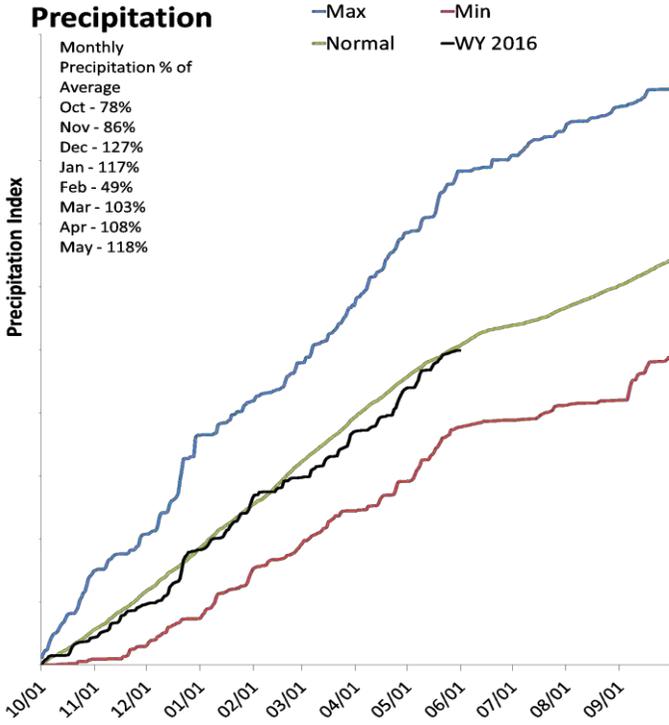
The average precipitation in May at SCAN sites within the basin was 0.6 inches, which brings the seasonal accumulation (Oct-May) to 7.4 inches. Soil moisture is at 32% compared to 65% last year.



Statewide SNOTEL

6/1/2016

Precipitation at SNOTEL sites during May was above average at 118%, which brings the seasonal accumulation (Oct-May) to 98% of average. Soil moisture is at 74% compared to 69% last year. Reservoir storage is at 64% of capacity, compared to 65% last year.



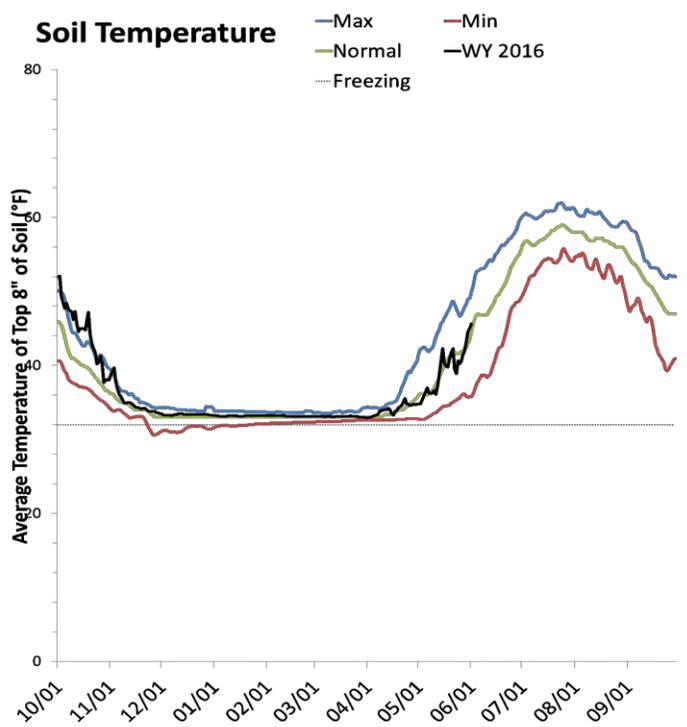
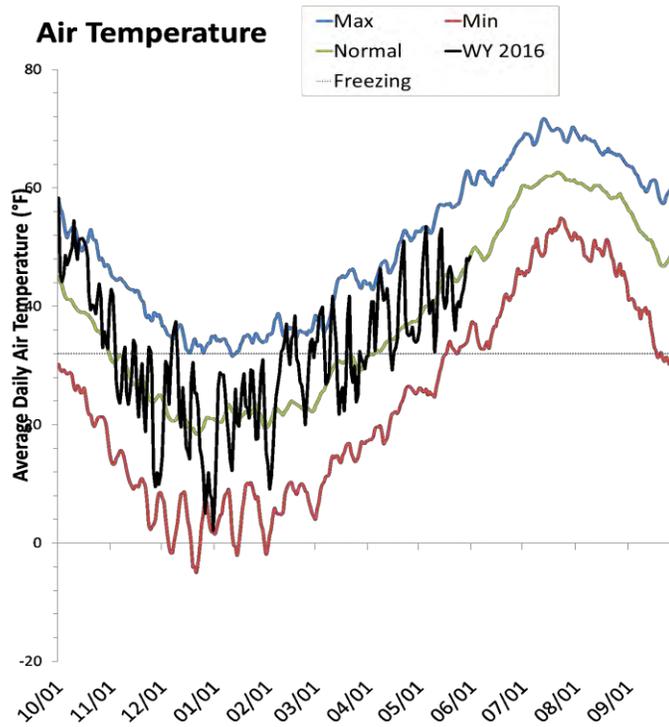
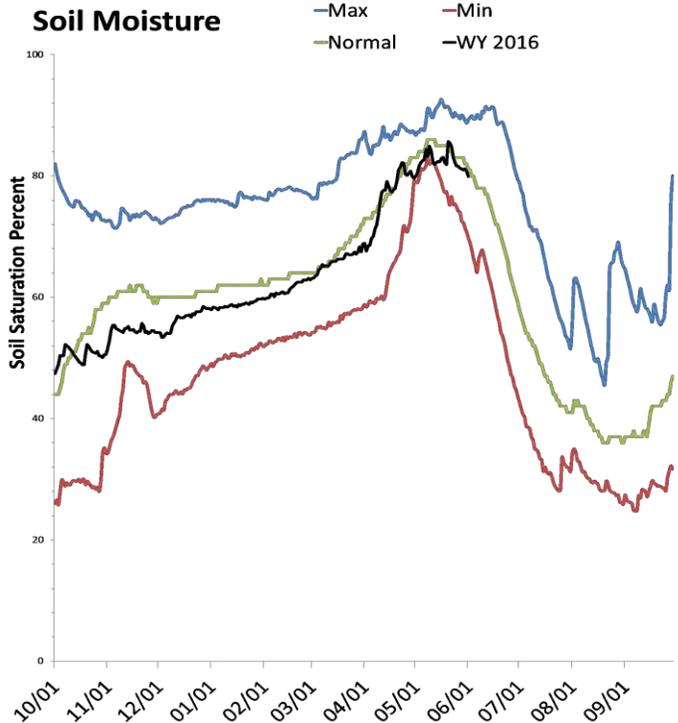
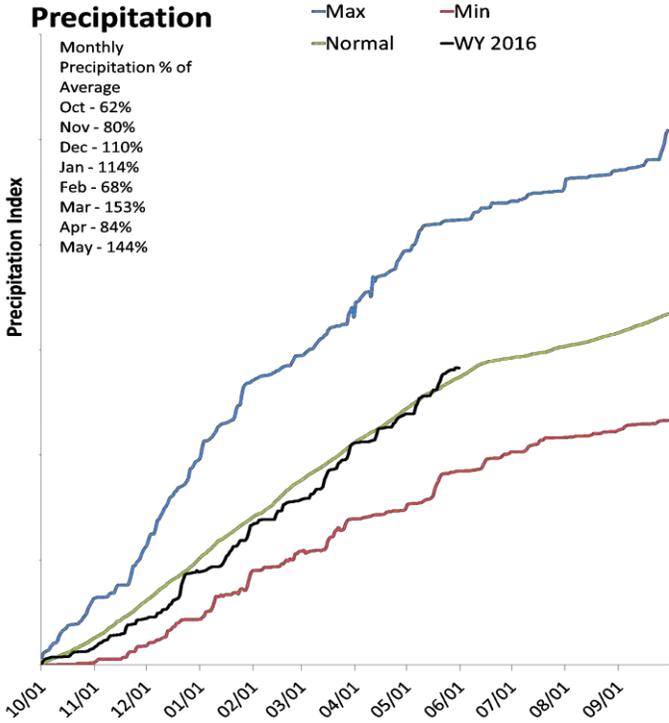
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

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Bear River Basin

6/1/2016

Precipitation in May was much above average at 146%, which brings the seasonal accumulation (Oct-May) to 103% of average. Soil moisture is at 80% compared to 78% last year. Reservoir storage is at 52% of capacity, compared to 52% last year. The water availability index for the Bear River is 49%, 65% for Woodruff Narrows and 52% for the Little Bear.



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

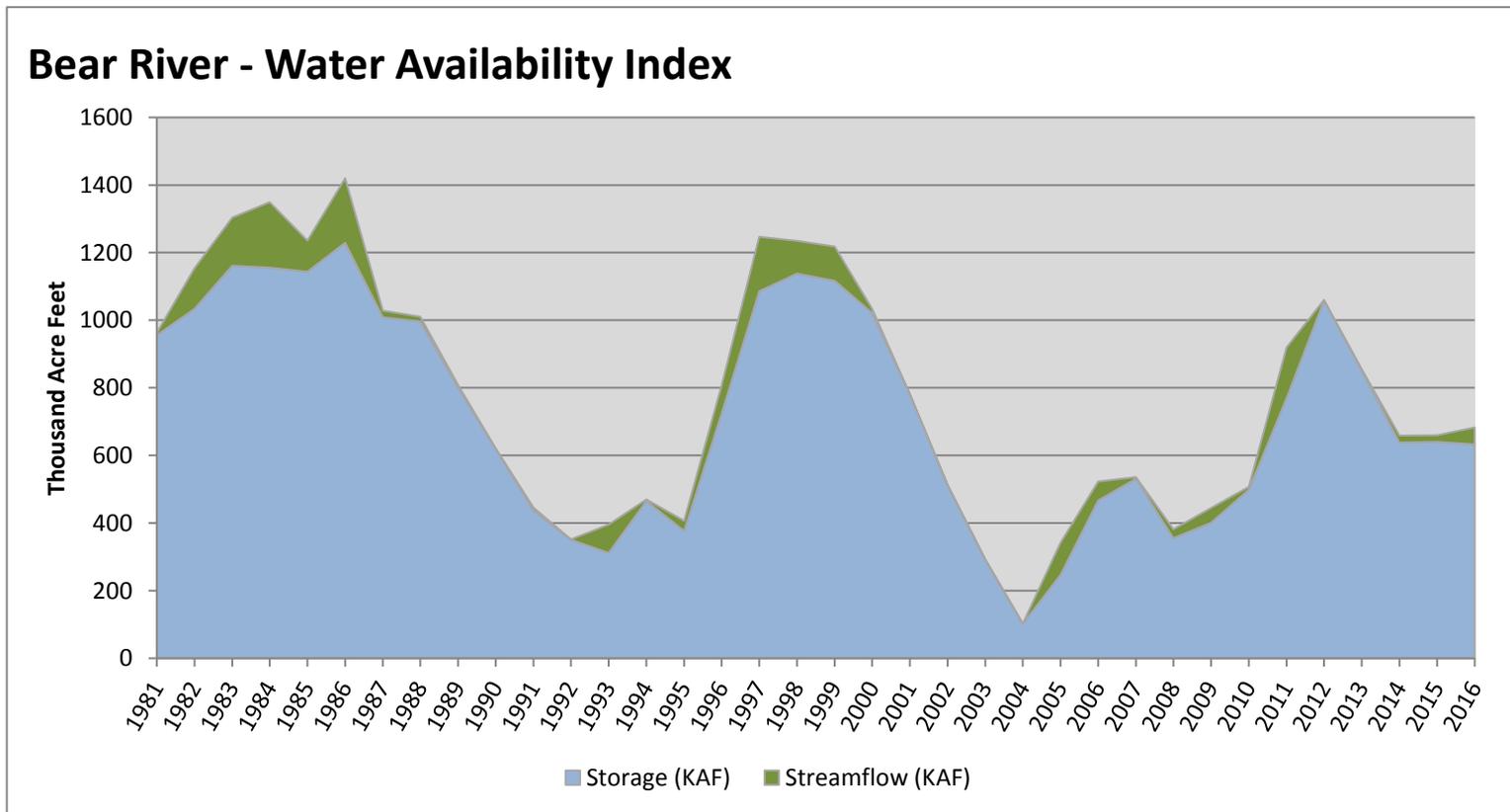
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

June 1, 2016

Water Availability Index

Basin or Region	May EOM [*] Storage	May Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Bear River	632.91	50.05	682.96	49	-0.11	14, 15, 01, 96

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

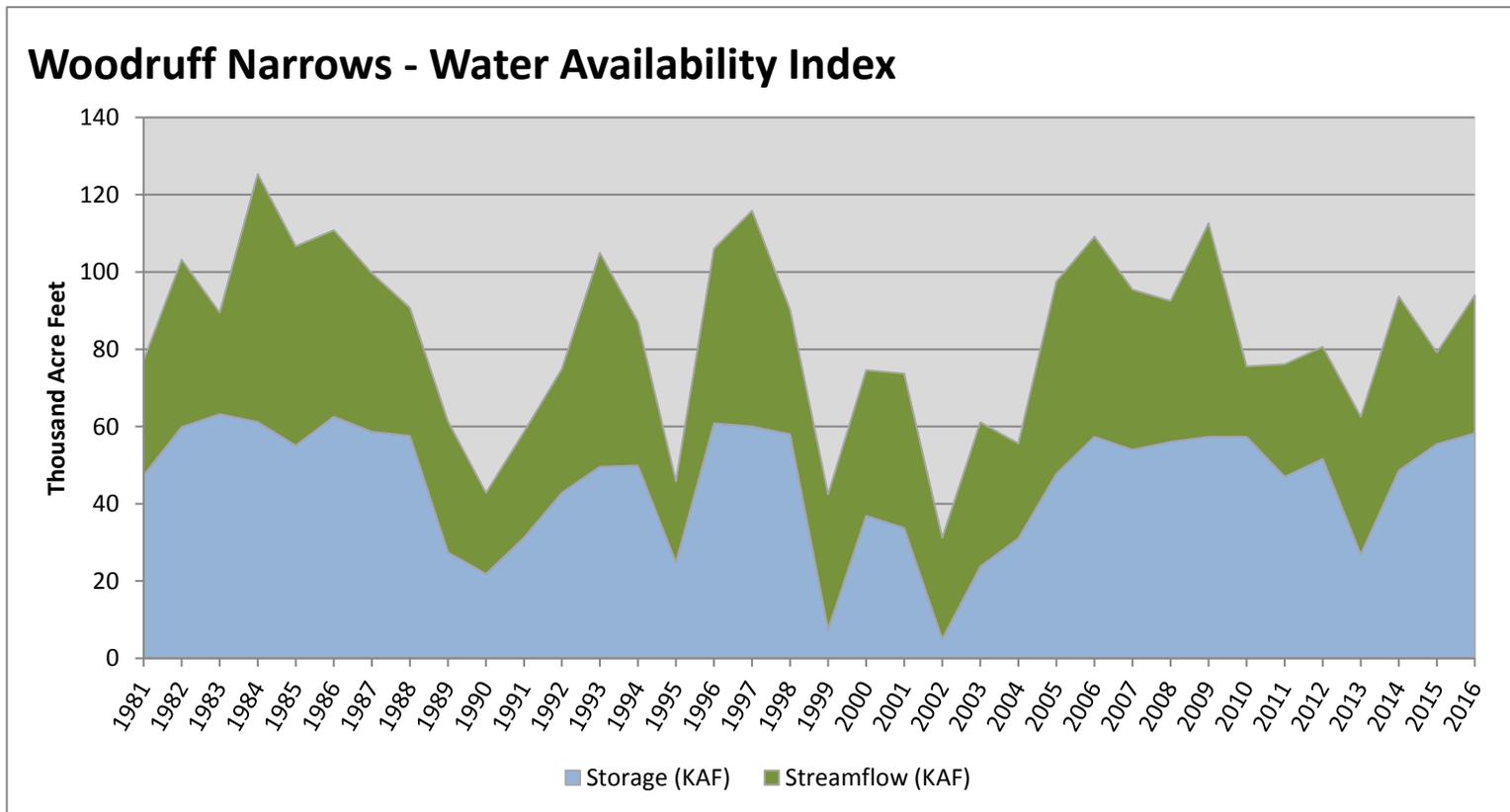


June 1, 2016

Water Availability Index

Basin or Region	May EOM* Storage	May Flow	Storage + Flow	Percentile	WAI#	Years with similiar WAI
	KAF^	KAF^	KAF^	%		
Woodruff Narrows	58.25	35.71	93.96	65	1.24	08, 14, 07, 05

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

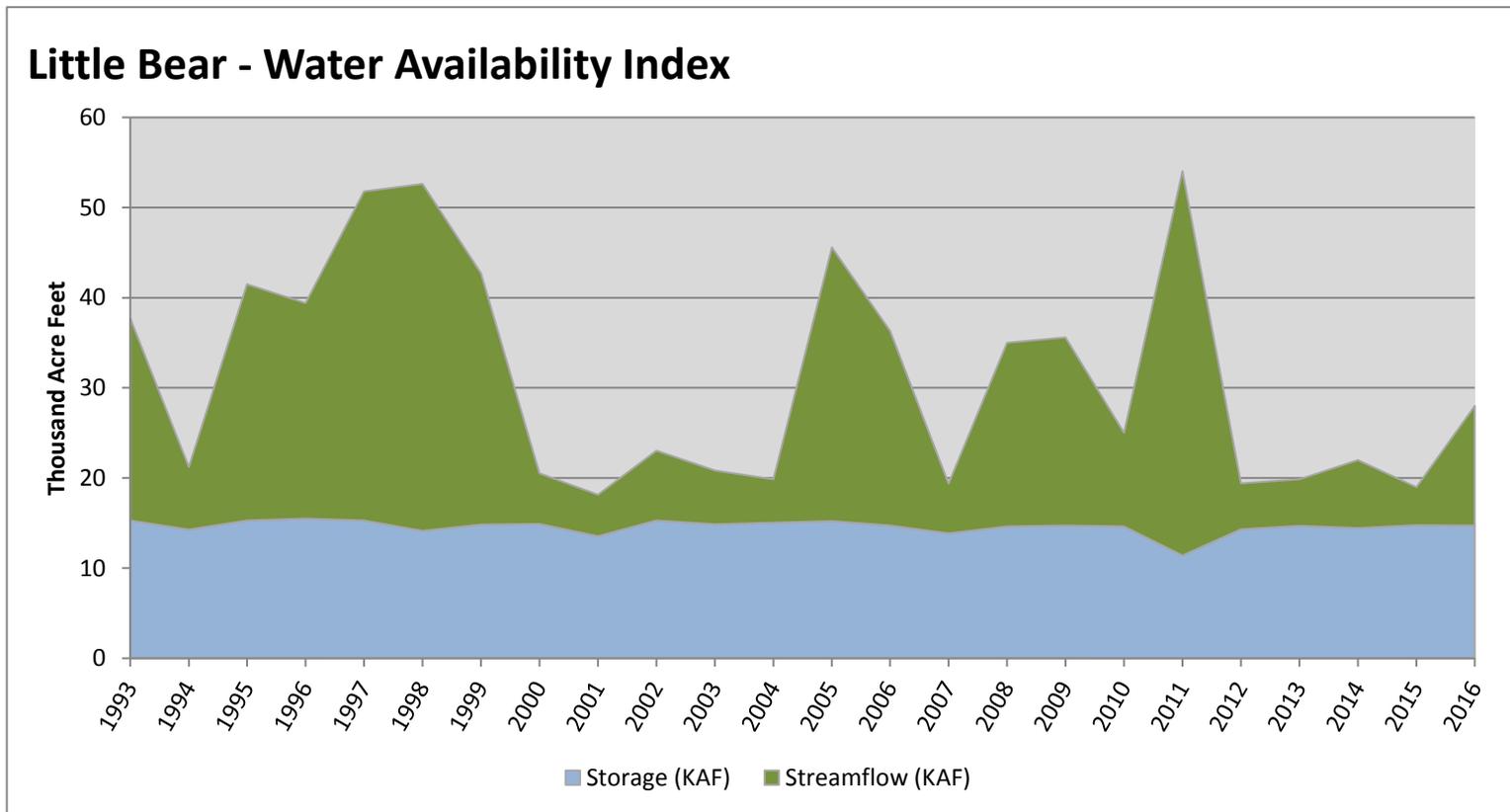


June 1, 2016

Water Availability Index

Basin or Region	May EOM [*] Storage	May Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Little Bear	14.72	13.26	27.98	52	0.17	02, 10, 08, 09

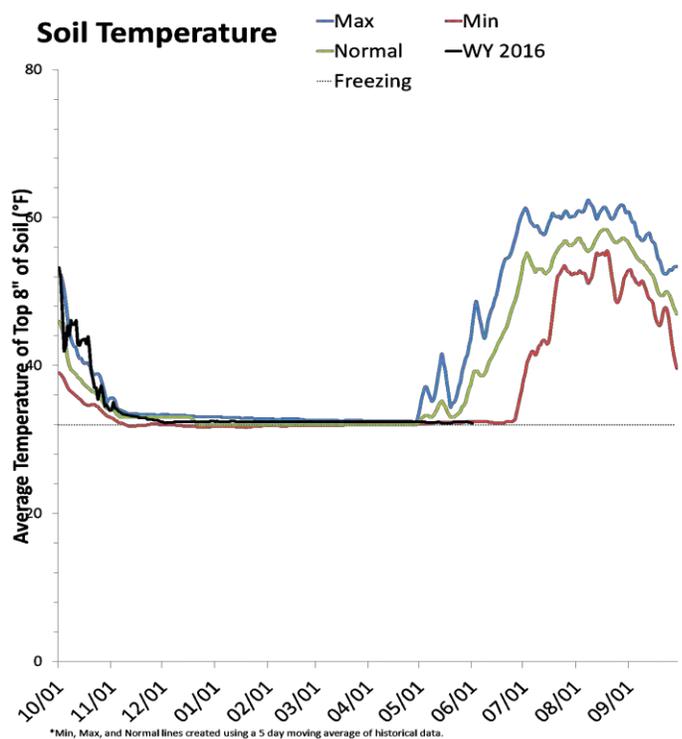
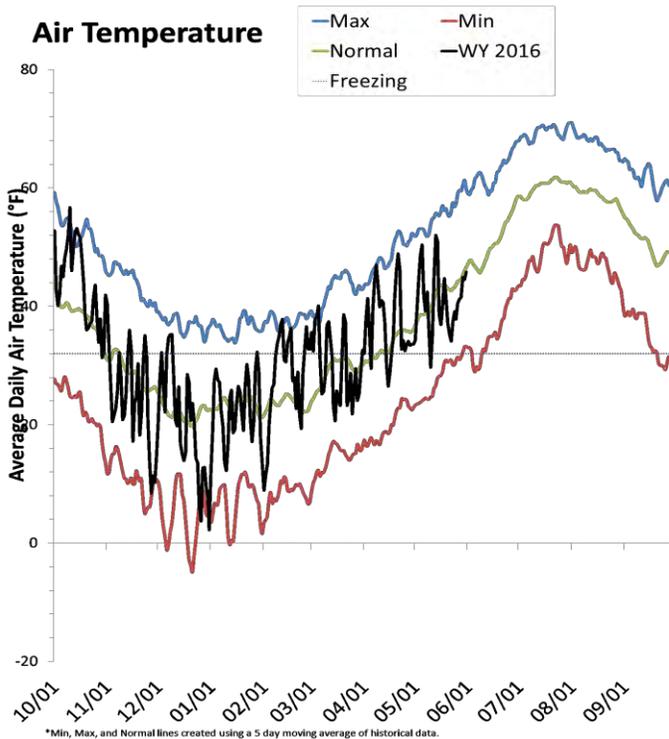
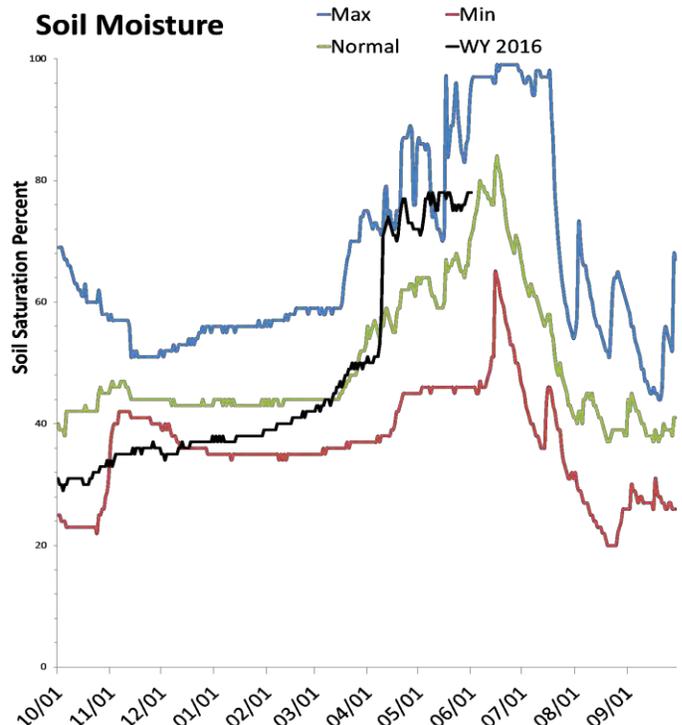
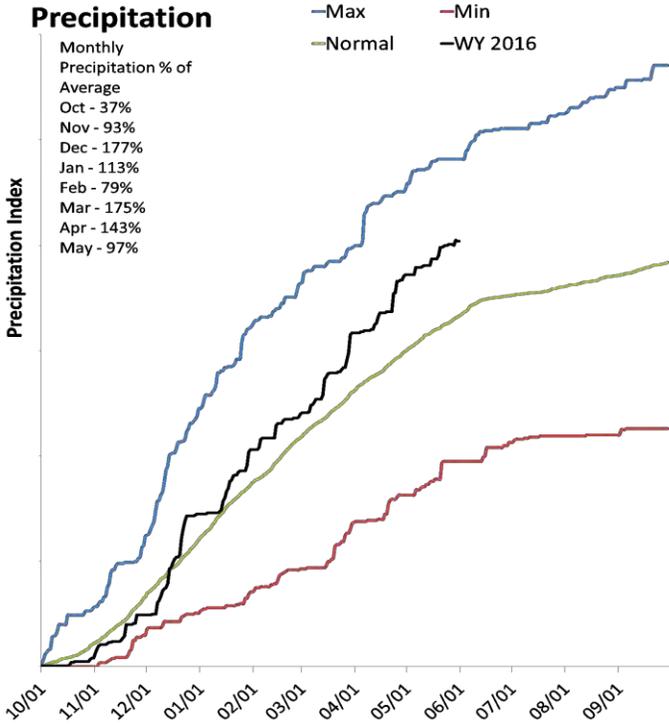
^{*}EOM, end of month; [#]WAI, Water Availability Index; [^]KAF, thousand acre-feet.



