Utah Climate and Water Report

August 1, 2020

West Fork Blacks Fork River

near the Buck Pasture SNOTEL site, North Slope Uinta Mountains

Photo by Jordan Clayton

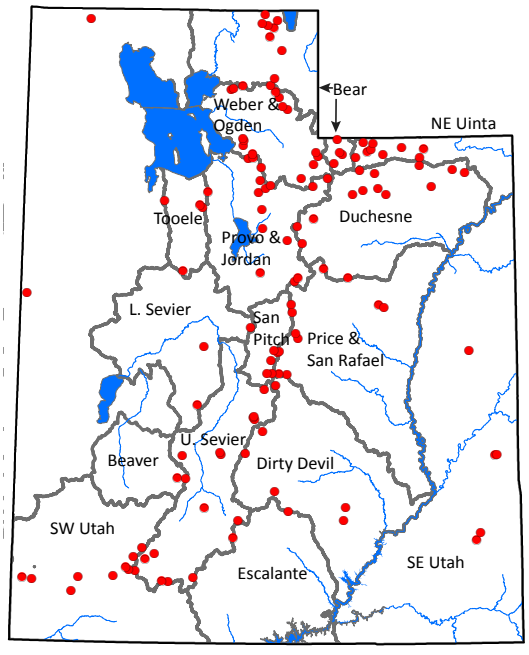
Report Contents

Utah Climate and Water Report

The purpose of the Climate and Water Report is to provide a snapshot of current and immediate past climatic conditions and other information useful to agricultural and water user interests in Utah. The report utilizes data from several sources that represent specific parameters (streamflow data from the United States Geological Survey, reservoir data from the Bureau of Reclamation, and other sources), geography including high elevation United States Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS) Snowpack Telemetry (SNOTEL) data, and agriculturally important data from the USDA-NRCS Soil Climate Analysis Network (SCAN). Data on precipitation, soil moisture, soil temperature, reservoir storage, and streamflow are analyzed and presented. These data analyses can be used to increase irrigation efficiency and agricultural production. As with all data and analyses, there are limitations due to data quality, quantity, and spatial application.