Raft River Basin

6/1/2016

Precipitation in May was near average at 97%, which brings the seasonal accumulation (Oct-May) to 121% of average. Soil moisture is at 78% compared to 65% last year.



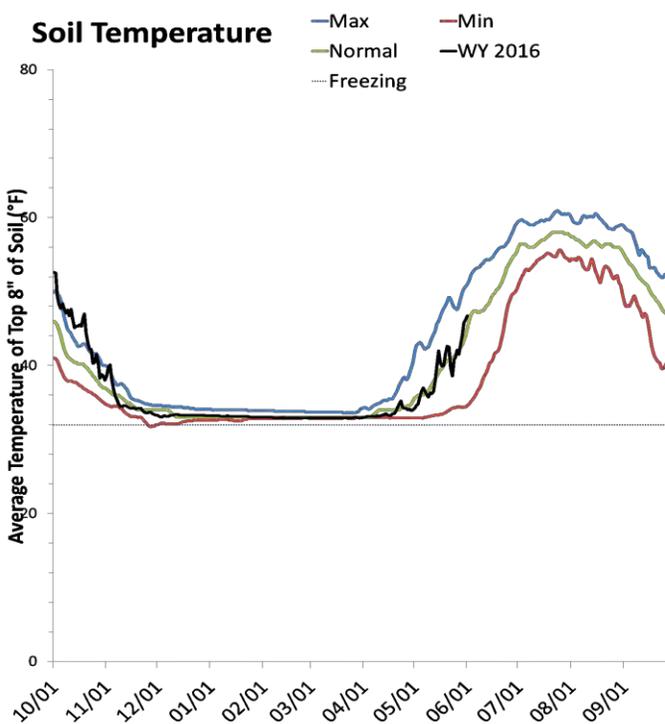
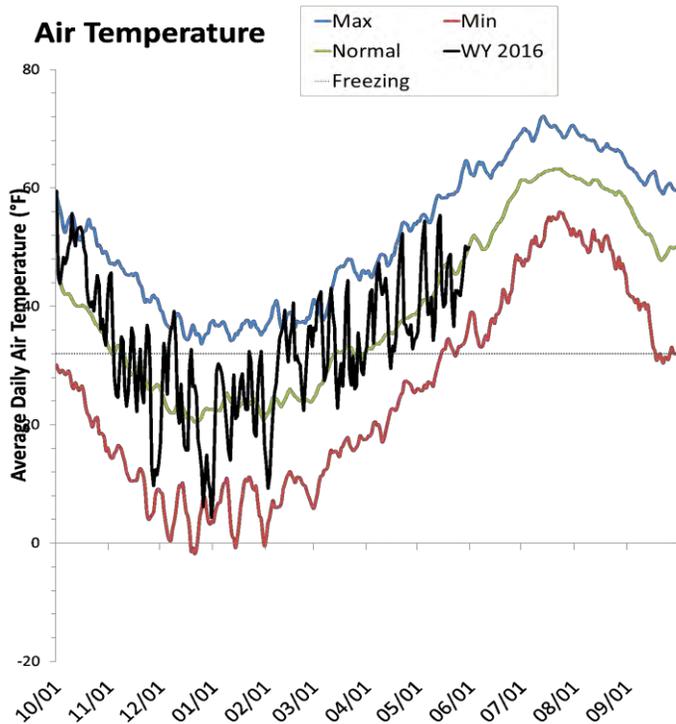
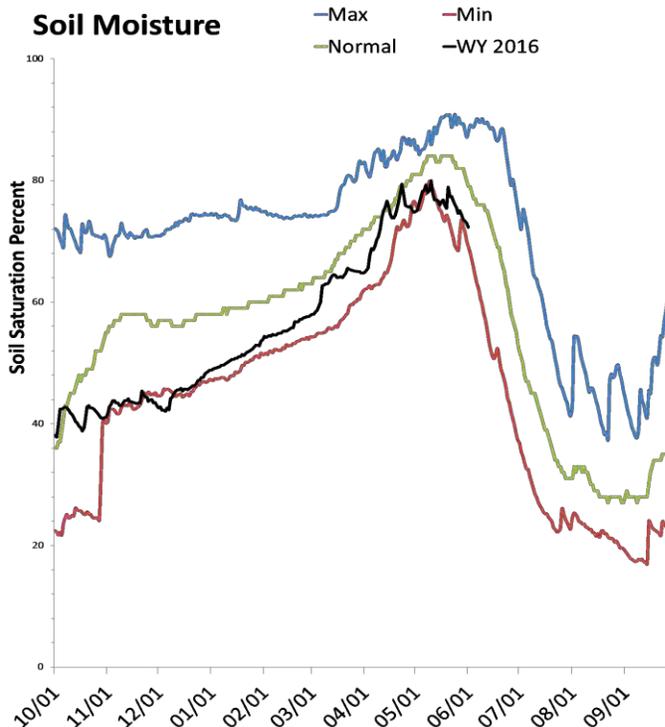
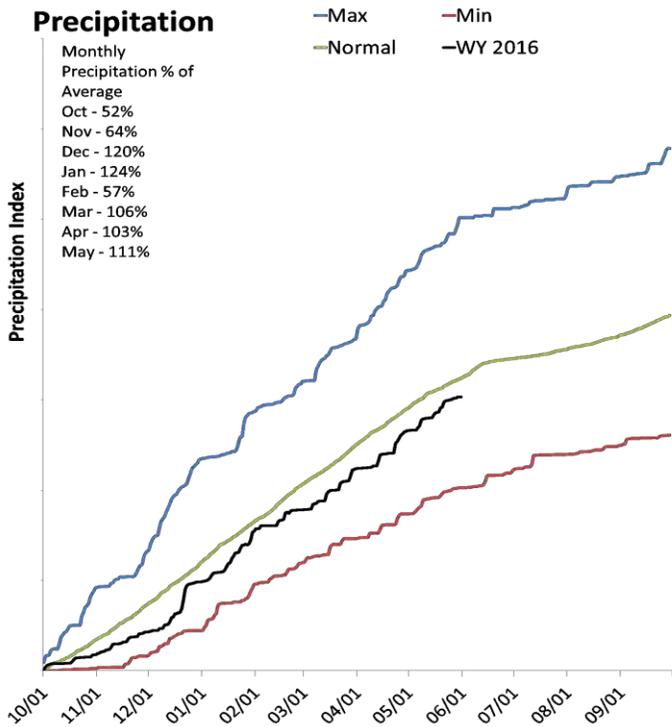
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

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Weber & Ogden River Basins

6/1/2016

Precipitation in May was above average at 111%, which brings the seasonal accumulation (Oct-May) to 94% of average. Soil moisture is at 73% compared to 71% last year. Reservoir storage is at 78% of capacity, compared to 61% last year. The water availability index for the Ogden River is 59% and 44% for the Weber River.



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

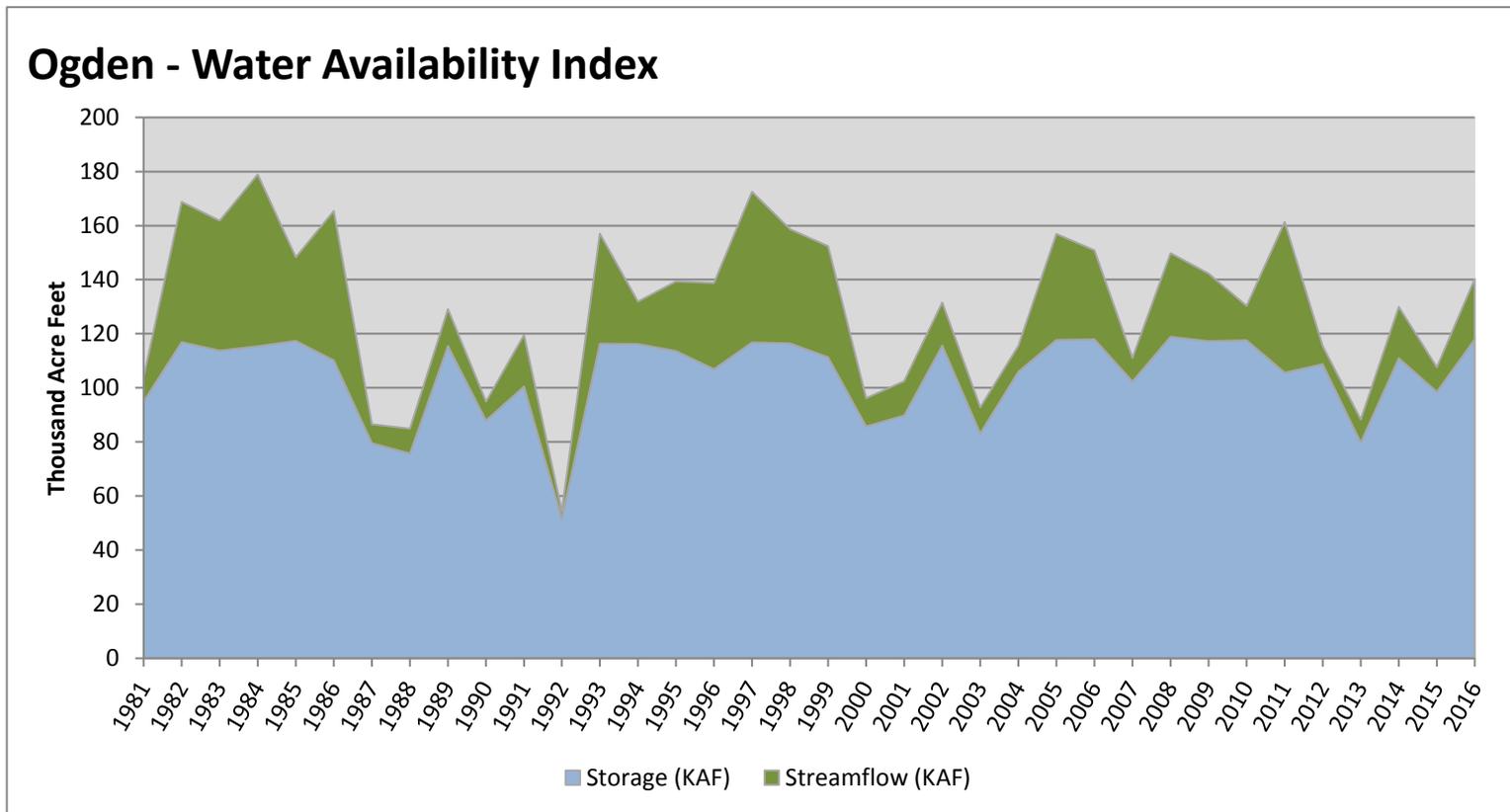
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

June 1, 2016

Water Availability Index

Basin or Region	May EOM [*] Storage	May Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Ogden	117.90	22.42	140.32	59	0.79	96, 95, 09, 85

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

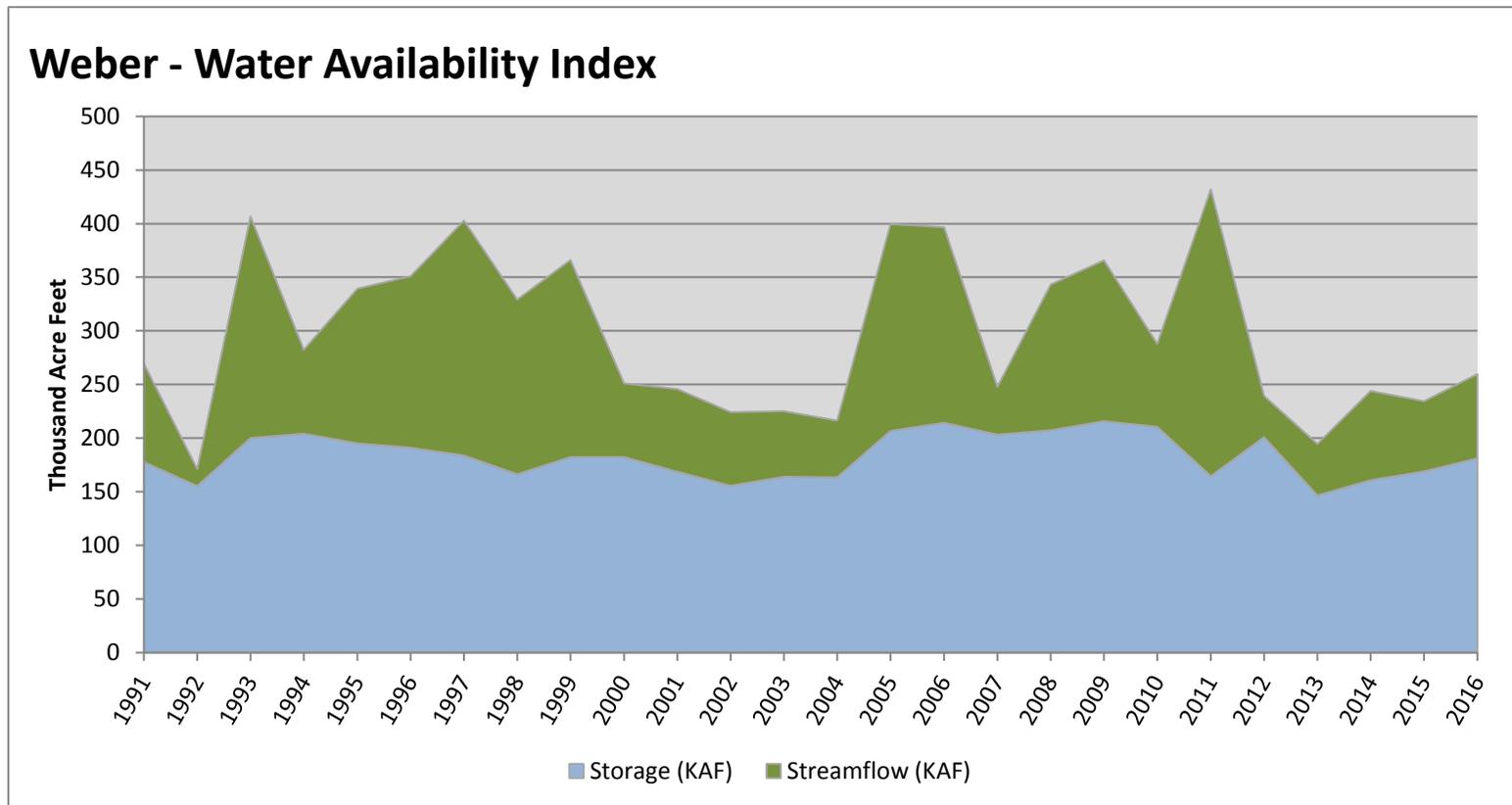


June 1, 2016

Water Availability Index

Basin or Region	May EOM [*] Storage	May Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Weber	181.15	78.53	259.68	44	-0.46	07, 00, 91, 94

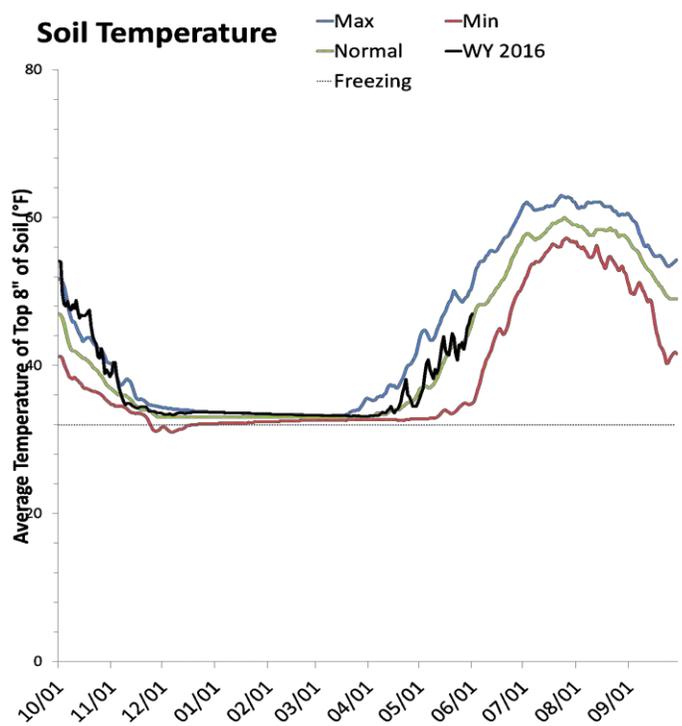
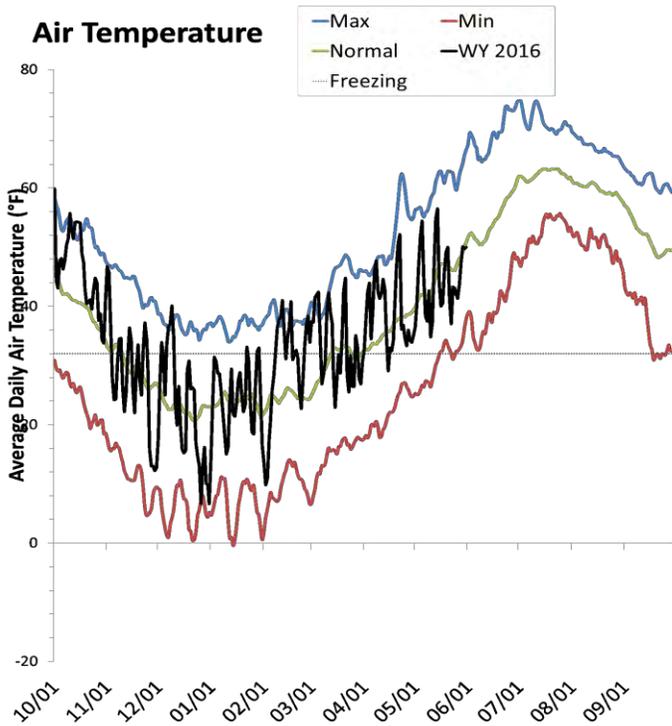
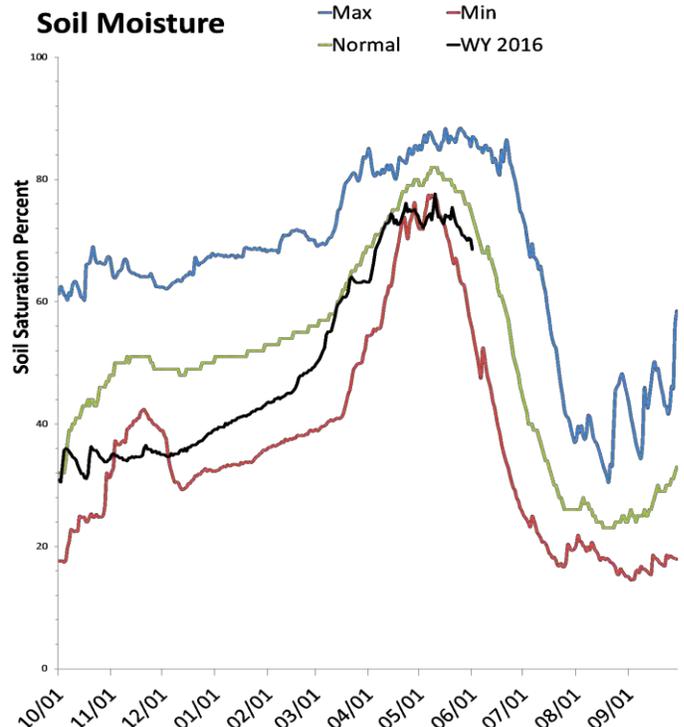
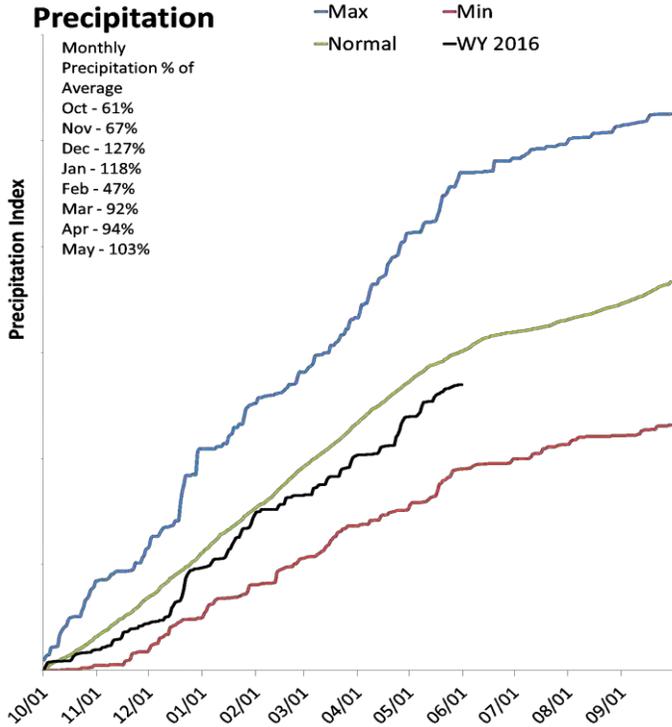
^{*}EOM, end of month; [#]WAI, Water Availability Index; [^]KAF, thousand acre-feet.



Provo & Jordan River Basins

6/1/2016

Precipitation in May was near average at 103%, which brings the seasonal accumulation (Oct-May) to 90% of average. Soil moisture is at 70% compared to 68% last year. Reservoir storage is at 69% of capacity, compared to 74% last year. The water availability index for the Provo River is 32%.



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

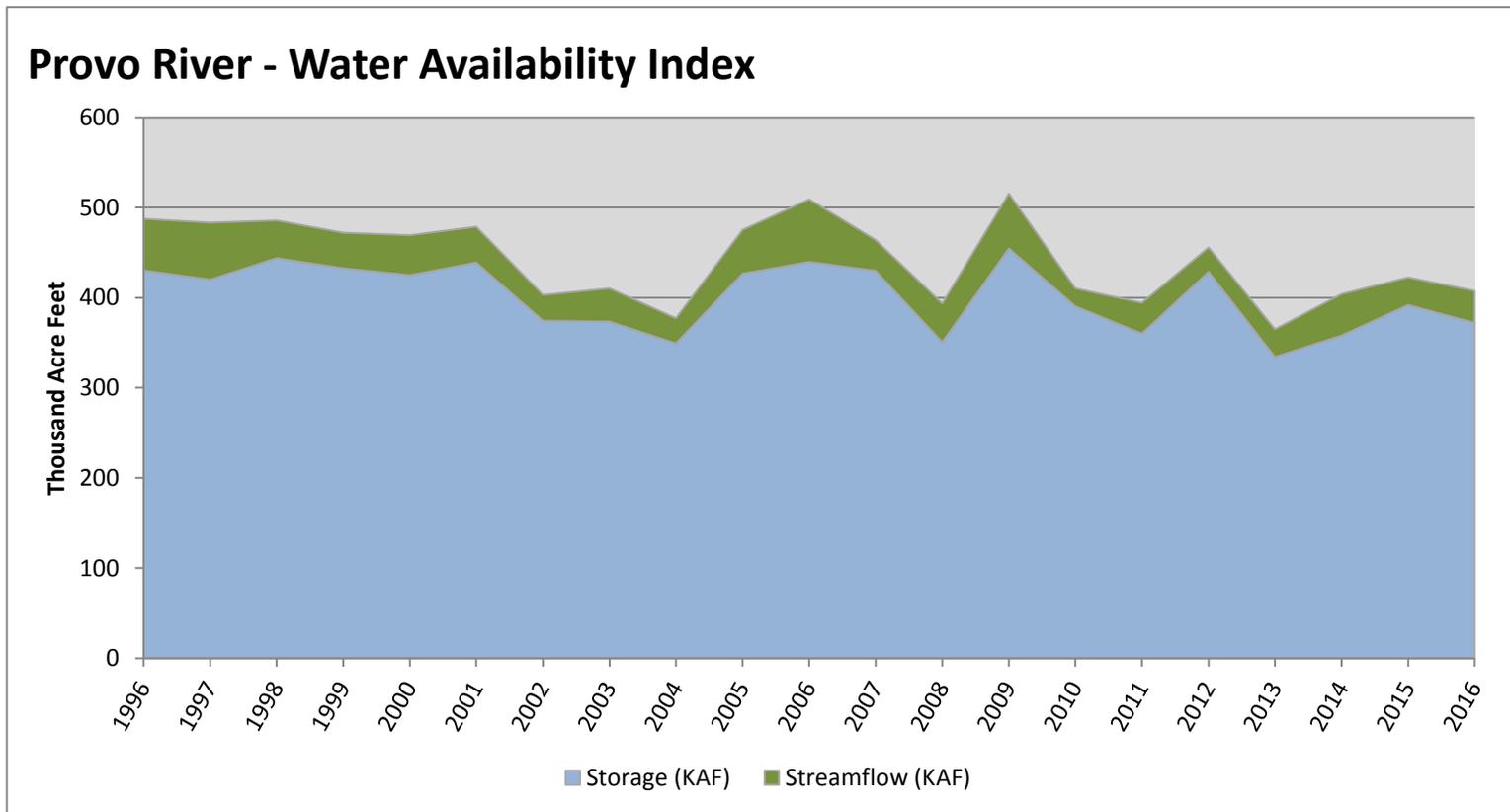
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

June 1, 2016

Water Availability Index

Basin or Region	May EOM [*] Storage	May Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Provo River	372.05	35.43	407.48	32	-1.52	02, 14, 10, 03

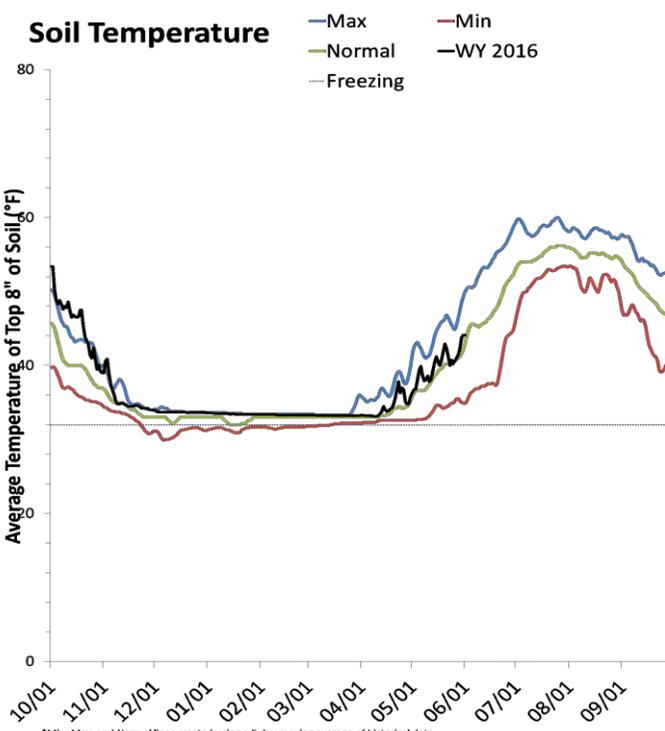
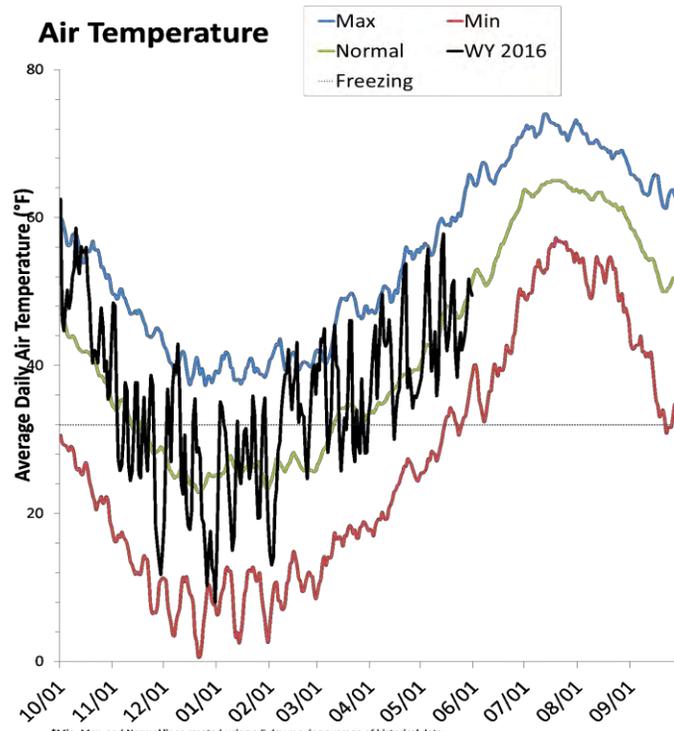
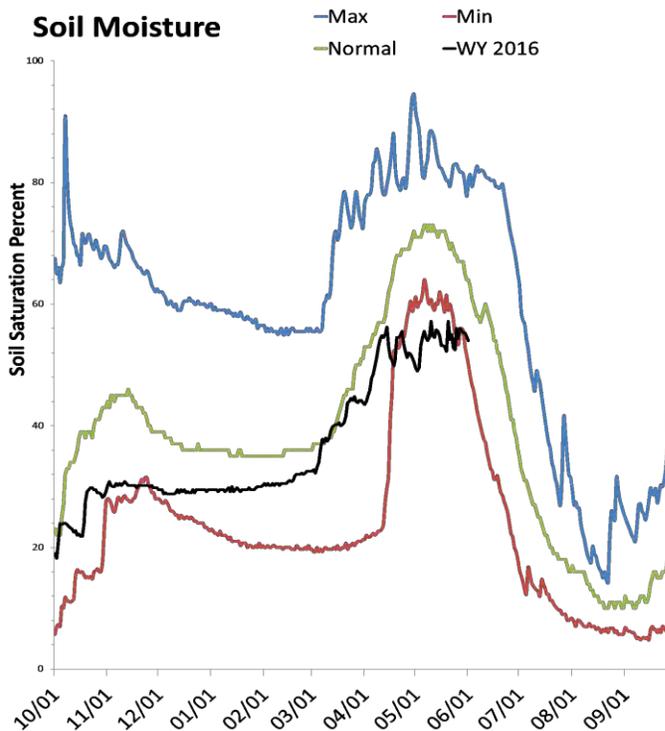
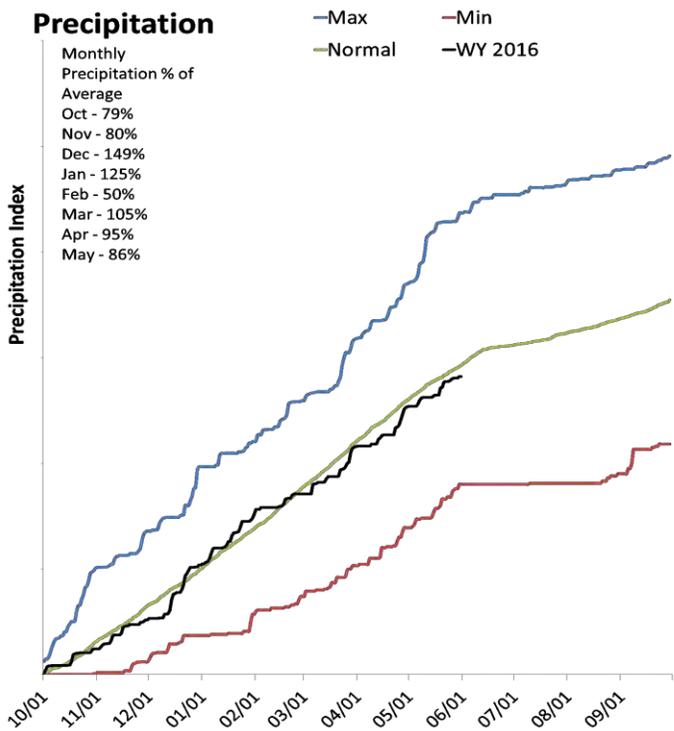
^{*}EOM, end of month; [#]WAI, Water Availability Index; [^]KAF, thousand acre-feet.



Tooele & Vernon Creek Basins

6/1/2016

Precipitation in May was below average at 85%, which brings the seasonal accumulation (Oct-May) to 96% of average. Soil moisture is at 55% compared to 51% last year. Reservoir storage is at 77% of capacity, compared to 72% last year.



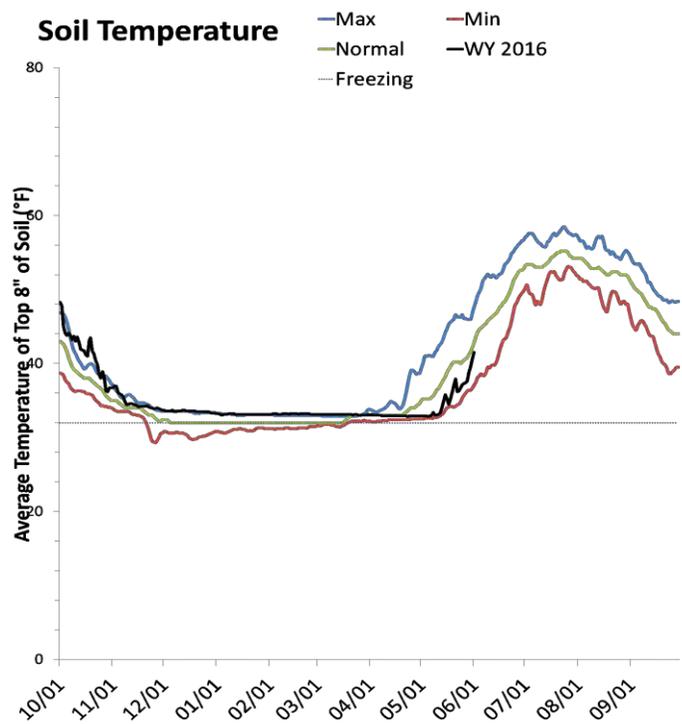
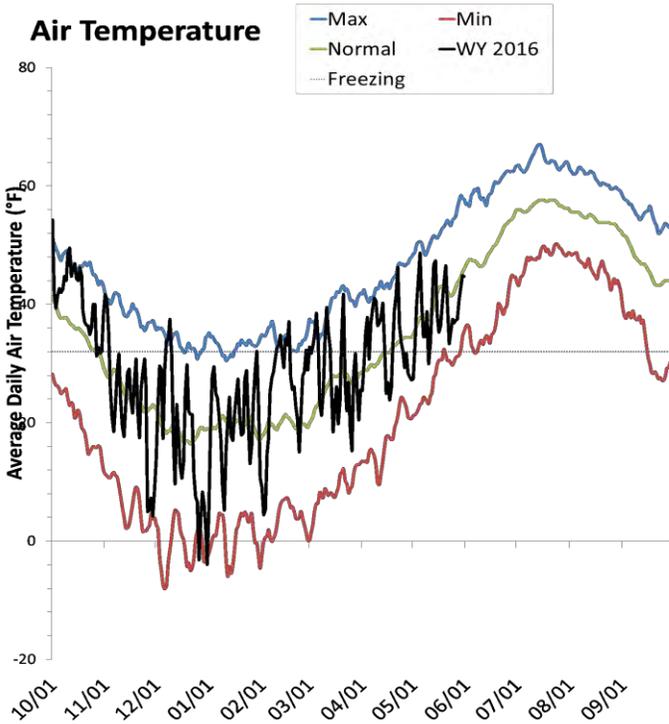
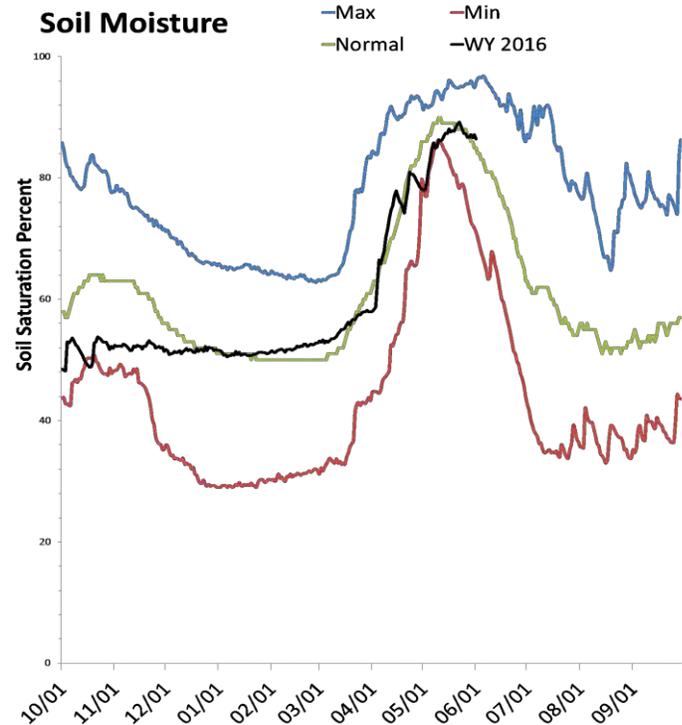
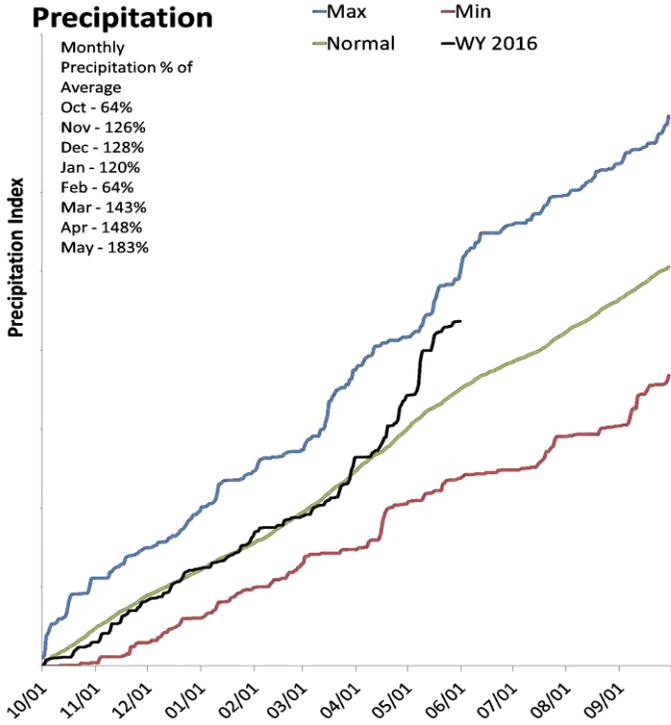
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

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

Northeastern Uintah Basin

6/1/2016

Precipitation in May was much above average at 181%, which brings the seasonal accumulation (Oct-May) to 124% of average. Soil moisture is at 92% compared to 85% last year. Reservoir storage is at 91% of capacity, compared to 85% last year. The Water Availability Index for Blacks Fork is 50% and 76% for Smiths Creek.



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

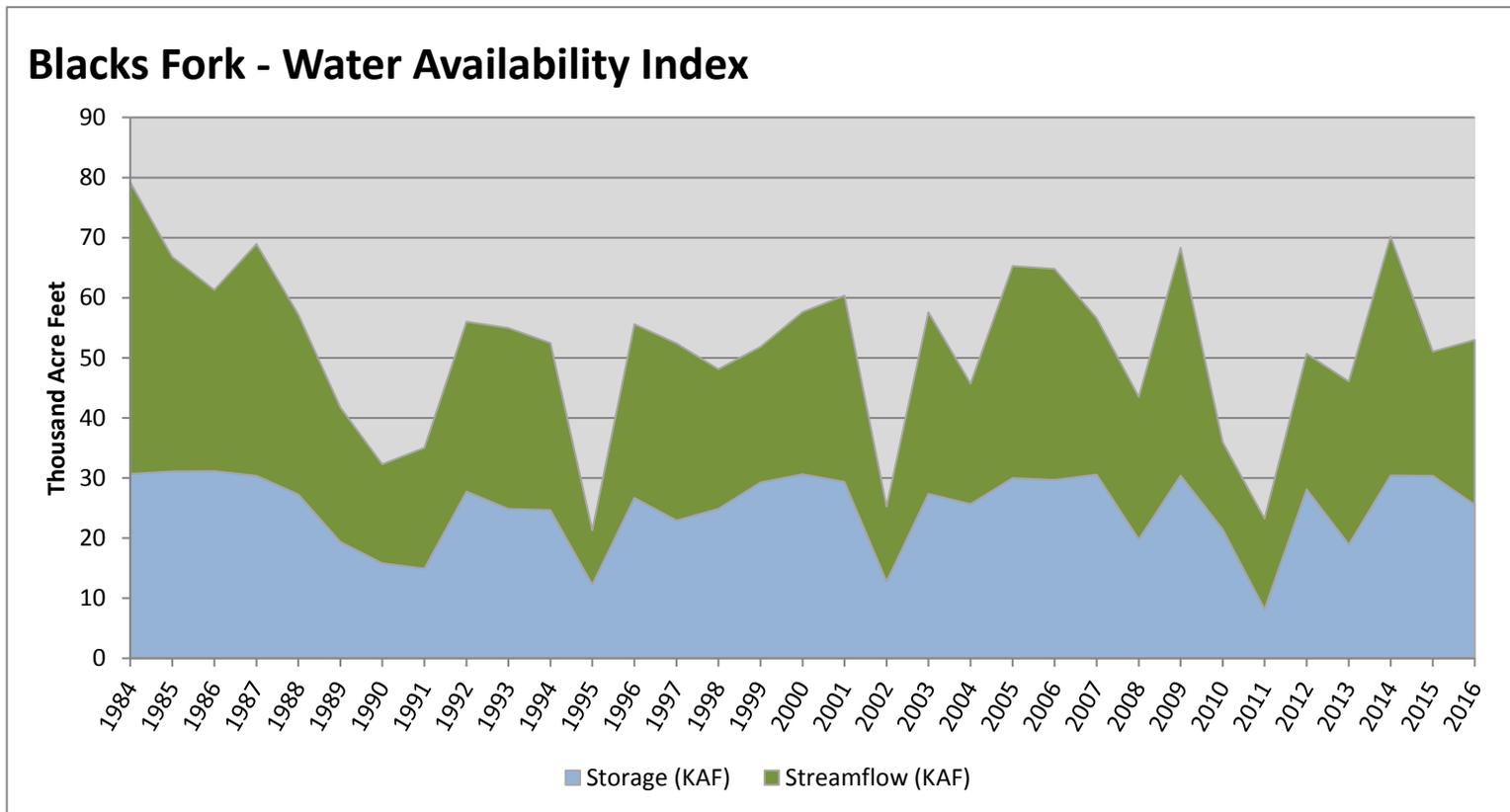
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

June 1, 2016

Water Availability Index

Basin or Region	May EOM [*] Storage	May Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Blacks Fork	25.52	27.43	52.95	50	0	97, 94, 93, 96

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

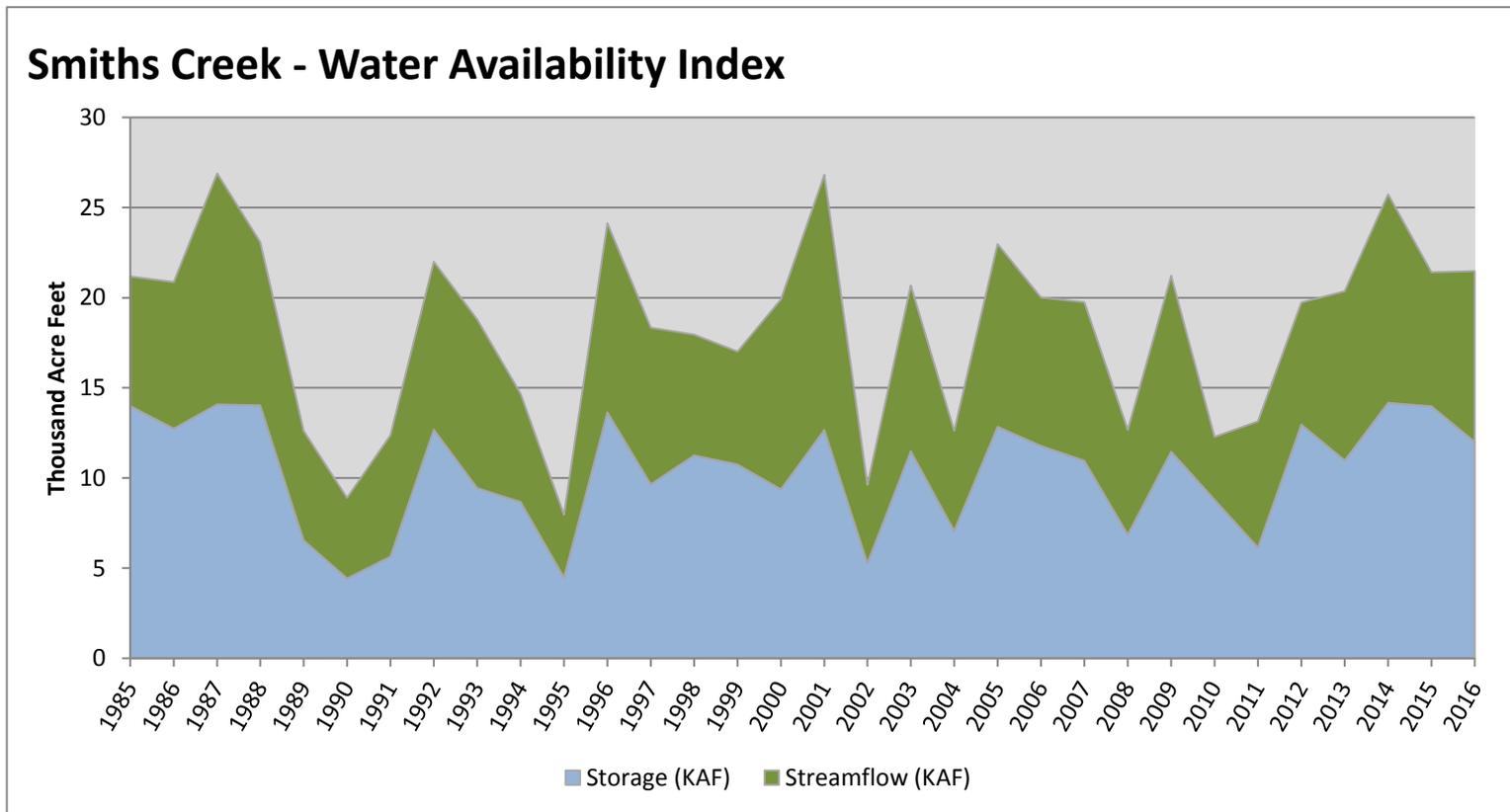


June 1, 2016

Water Availability Index

Basin or Region	May EOM [*] Storage	May Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Smiths Creek	12.00	9.48	21.48	76	2.15	09, 15, 92, 05

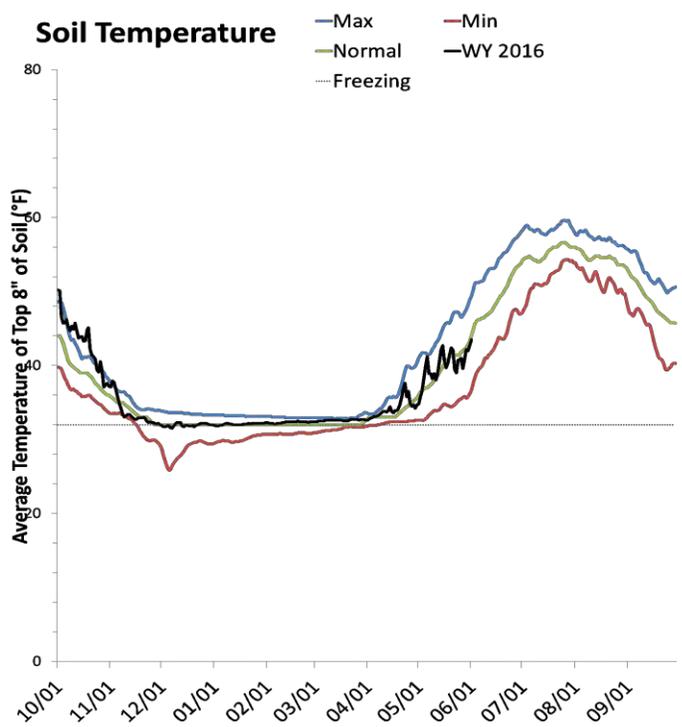
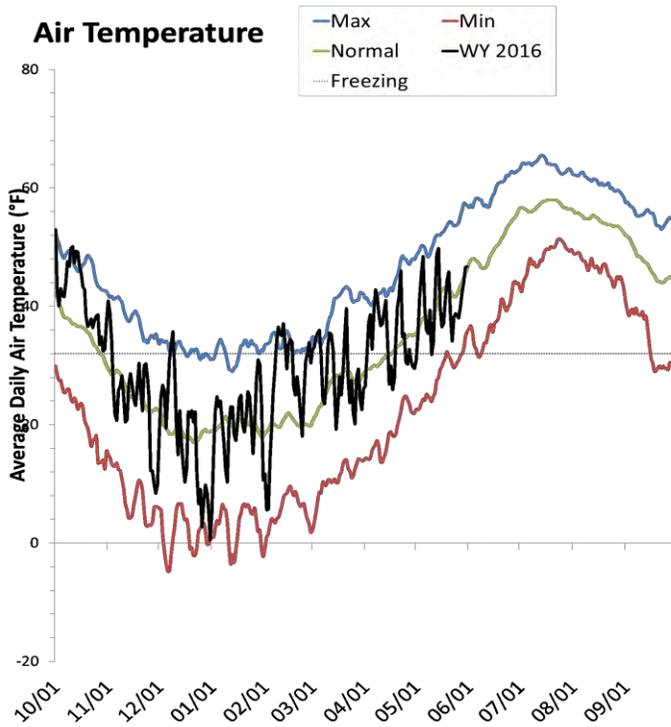
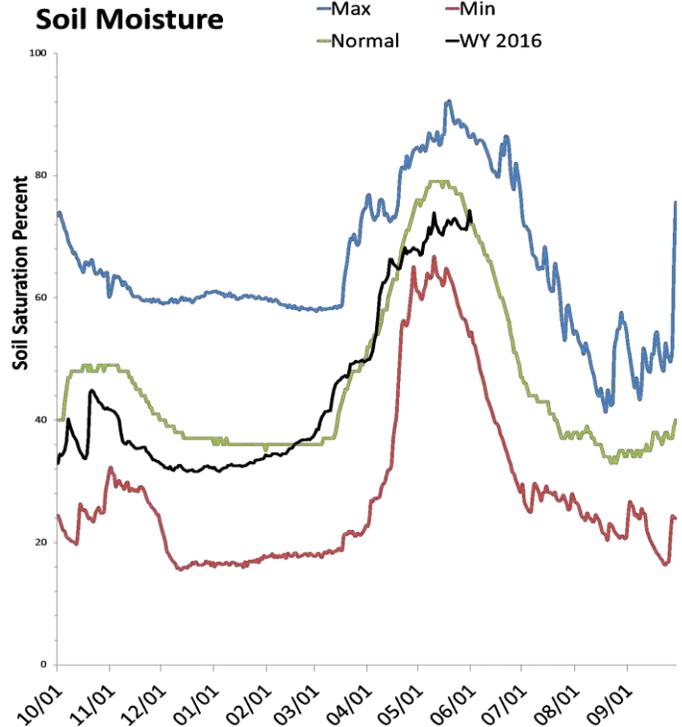
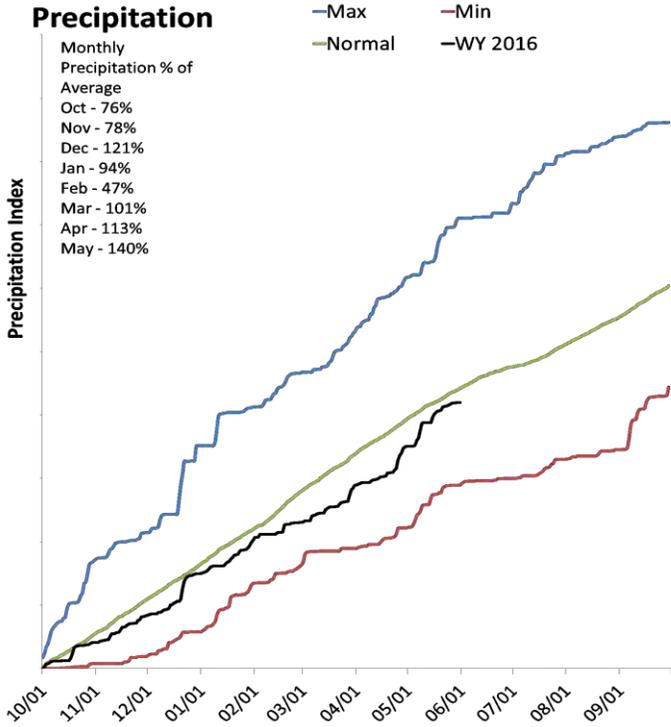
^{*}EOM, end of month; [#]WAI, Water Availability Index; [^]KAF, thousand acre-feet.



Duchesne River Basin

6/1/2016

Precipitation in May was much above average at 141%, which brings the seasonal accumulation (Oct-May) to 95% of average. Soil moisture is at 83% compared to 67% last year. Reservoir storage is at 77% of capacity, compared to 79% last year. The water availability index for the Western Uintahs is 40% and 59% for the Eastern Uintahs.



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

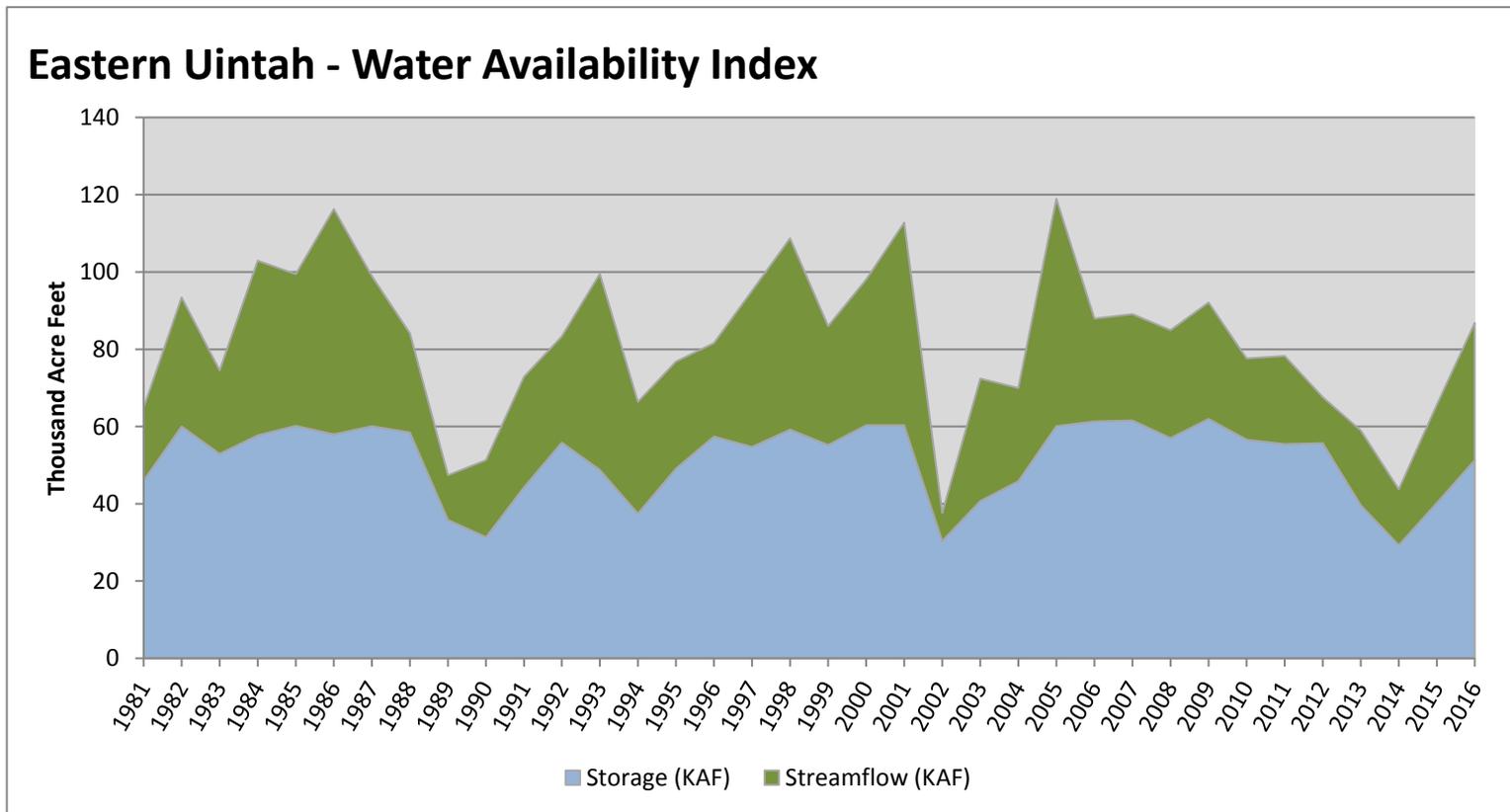
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

June 1, 2016

Water Availability Index

Basin or Region	May EOM [*] Storage	May Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Eastern Uintah	51.33	35.44	86.77	59	0.79	08, 99, 06, 07

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

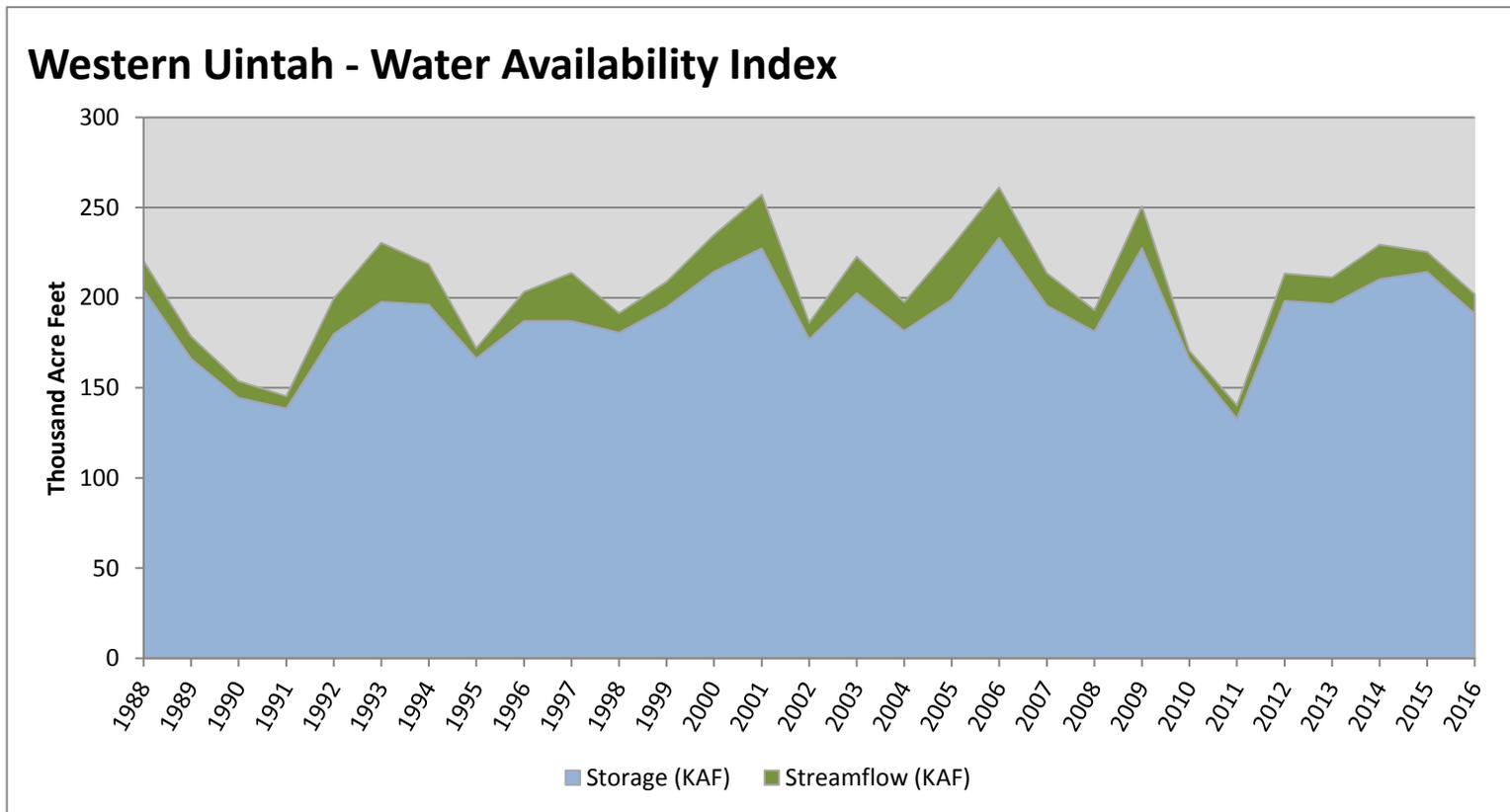


June 1, 2016

Water Availability Index

Basin or Region	May EOM [*] Storage	May Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Western Uintah	191.00	10.81	201.81	40	-0.83	04, 92, 96, 99

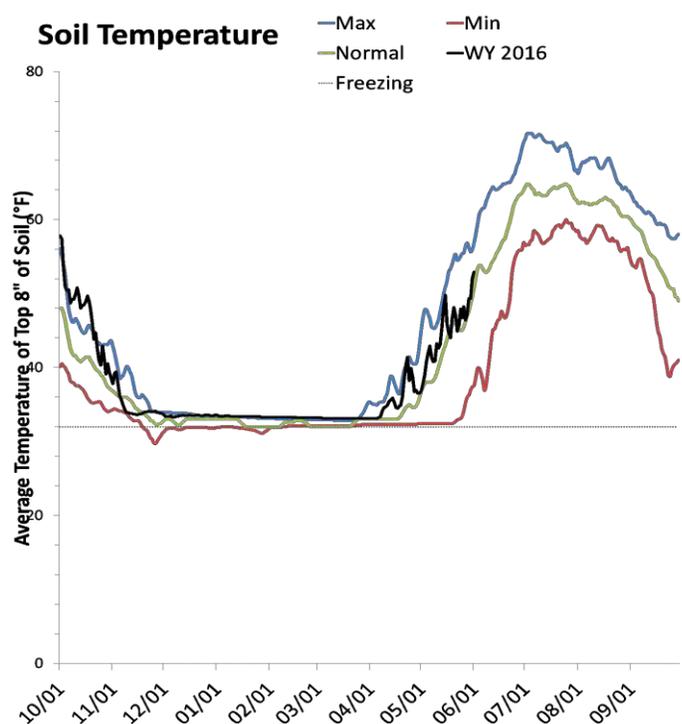
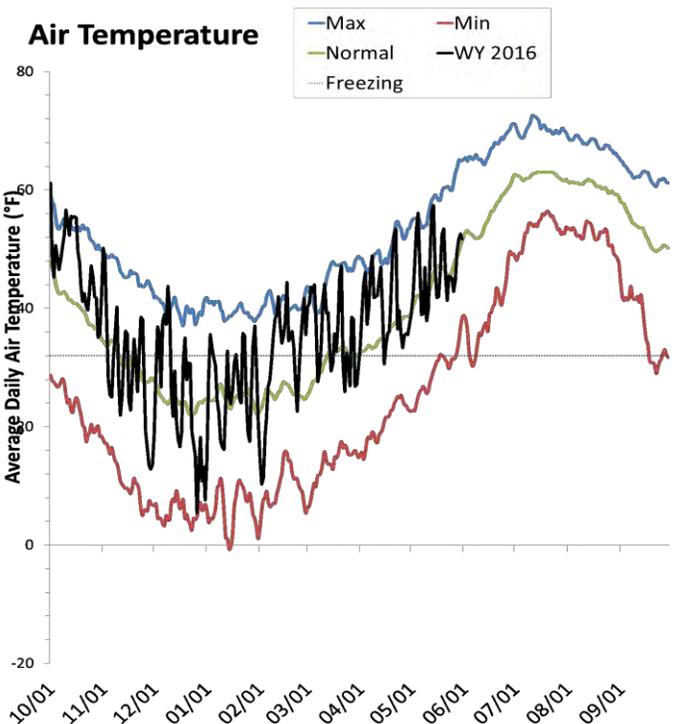
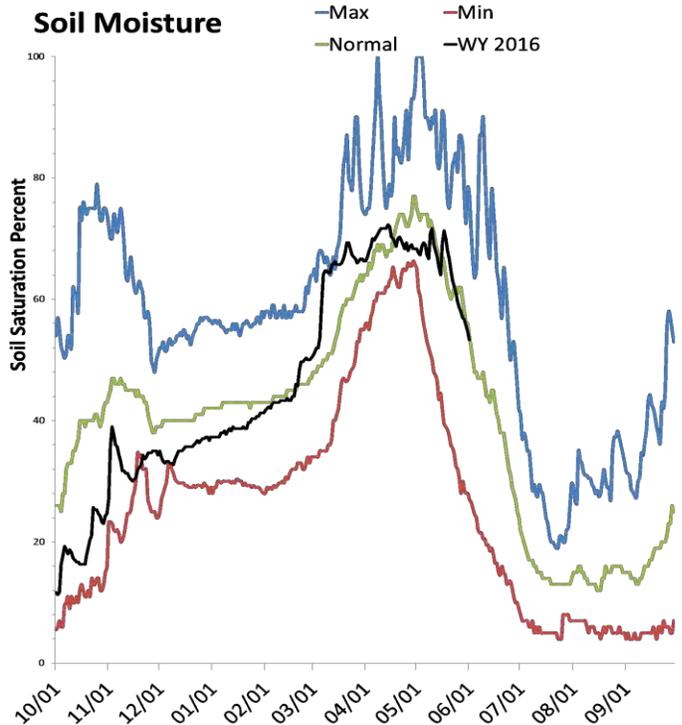
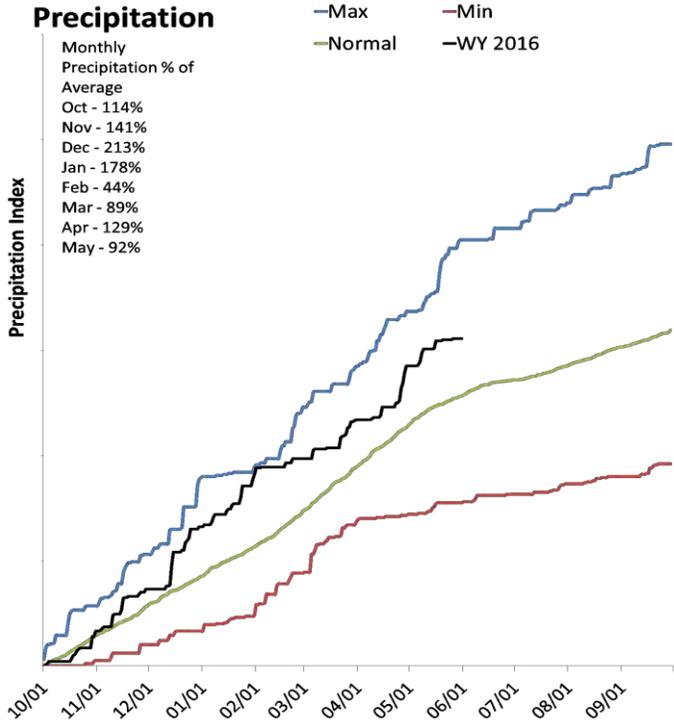
^{*}EOM, end of month; [#]WAI, Water Availability Index; [^]KAF, thousand acre-feet.



Lower Sevier River Basin

6/1/2016

Precipitation in May was near average at 90%, which brings the seasonal accumulation (Oct-May) to 121% of average. Soil moisture is at 54% compared to 44% last year. Reservoir storage is at 29% of capacity, compared to 39% last year. The water availability index for the Lower Sevier is 5%.



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

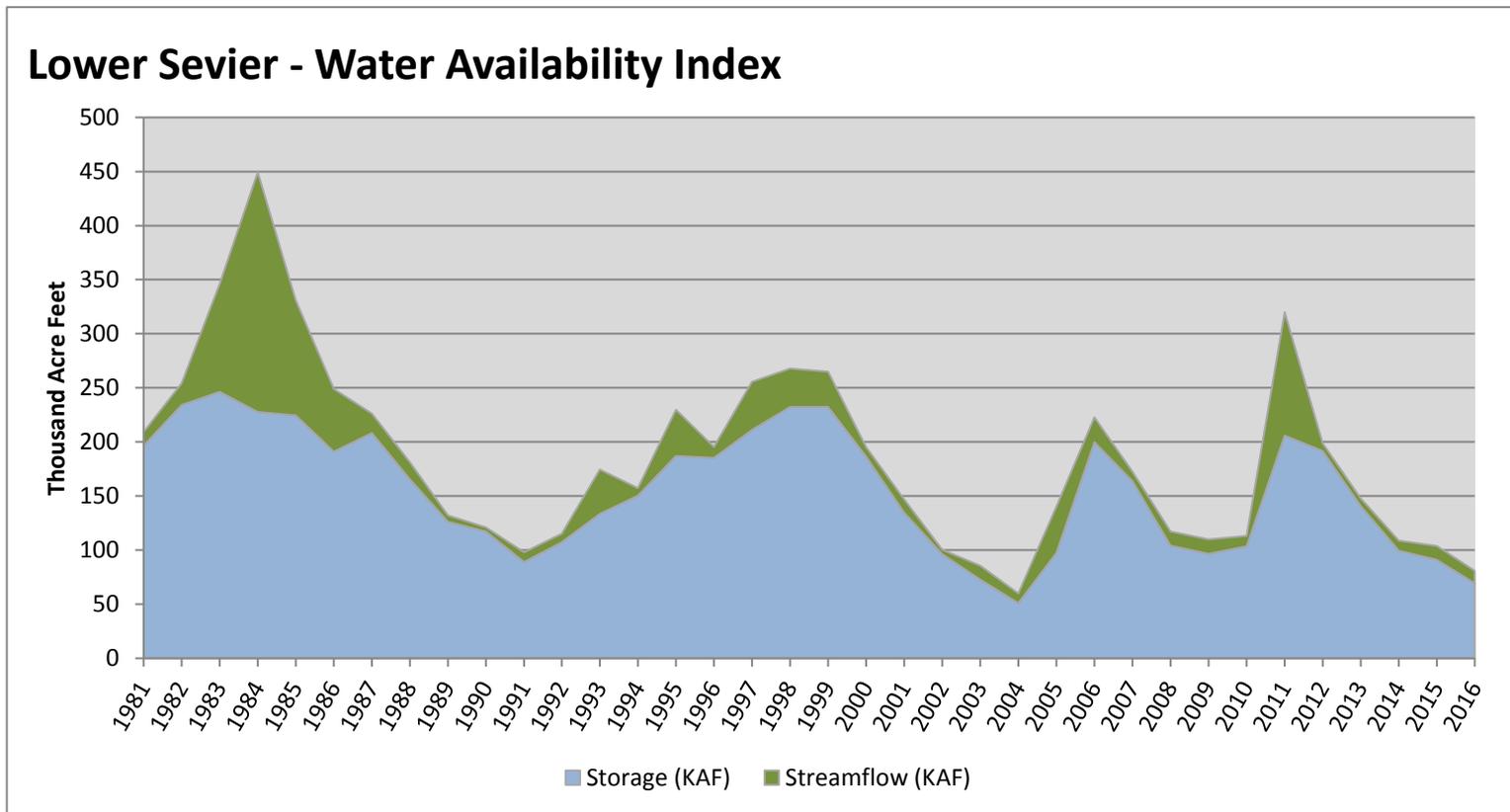
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

June 1, 2016

Water Availability Index

Basin or Region	May EOM [*] Storage	May Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Lower Sevier	69.24	11.54	80.78	5	-3.72	04, 03, 91, 02

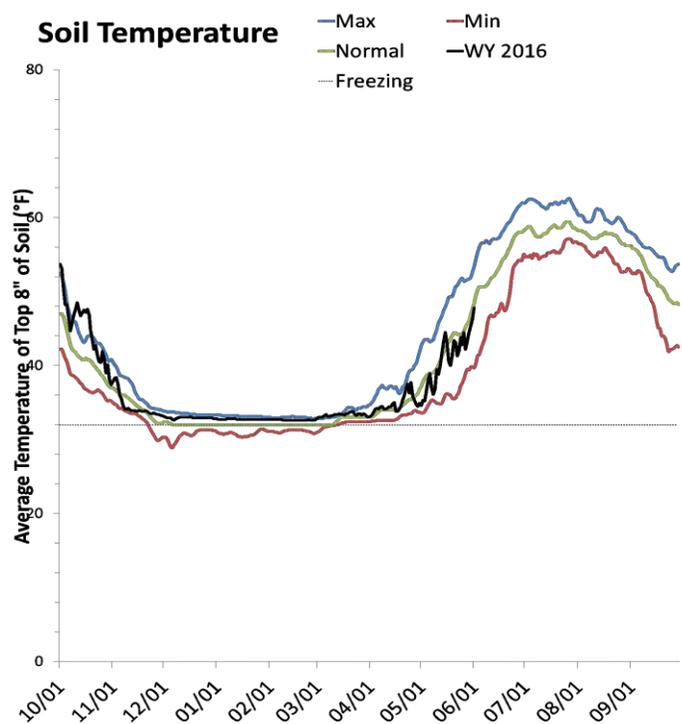
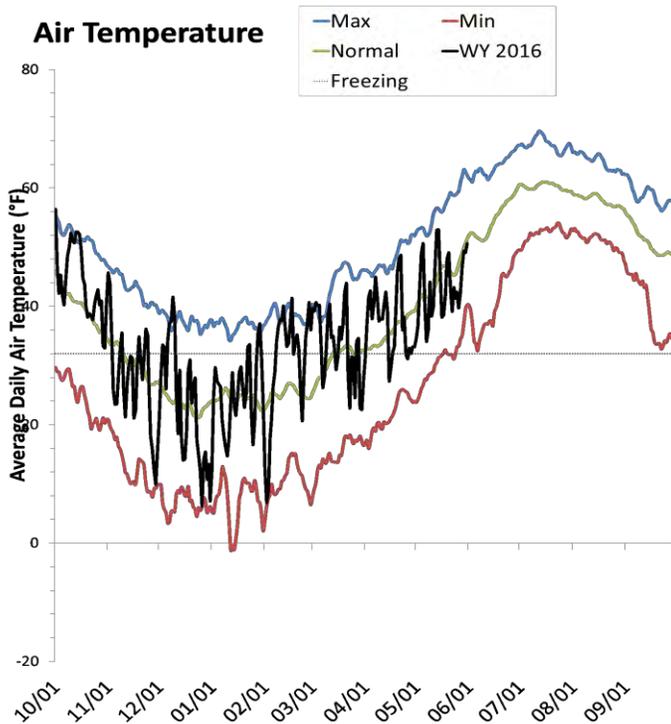
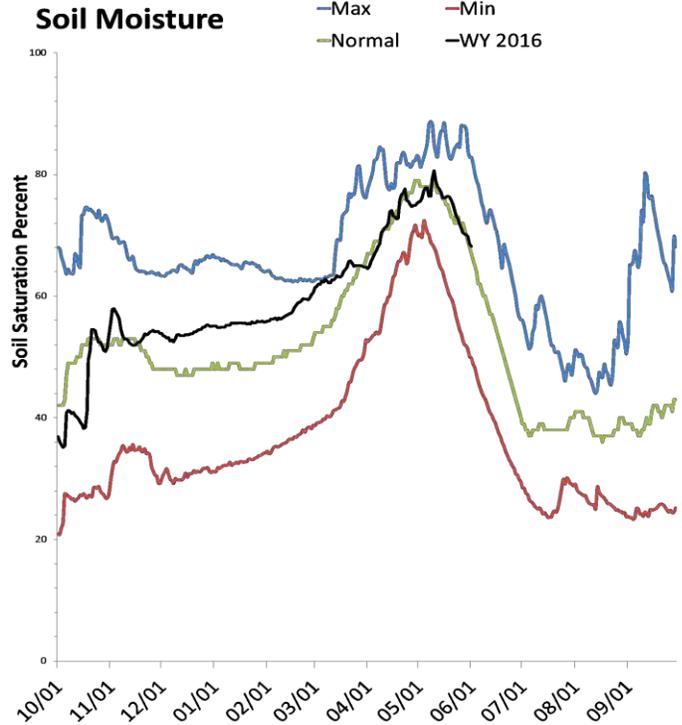
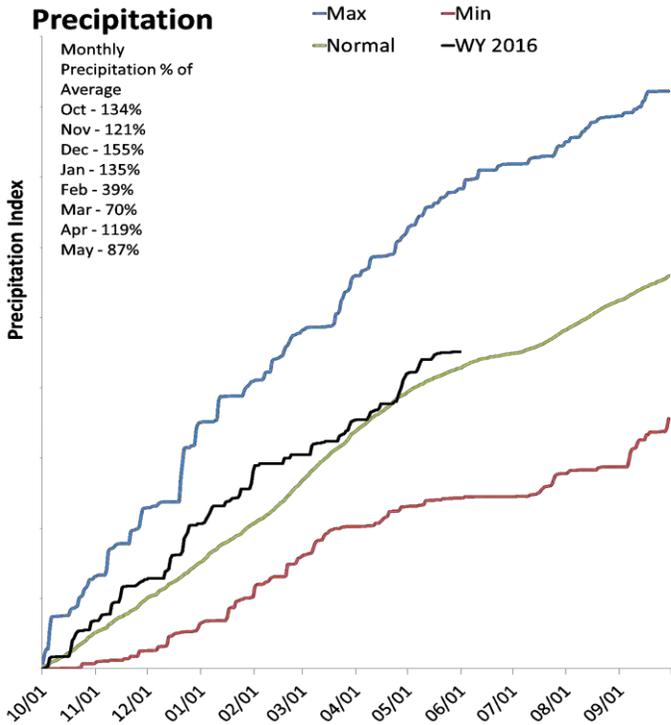
^{*}EOM, end of month; [#]WAI, Water Availability Index; [^]KAF, thousand acre-feet.



Upper Sevier River Basin

6/1/2016

Precipitation in May was below average at 86%, which brings the seasonal accumulation (Oct-May) to 105% of average. Soil moisture is at 69% compared to 68% last year. Reservoir storage is at 64% of capacity, compared to 49% last year. The water availability index for the Upper Sevier is 32%.



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

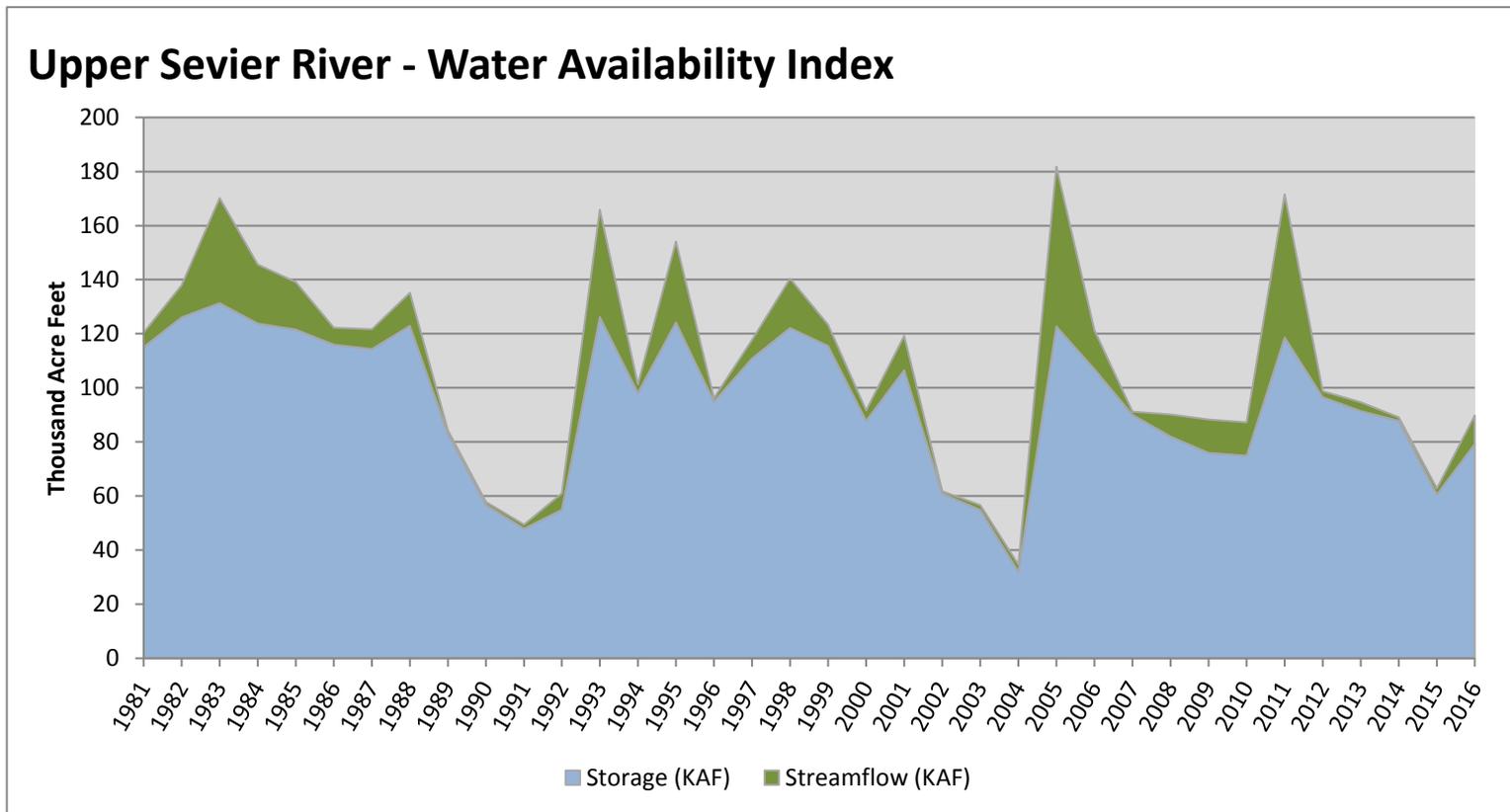
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

June 1, 2016

Water Availability Index

Basin or Region	May EOM [*] Storage	May Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Upper Sevier River	79.22	10.55	89.77	32	-1.46	09, 14, 08, 07

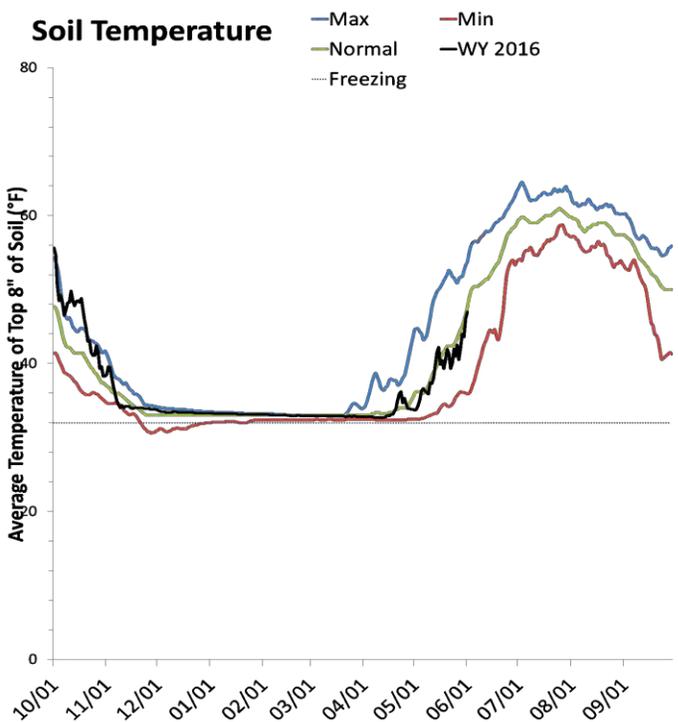
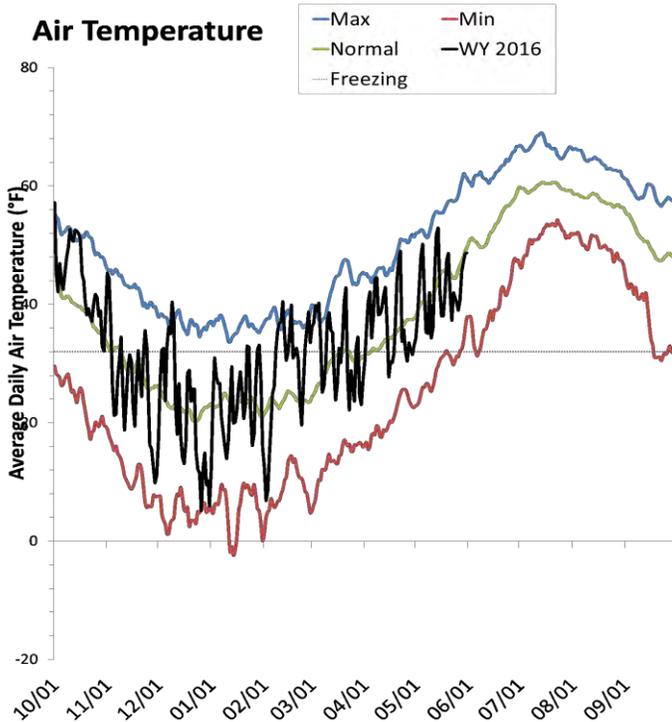
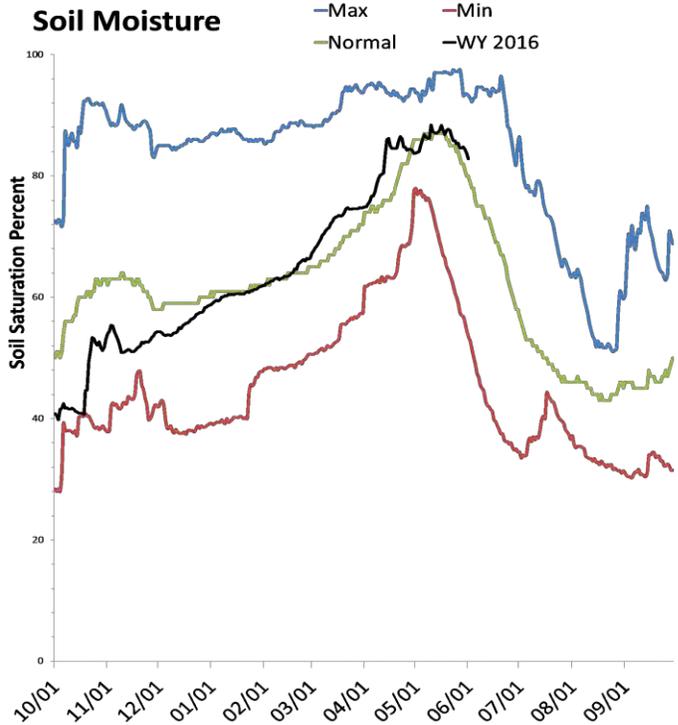
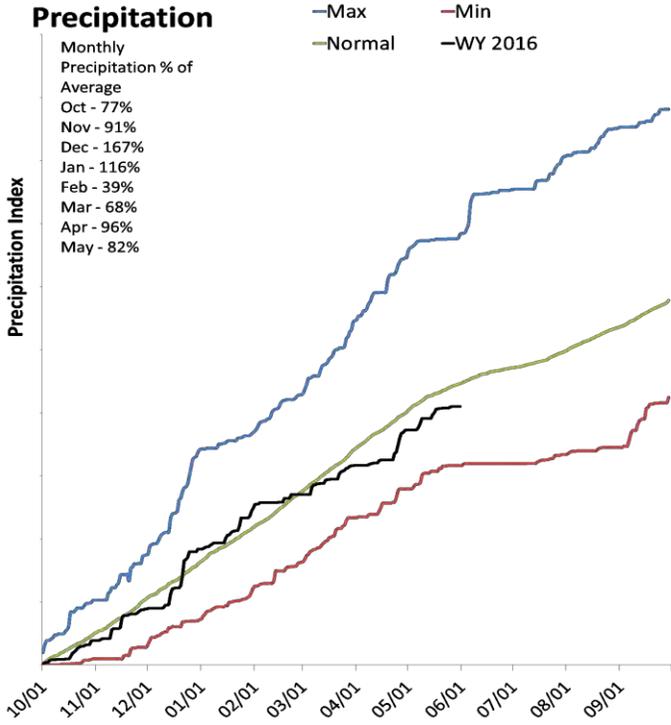
^{*}EOM, end of month; [#]WAI, Water Availability Index; [^]KAF, thousand acre-feet.



San Pitch River Basin

6/1/2016

Precipitation in May was below average at 82%, which brings the seasonal accumulation (Oct-May) to 92% of average. Soil Moisture is at 83% compared to 73% last year. Reservoir storage is at 6% of capacity, compared to 3% last year. The water availability index for the San Pitch is 8%.



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

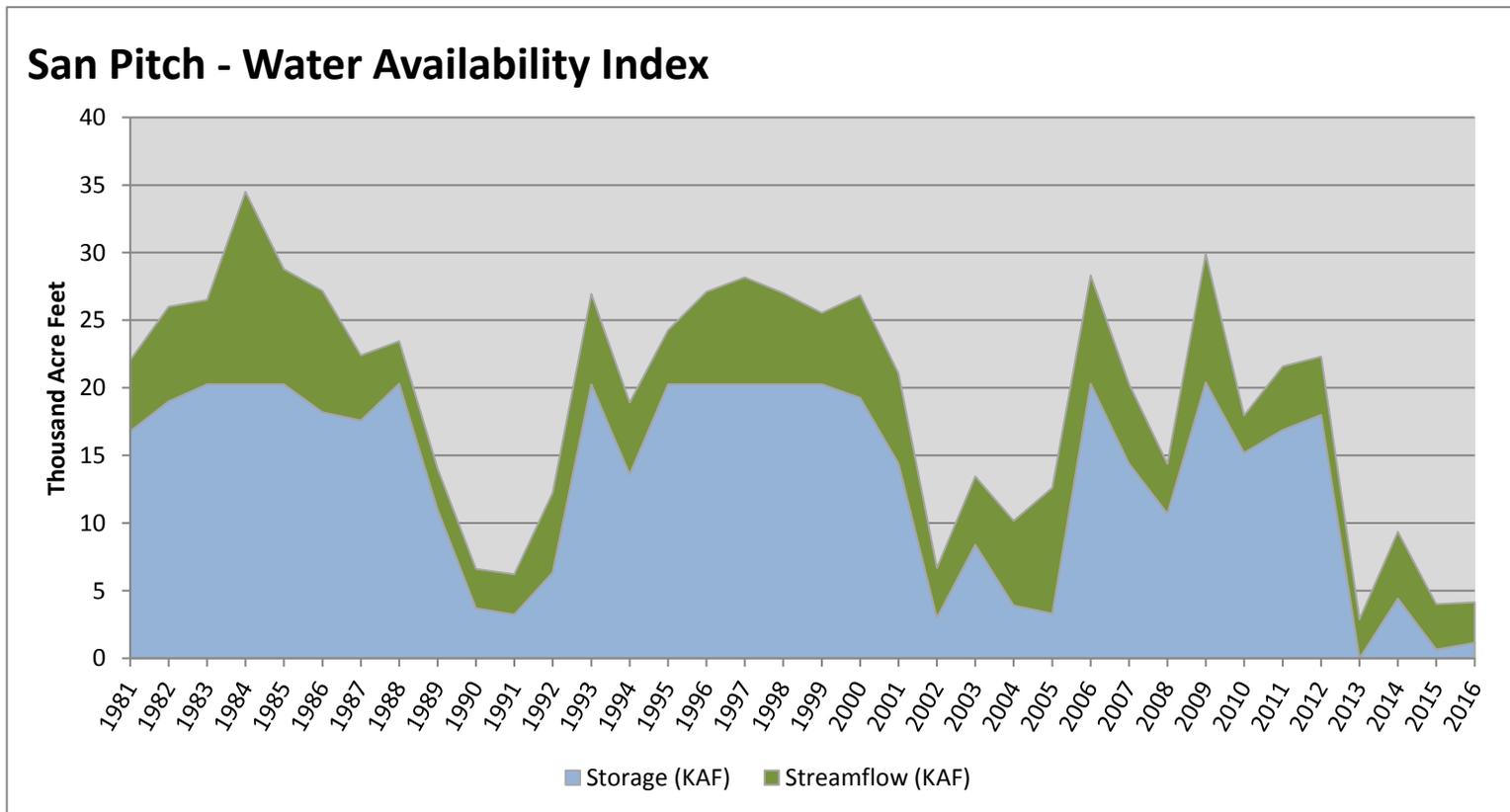
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

June 1, 2016

Water Availability Index

Basin or Region	May EOM [*] Storage	May Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
San Pitch	1.15	3.00	4.15	8	-3.49	13, 15, 91, 90

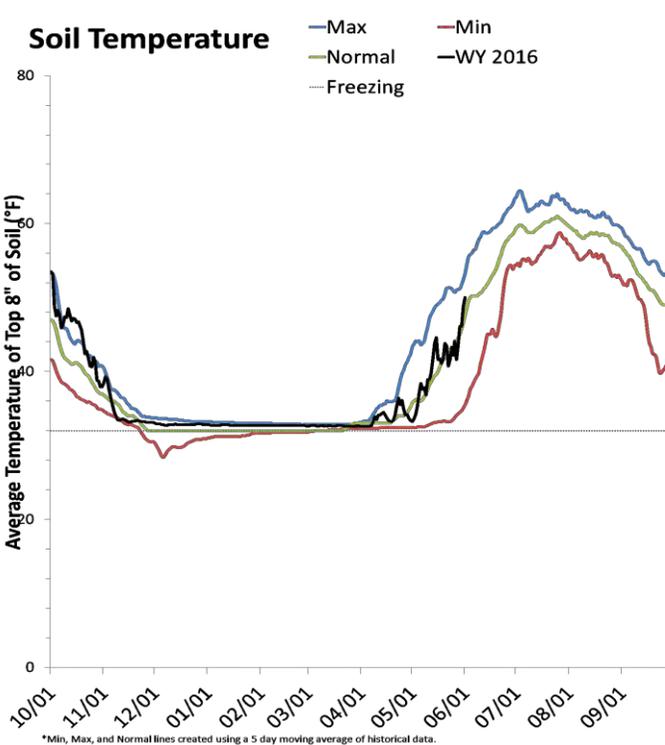
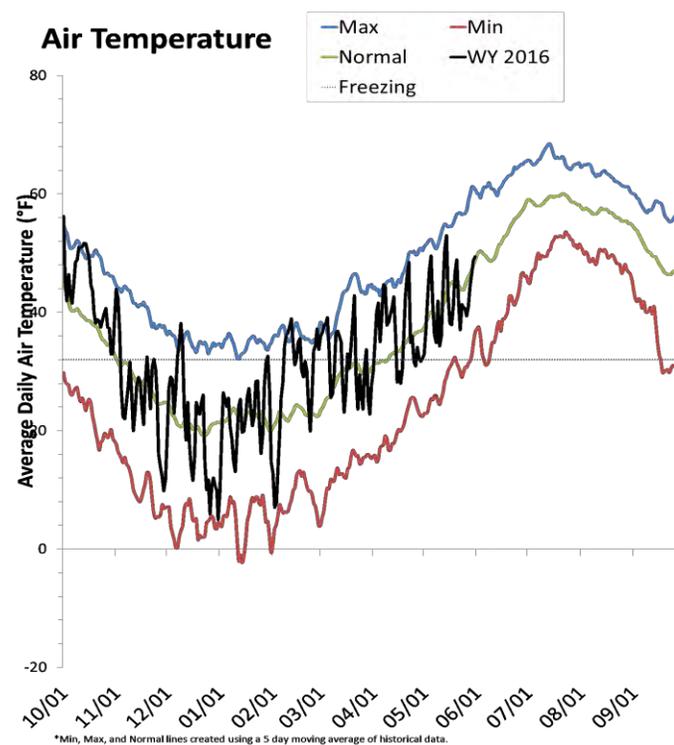
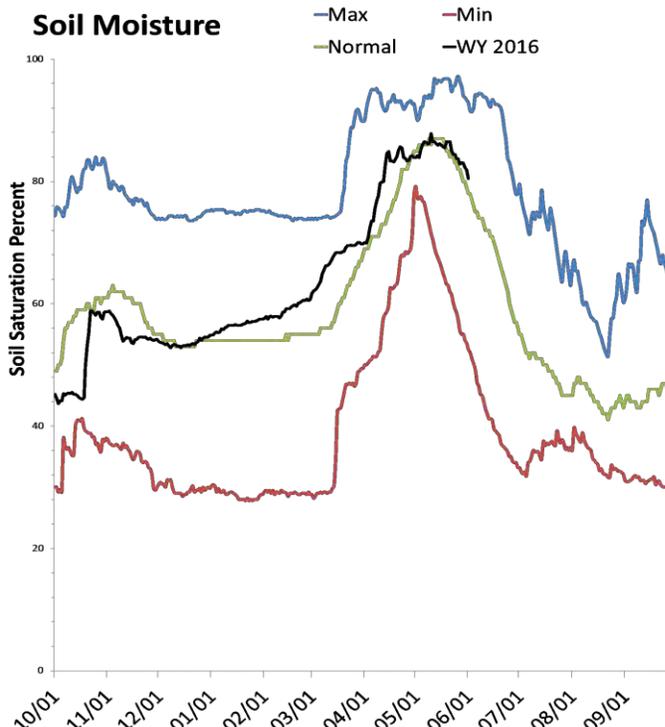
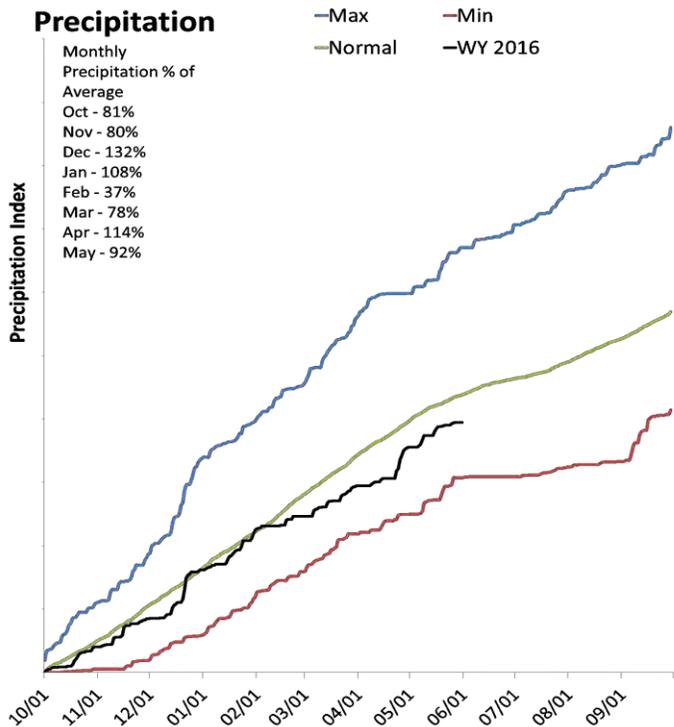
^{*}EOM, end of month; [#]WAI, Water Availability Index; [^]KAF, thousand acre-feet.



Price & San Rafael Basins

6/1/2016

Precipitation in May was near average at 92%, which brings the seasonal accumulation (Oct-May) to 90% of average. Soil moisture is at 81% compared to 72% last year. Reservoir storage is at 56% of capacity, compared to 58% last year. The water availability index for the Price River is 16%, and 22% for Joe's Valley.



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

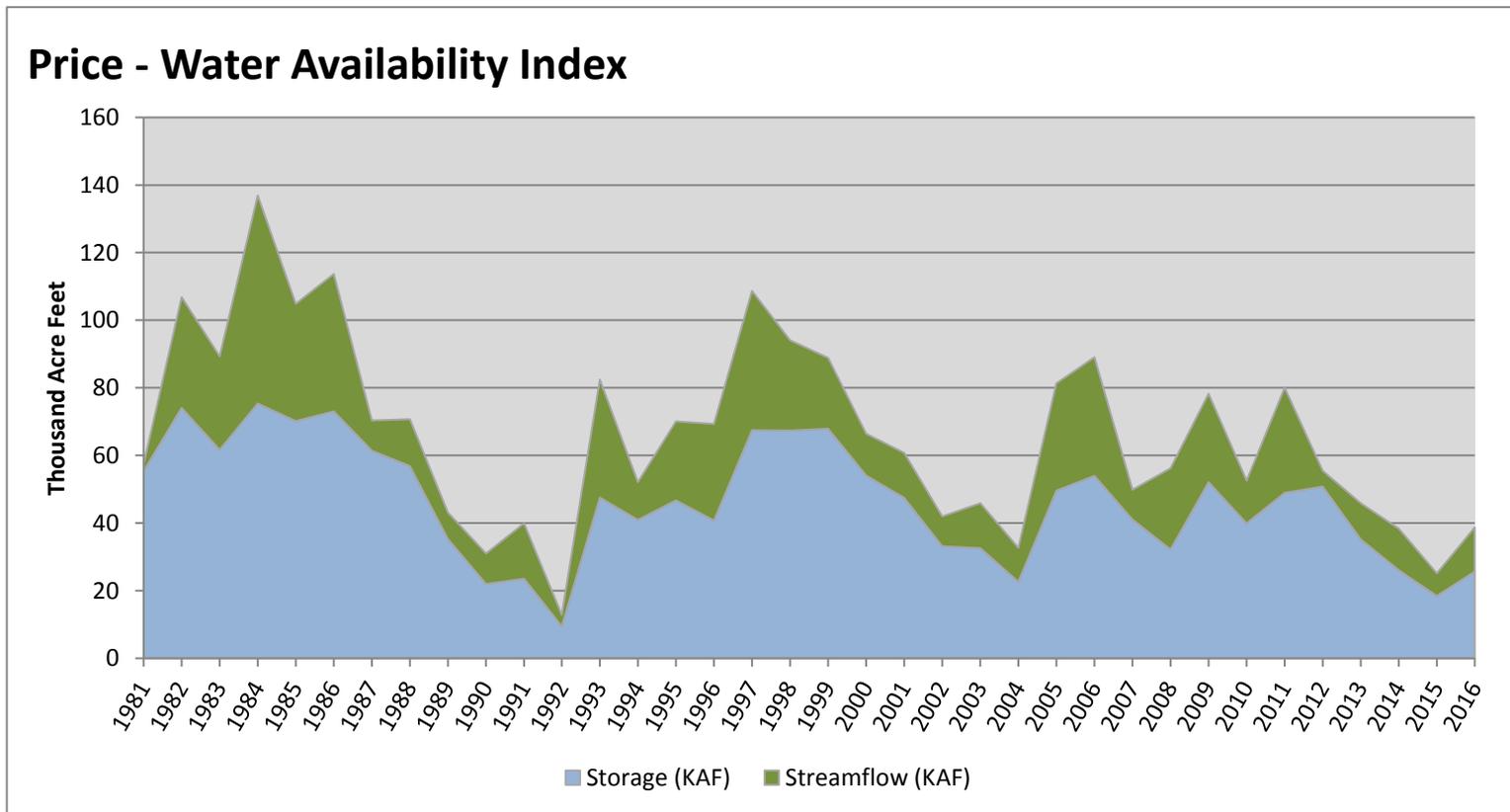
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

June 1, 2016

Water Availability Index

Basin or Region	May EOM [*] Storage	May Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Price	25.73	12.99	38.72	16	-2.82	04, 14, 91, 02

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

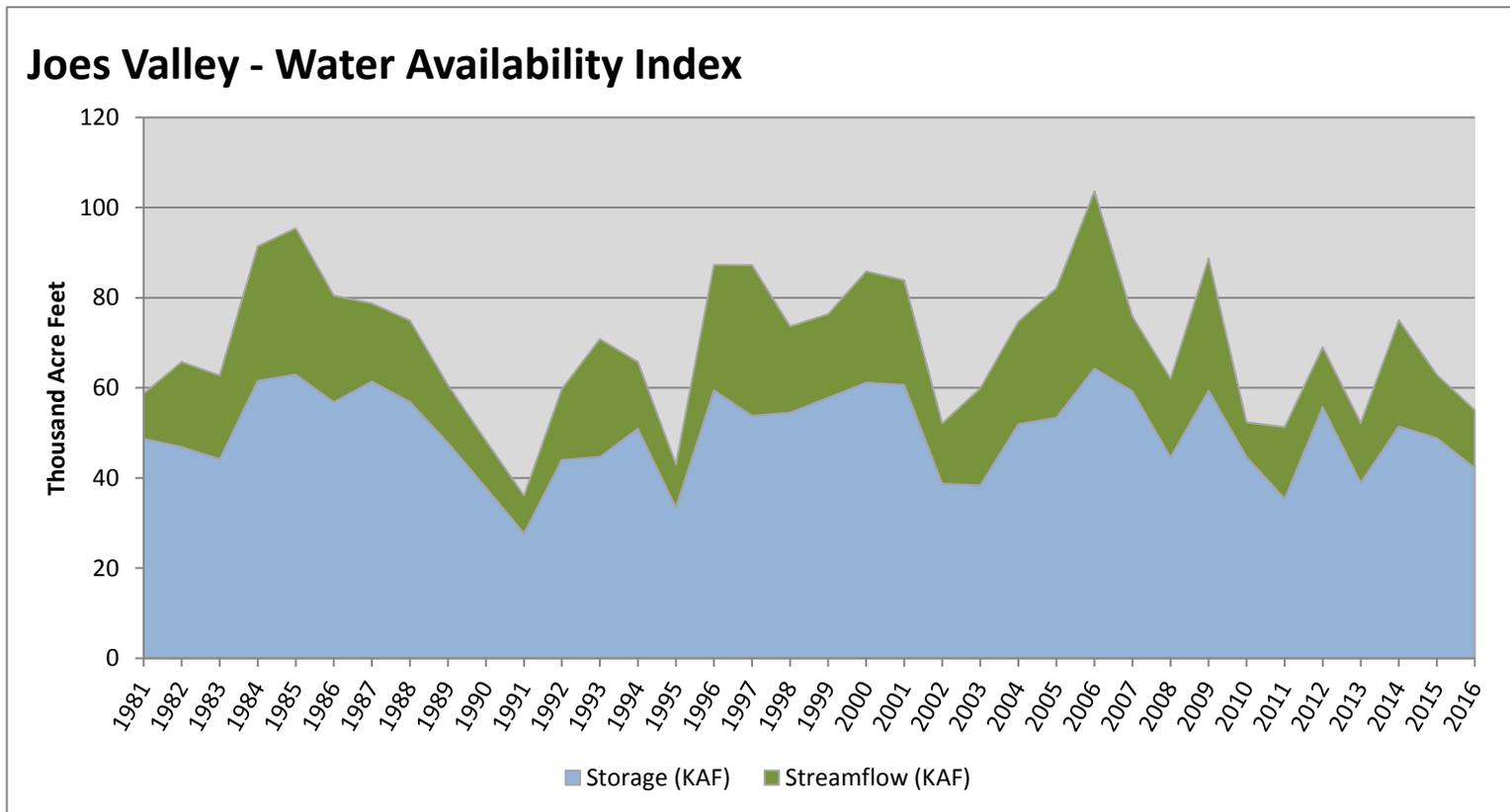


June 1, 2016

Water Availability Index

Basin or Region	May EOM [*] Storage	May Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Joese Valley	42.24	12.80	55.04	22	-2.36	13, 10, 81, 92

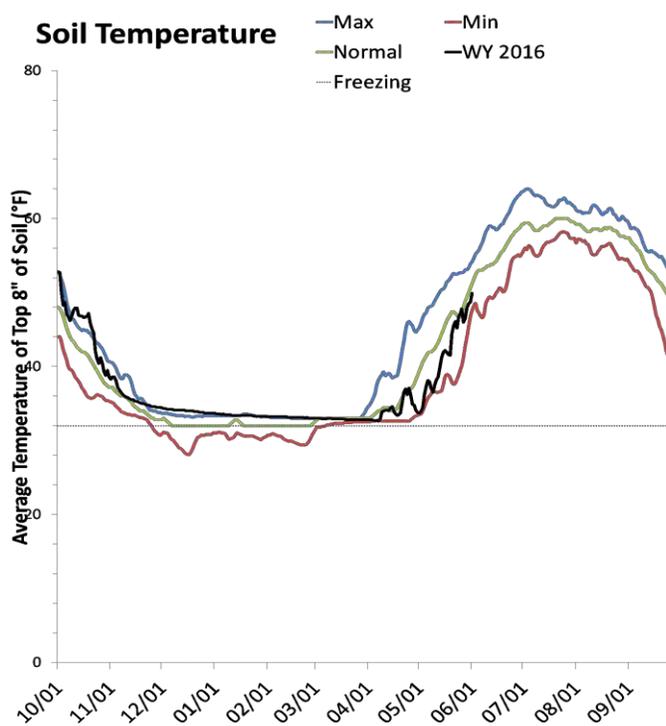
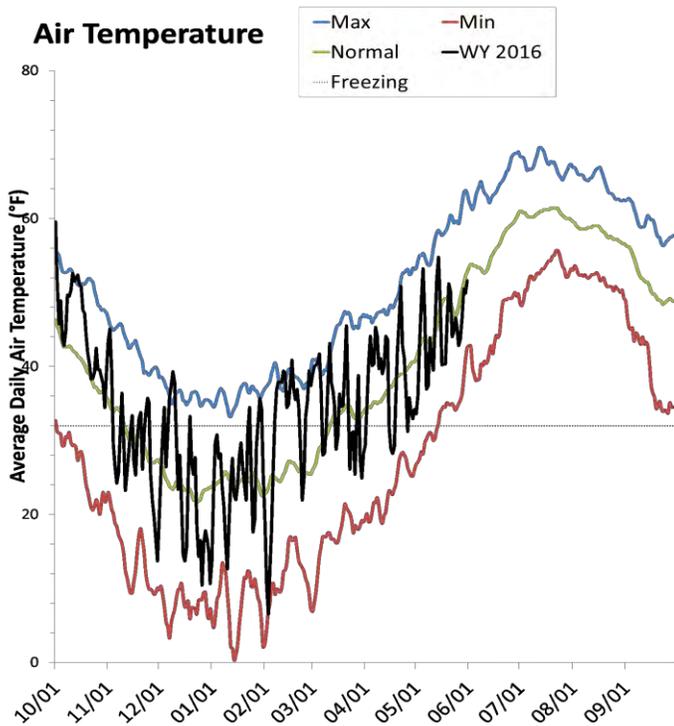
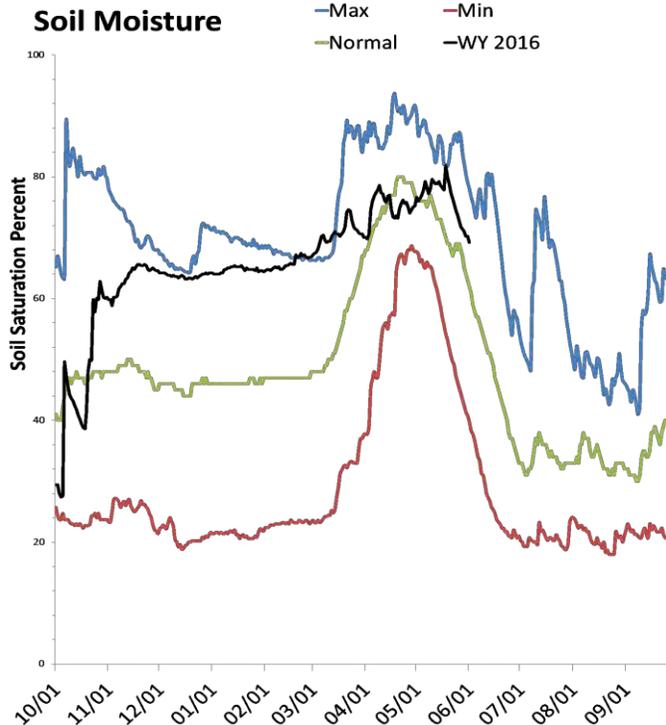
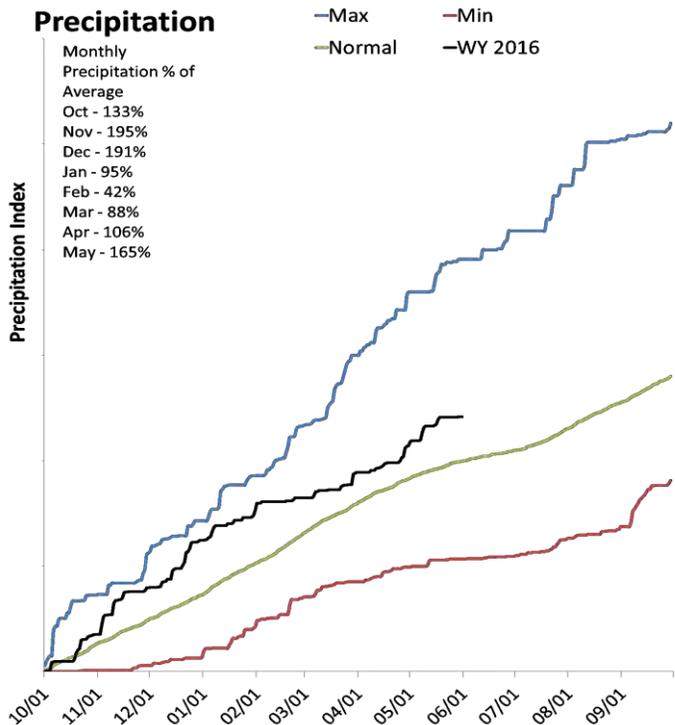
^{*}EOM, end of month; [#]WAI, Water Availability Index; [^]KAF, thousand acre-feet.



Southeastern Utah Basin

6/1/2016

Precipitation in May was much above average at 166%, which brings the seasonal accumulation (Oct-May) to 121% of average. Soil moisture is at 78% compared to 65% last year. Reservoir storage is at 102% of capacity, compared to 72% last year. The water availability index for Moab is 90%.



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

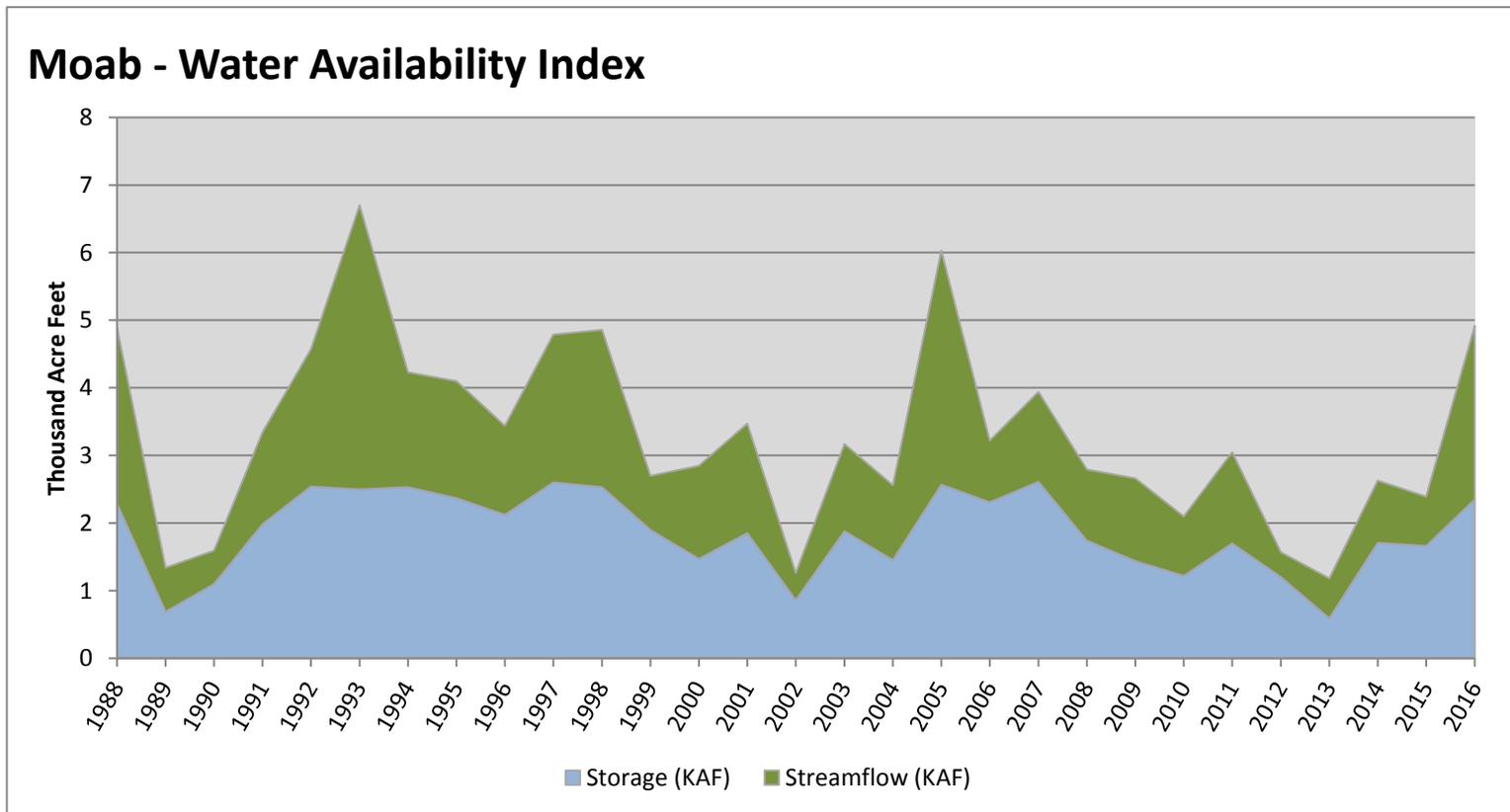
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

June 1, 2016

Water Availability Index

Basin or Region	May EOM [*] Storage	May Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Moab	2.35	2.57	4.92	90	3.33	98, 88, 05, 93

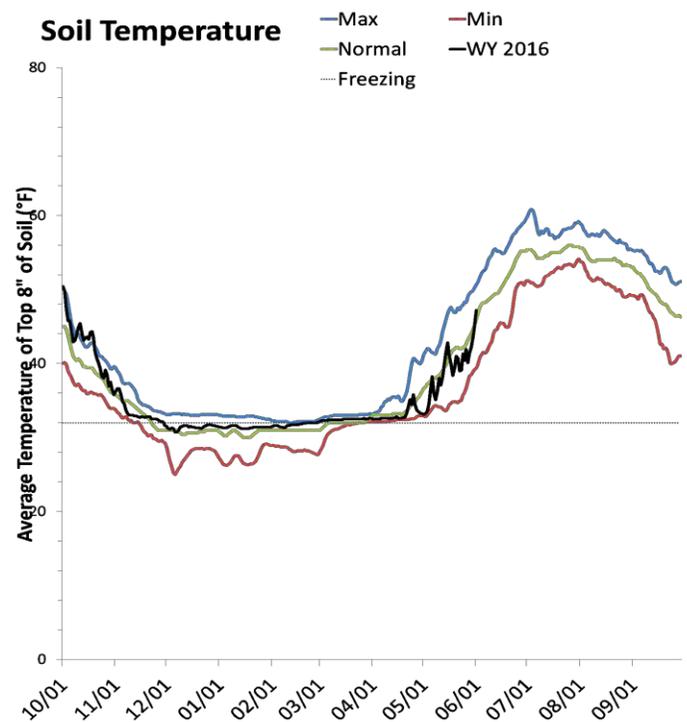
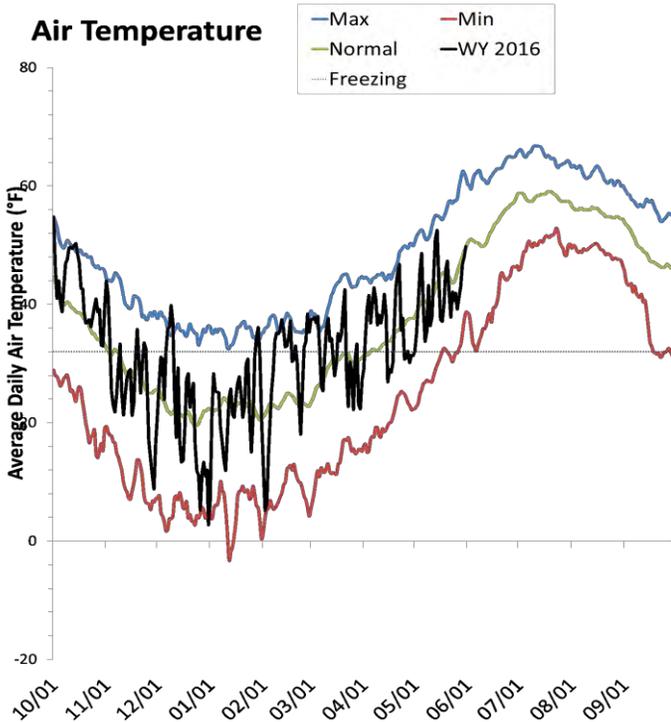
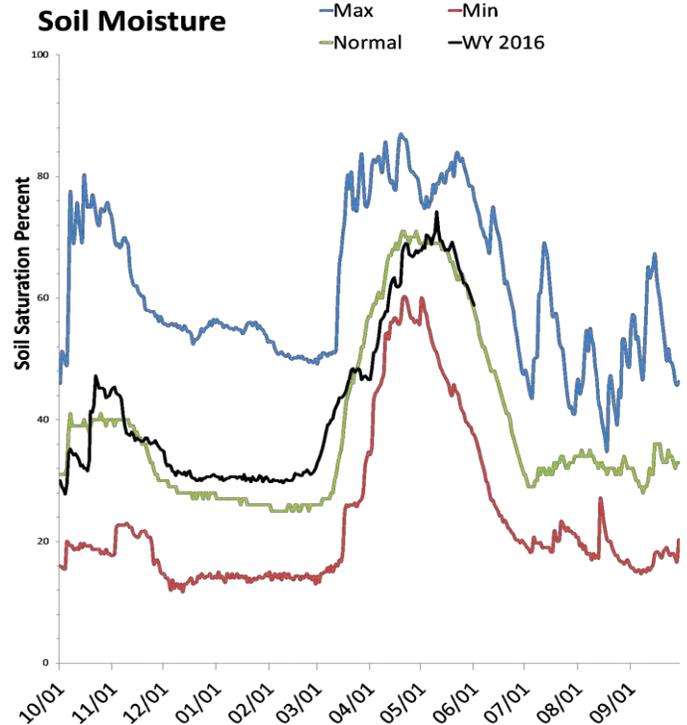
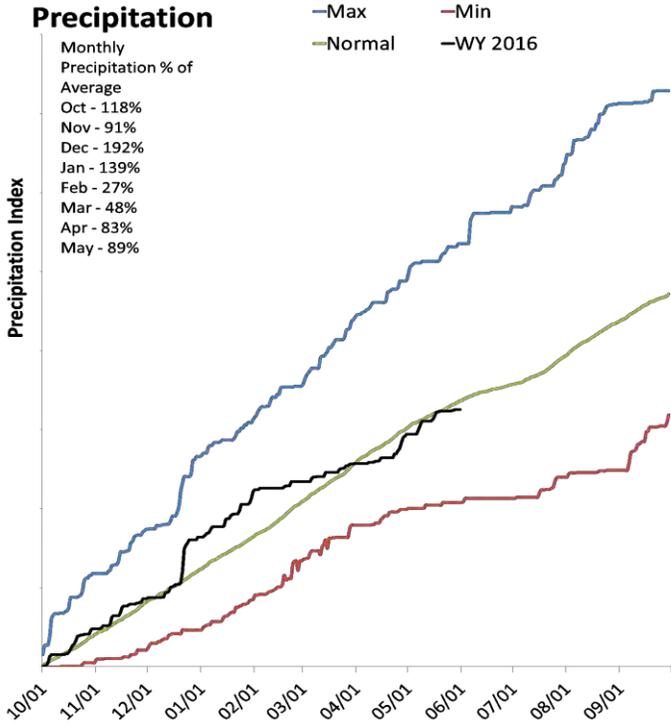
^{*}EOM, end of month; [#]WAI, Water Availability Index; [^]KAF, thousand acre-feet.



Dirty Devil Basin

6/1/2016

Precipitation in May was below average at 89%, which brings the seasonal accumulation (Oct-May) to 97% of average. Soil moisture is at 65% compared to 58% last year.



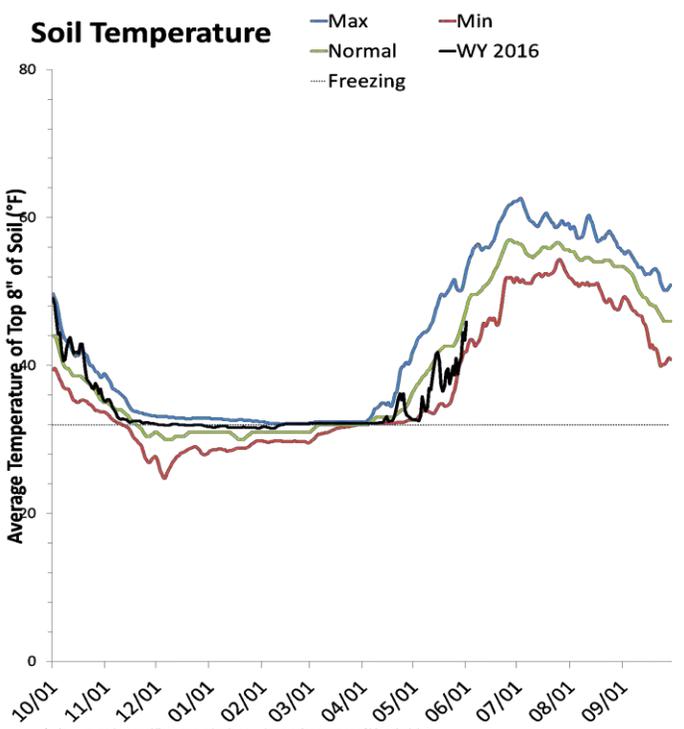
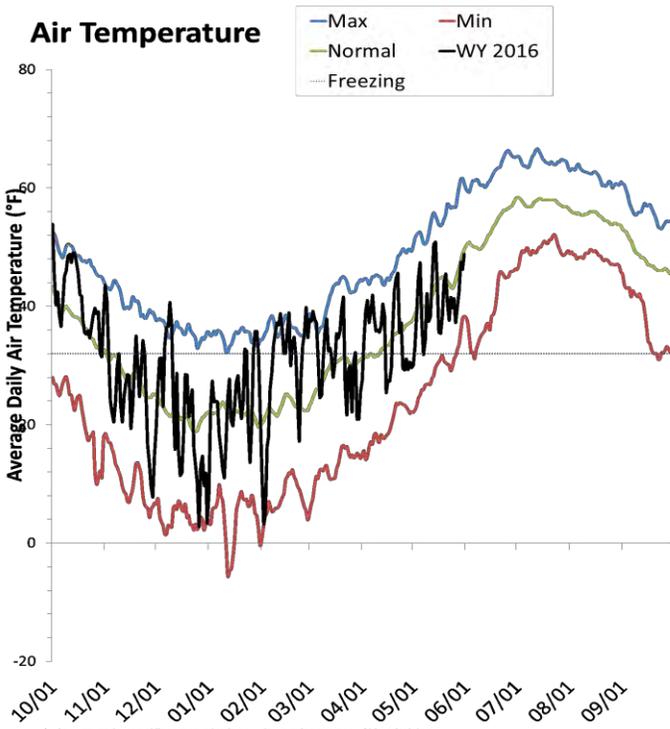
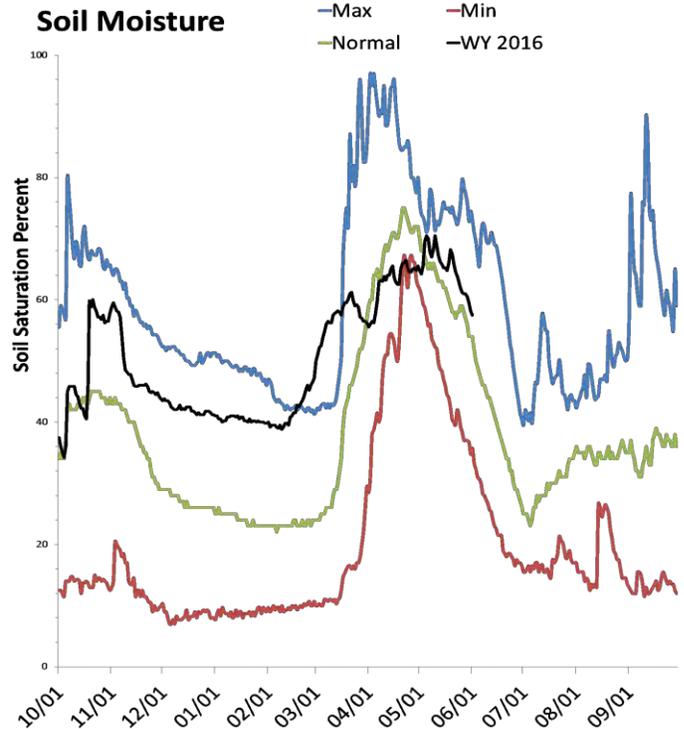
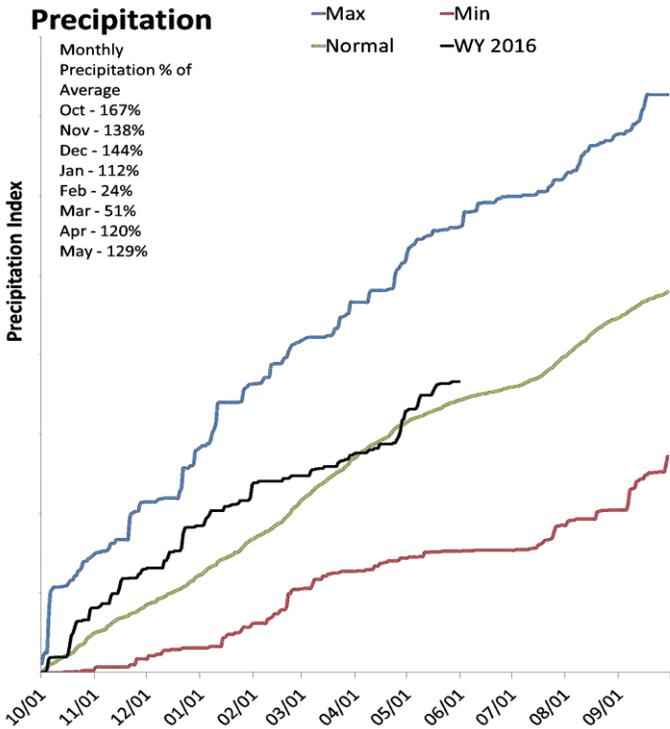
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

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

Escalante River Basin

6/1/2016

Precipitation in May was above average at 130%, which brings the seasonal accumulation (Oct-May) to 107% of average. Soil moisture is at 61% compared to 60% last year.



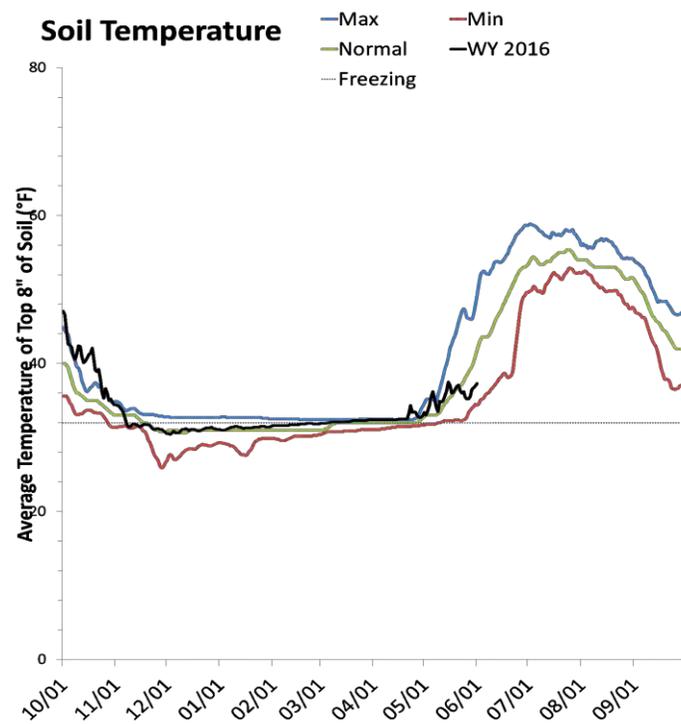
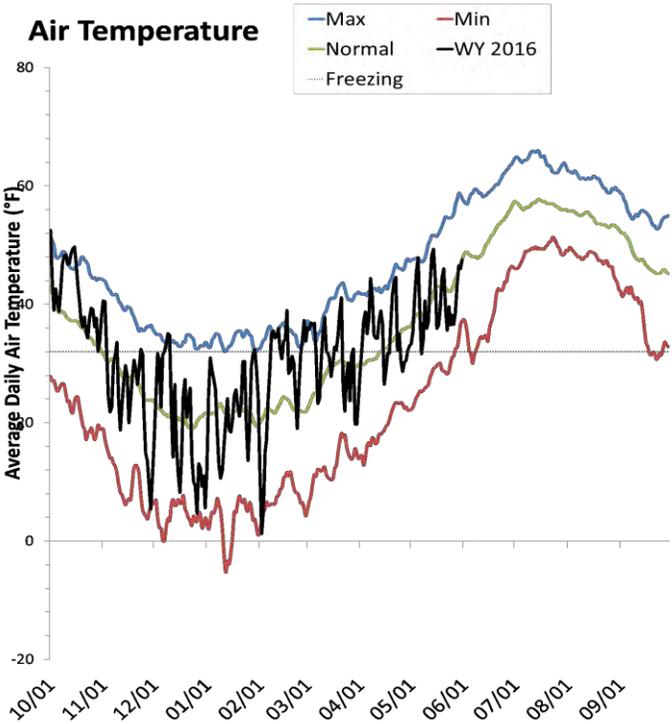
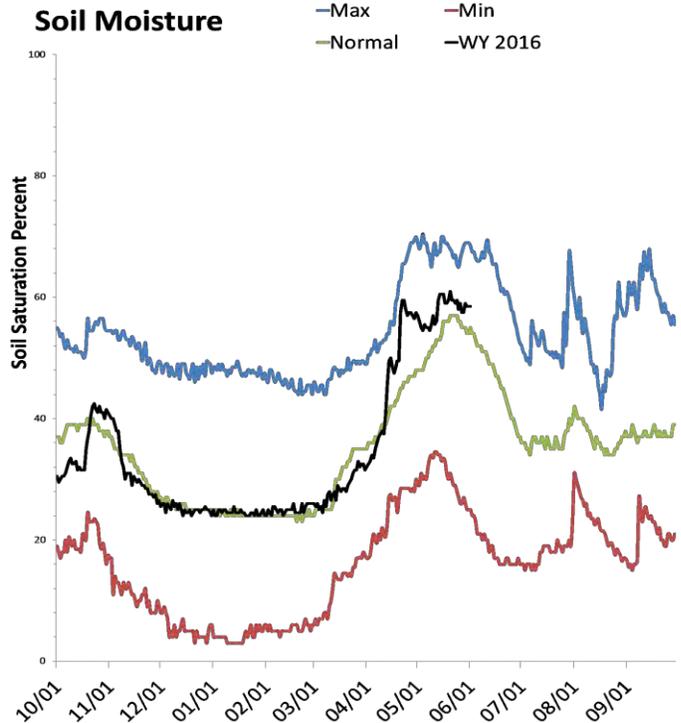
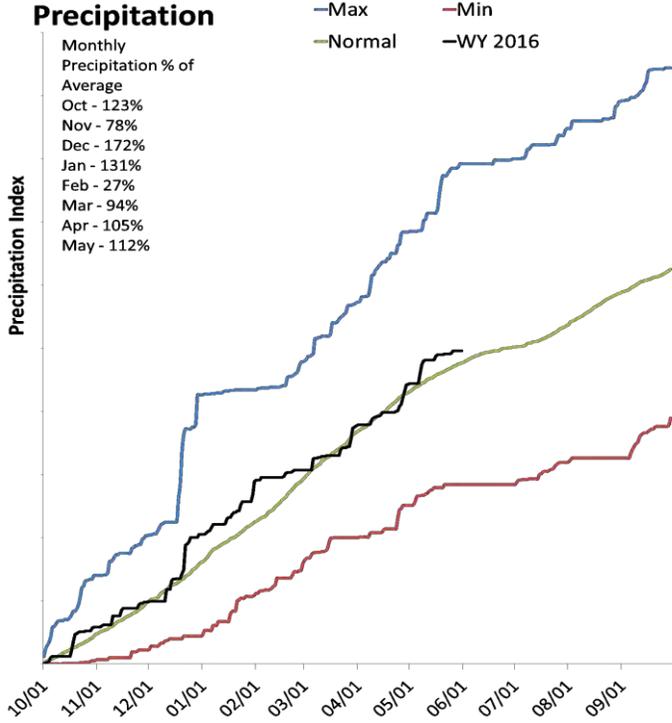
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

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

Beaver River Basin

6/1/2016

Precipitation in May was above average at 113%, which brings the seasonal accumulation (Oct-May) to 104% of average. Soil moisture is at 58% compared to 61% last year. Reservoir storage is at 43% of capacity, compared to 48% last year. The water availability index for the Beaver River is 38%.



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

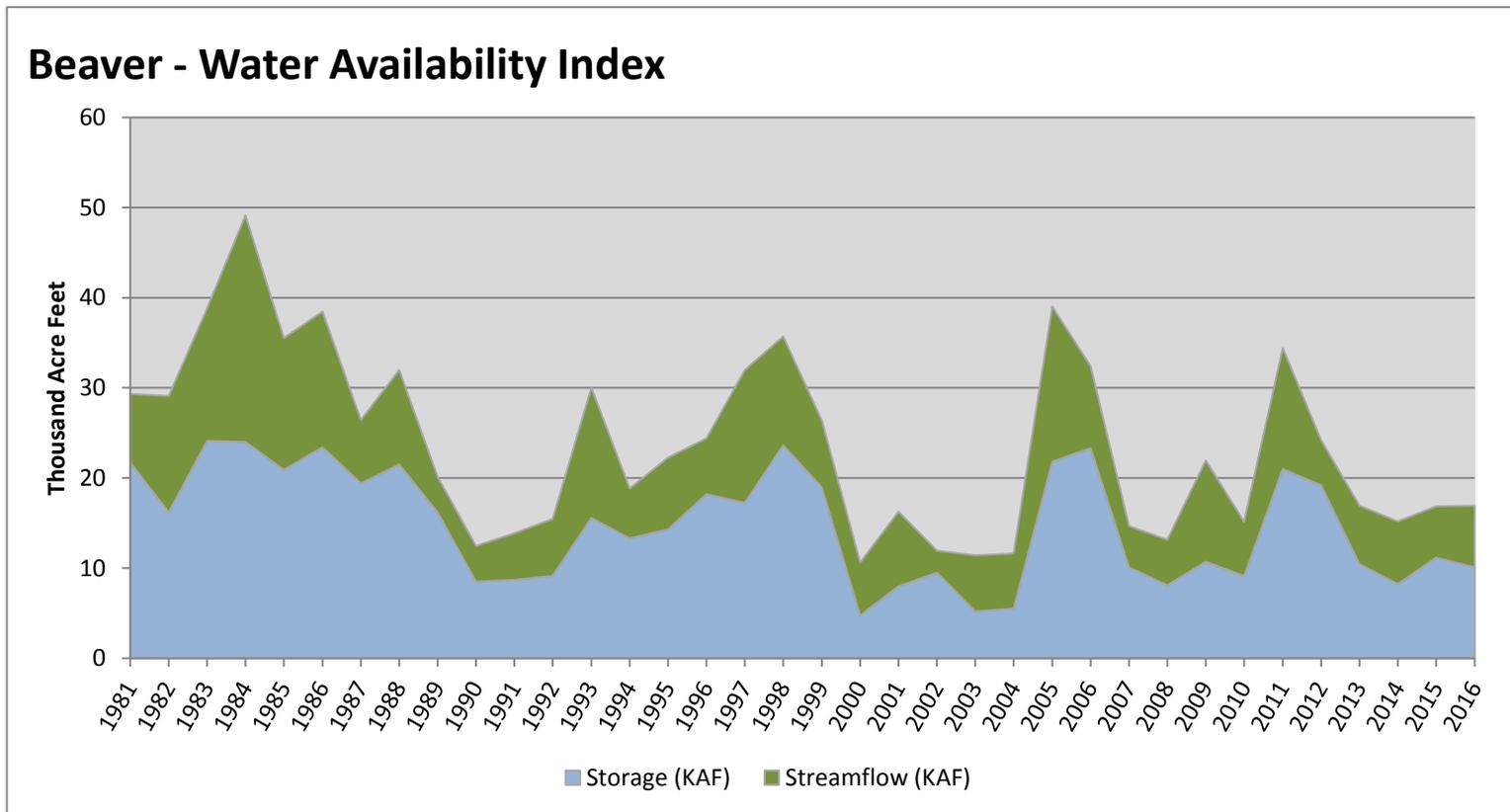
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

June 1, 2016

Water Availability Index

Basin or Region	May EOM [*] Storage	May Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Beaver	10.10	6.81	16.91	38	-1.01	01, 15, 13, 94

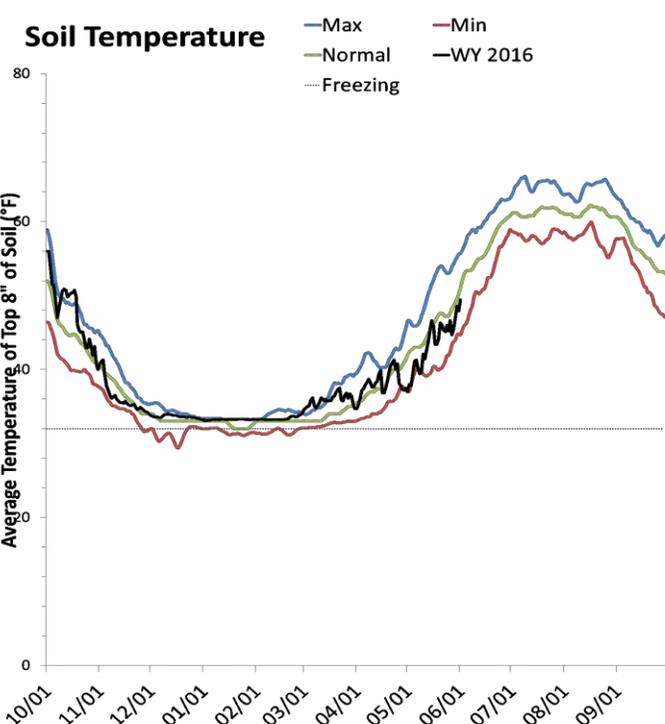
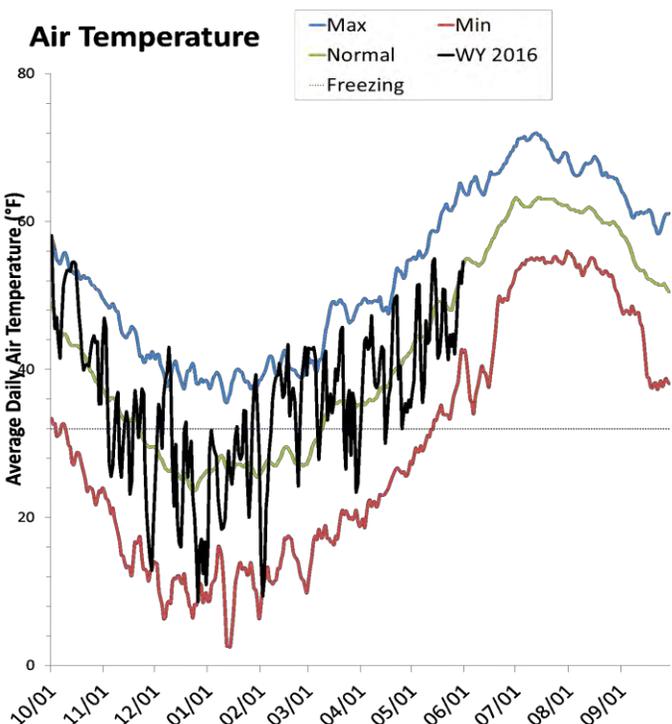
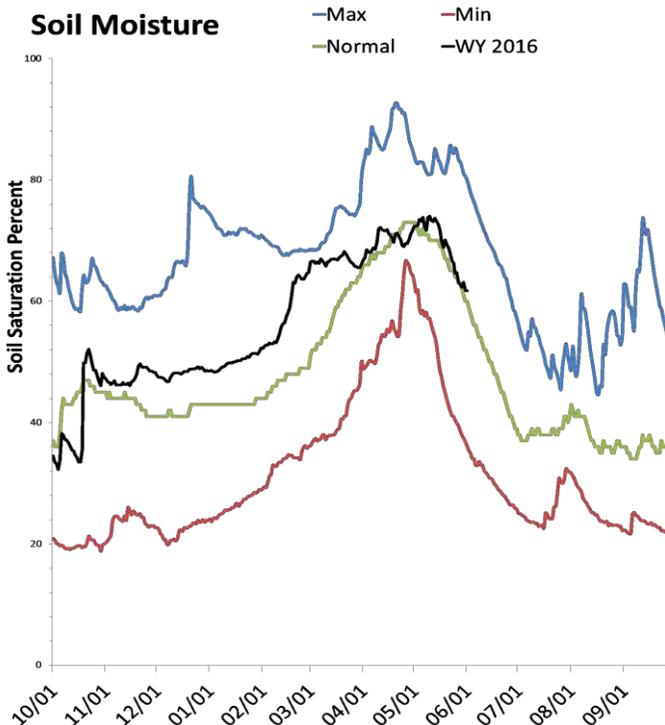
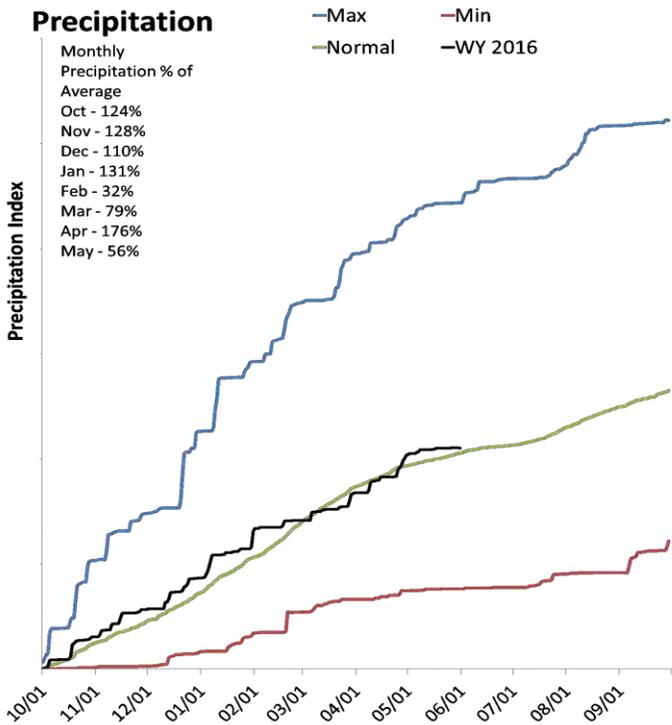
^{*}EOM, end of month; [#]WAI, Water Availability Index; [^]KAF, thousand acre-feet.



Southwestern Utah Basin

6/1/2016

Precipitation in May was much below average at 56%, which brings the seasonal accumulation (Oct-May) to 102% of average. Soil moisture is at 64% compared to 59% last year. Reservoir storage is at 50% of capacity, compared to 47% last year. The water availability index for the Virgin River is 45%.



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

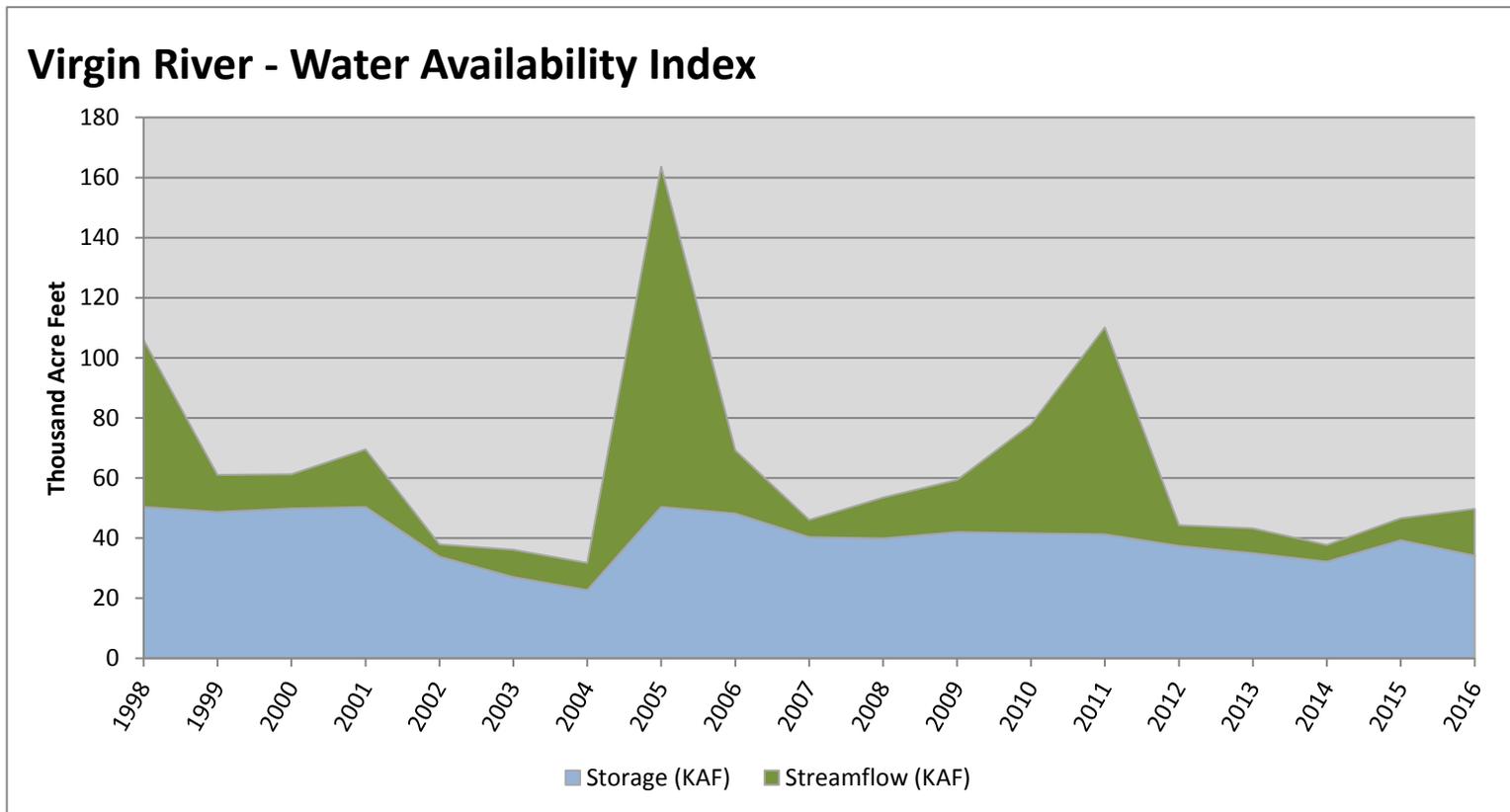
*Min, Max, and Normal lines created using a 5 day moving average of historical data.

June 1, 2016

Water Availability Index

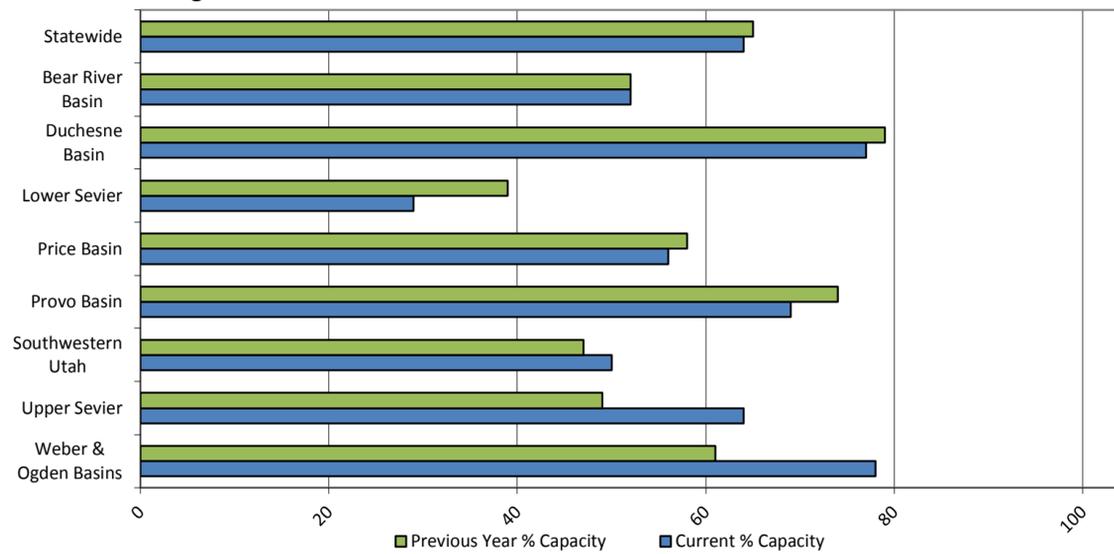
Basin or Region	May EOM [*] Storage	May Flow	Storage + Flow	Percentile	WAI [#]	Years with similiar WAI
	KAF [^]	KAF [^]	KAF [^]	%		
Virgin River	34.10	15.68	49.78	45	-0.42	07, 15, 08, 09

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



Reservoir Storage Summary for the end of May 2016	Current (KAF)	Last Year (KAF)	Average (KAF)	Capacity (KAF)	Current % Capacity	Last Year % Capacity	Average % Capacity	Current % Average	Last Year % Average
Big Sand Wash Reservoir	23.8	24.6		25.7	93%	96%			
Causey Reservoir	7.2	7.1	7.0	7.1	101%	100%	99%	102%	101%
Cleveland Lake	3.8	5.4		5.4	71%	100%			
Currant Creek Reservoir	14.9	15.1	15.2	15.5	96%	97%	98%	98%	99%
Deer Creek Reservoir	140.6	144.9	132.8	149.7	94%	97%	89%	106%	109%
East Canyon Reservoir	37.7	35.0	46.7	49.5	76%	71%	94%	81%	75%
Echo Reservoir	66.7	61.9	67.0	73.9	90%	84%	91%	100%	92%
Grantsville Reservoir	2.6	2.6	2.8	3.3	79%	80%	85%	93%	94%
Gunlock	3.6	5.5	7.9	10.4	35%	53%	76%	46%	70%
Gunnison Reservoir	1.2	0.7	14.7	20.3	6%	3%	72%	8%	4%
Huntington North Reservoir	3.2	3.2	3.7	4.2	76%	76%	88%	86%	87%
Hyrum Reservoir	14.7	14.8	14.6	15.3	96%	97%	95%	101%	101%
Joes Valley Reservoir	42.2	48.8	51.0	61.6	69%	79%	83%	83%	96%
Jordanelle Reservoir	231.4	247.0	274.4	320.0	72%	77%	86%	84%	90%
Ken's Lake	2.4	1.7	2.0	2.3	102%	72%	87%	118%	83%
Kolob Reservoir	5.4	4.9		5.6	97%	87%			
Lost Creek Reservoir	20.6	15.9	18.7	22.5	92%	70%	83%	110%	85%
Lower Enterprise	0.8	1.3	1.2	2.6	31%	48%	45%	68%	106%
Miller Flat Reservoir	3.4	5.3		5.2	66%	102%			
Millsite	11.9	15.8	15.9	16.7	71%	95%	95%	75%	99%
Minersville Reservoir	10.1	11.2	15.0	23.3	43%	48%	64%	67%	75%
Moon Lake Reservoir	23.0	32.0	28.6	35.8	64%	89%	80%	81%	112%
Otter Creek Reservoir	47.1	36.8	43.7	52.5	90%	70%	83%	108%	84%
Panguitch Lake	13.9	11.6	18.1	22.3	62%	52%	81%	77%	64%
Pineview Reservoir	110.7	91.5	97.8	110.1	101%	83%	89%	113%	94%
Piute Reservoir	32.1	23.9	53.0	71.8	45%	33%	74%	61%	45%
Porcupine Reservoir	11.4	11.5	10.8	11.3	101%	102%	96%	106%	106%
Quail Creek	30.5	33.7	31.5	40.0	76%	84%	79%	97%	107%
Red Fleet Reservoir	25.4	18.3	23.5	25.7	99%	71%	91%	108%	78%
Rockport Reservoir	48.0	48.0	50.8	60.9	79%	79%	83%	94%	95%
Sand Hollow Reservoir	47.1	37.2		50.0	94%	74%			
Scofield Reservoir	25.7	18.5	48.7	65.8	39%	28%	74%	53%	38%
Settlement Canyon Reservoir	0.7	0.5	0.9	1.0	74%	46%	85%	87%	54%
Sevier Bridge Reservoir	69.2	91.2	159.0	236.0	29%	39%	67%	44%	57%
Smith And Morehouse Reservoir	8.2	8.2	6.7	81.0	10%	10%	8%	122%	122%
Starvation Reservoir	162.1	162.0	154.8	165.3	98%	98%	94%	105%	105%
Stateline Reservoir	12.0	14.0	10.2	12.0	100%	116%	85%	118%	137%
Steinaker Reservoir	25.9	22.0	29.2	33.4	78%	66%	87%	89%	75%
Strawberry Reservoir	828.5	850.2	714.9	1105.9	75%	77%	65%	116%	119%
Upper Enterprise	0.3	0.5	4.8	10.0	3%	5%	48%	7%	11%
Upper Stillwater Reservoir	5.8	20.2	15.7	32.5	18%	62%	48%	37%	129%
Utah Lake	480.7	575.0	864.9	870.9	55%	66%	99%	56%	66%
Vernon Creek Reservoir	0.5	0.5	0.5	0.6	75%	75%	87%	87%	87%
Willard Bay	182.1	108.9	164.5	215.0	85%	51%	77%	111%	66%
Woodruff Creek	4.1	4.0	3.8	4.0	103%	100%	95%	108%	105%
Woodruff Narrows Reservoir	58.2	55.4	44.8	57.3	102%	97%	78%	130%	124%
Meeks Cabin Reservoir	25.5	30.3	25.2	32.5	79%	93%	78%	101%	120%
Bear Lake	632.9	640.3	710.6	1302.0	49%	49%	55%	89%	90%
Basin-wide Total	3476.7	3541.1	4007.6	5453.8	64%	65%	73%	87%	88%
# of reservoirs	43	43	43	43	43	43	43	43	43

Reservoir Storage



June 1, 2016

Water Availability Index

Basin or Region	May EOM* Storage	May Flow	Storage + Flow	Percentile	WAI#	Years with similar WAI
	KAF^	KAF^	KAF^	%		
Bear River	633	50.1	683	49	-0.1	14, 15, 01, 96
Woodruff Narrows	58.3	35.7	94.0	65	1.2	08, 14, 07, 05
Little Bear	14.7	13.3	28.0	52	0.2	02, 10, 08, 09
Ogden	117.9	22.4	140.3	59	0.8	96, 95, 09, 85
Weber	181.2	78.5	259.7	44	-0.5	07, 00, 91, 94
Provo River	372.1	35.4	407.5	32	-1.5	02, 14, 10, 03
Western Uintah	191.0	10.8	201.8	40	-0.8	04, 92, 96, 99
Eastern Uintah	51.3	35.4	86.8	59	0.8	08, 99, 06, 07
Blacks Fork	25.5	27.4	53.0	50	0.0	97, 94, 93, 96
Price	25.7	13.0	38.7	16	-2.8	04, 14, 91, 02
Smiths Creek	12.0	9.5	21.5	76	2.2	09, 15, 92, 05
Joes Valley	42.2	12.8	55.0	22	-2.4	13, 10, 81, 92
Moab	2.4	2.6	4.9	90	3.3	98, 88, 05, 93
Upper Sevier River	79.2	10.6	89.8	32	-1.5	09, 14, 08, 07
San Pitch	1.2	3.0	4.2	8	-3.5	13, 15, 91, 90
Lower Sevier	69.2	11.5	80.8	5	-3.7	04, 03, 91, 02
Beaver	10.1	6.8	16.9	38	-1.0	01, 15, 13, 94
Virgin River	34.1	15.7	49.8	45	-0.4	07, 15, 08, 09

*EOM, end of month; # WAI, water availibility 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.

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YOU MAY OBTAIN THIS PRODUCT AS WELL AS CURRENT SNOW, PRECIPITATION, TEMPERATURE AND SOIL MOISTURE, RESERVOIR, SURFACE WATER SUPPLY INDEX, AND OTHER DATA BY VISITING OUR WEB SITE @: <http://www.ut.nrcs.usda.gov/snow/>

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