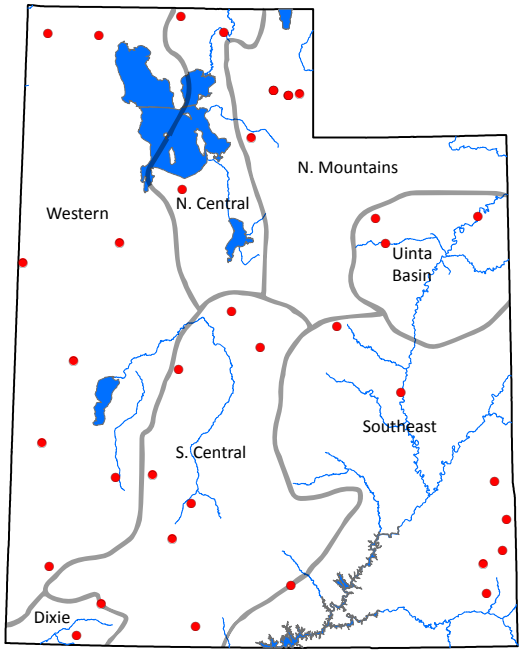
SNOTEL

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



SCAN

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



Utah General Summary
August 1, 2020

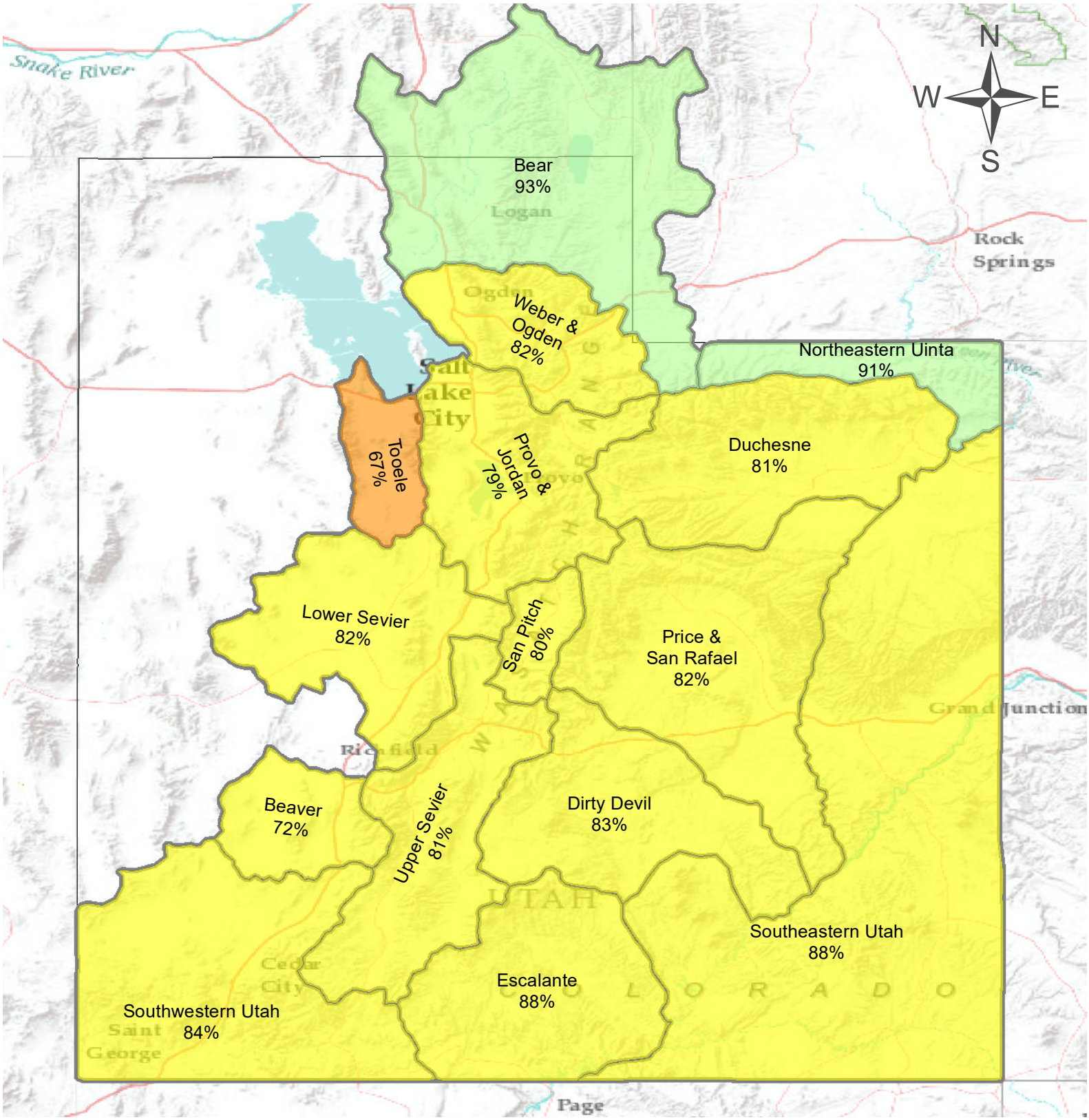
*This report has been reorganized to better reflect two distinct geographic areas being monitored – the low elevation valley sites (**S**oil **C**limate **A**nalysis **N**etwork) that are critical for agricultural production and operations, and the high elevation mountainous areas where water supply is generated (**SNO**w**TEL**emetry). 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 jordan.clayton@usda.gov.*

Current Valley Conditions (SCAN)

July was a rough month in Utah's valley locations, where a scant 0.4 inches of precipitation accumulated. Northern and Western Utah, and the Uinta Basin fared the worst with just 0.2 inches of accumulation, whereas Southeastern Utah saw 0.6 of an inch accumulated. The water year total for Utah's lower elevations incremented up to just 7.3 inches, still below average. For yet another month, soil moisture conditions are below normal and temperatures persist above normal. Also for another month, drought conditions continued to deteriorate in July. Almost the entire state of Utah (99%) is now experiencing drought conditions (D0-D4). Most troubling is the introduction of Extreme Drought (D3) in Utah, which now covers about 9% of the state. Needless to say, monsoonal moisture would be especially welcome this August.

Current Mountain Conditions (SNOTEL)

Precipitation at Utah's SNOTEL sites in our mountain locations has continued to disappoint. July precipitation was only 40% of average, bringing the water-year-to-date (October through July) precipitation to 83% of average. The statewide mountain soil moisture is at 33% of saturation compared with 41% of saturation last year. This is well below-normal and reflects the lack of monsoonal precipitation this summer thus far. Utah's reservoirs remain in reasonably good condition: statewide reservoir storage is at 76% of capacity, though some areas (such as the Sevier basin) are much lower. Water Availability Index values, which combine current reservoir storage with streamflow for major Utah watersheds, are generally around average except for the Eastern Uintas, Moab area, San Pitch, and Lower Sevier watersheds which are all below the 30th percentile. Let's hope that monsoonal moisture arrives soon!



Statewide Precipitation

As of August 1, 2020:

83% of Normal Precipitation

40% of Normal Precipitation Last Month

0 10 20 40 60 80 100 Miles

% of Normal

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

August 1, 2020

Water Availability Index

Basin or Region	Jul EOM* Storage	July Flow	Storage + Flow	Percentile	WAI#	Years with similiar WAI
	*KAF^*	*KAF^*	*KAF^*	*%*		
Bear River	**945**	**8.6**	**954**	**66**	**1.3**	**81, 12, 87, 18**
Woodruff Narrows	**31.4**	**8.6**	**40.0**	**51**	**0.1**	**87, 91, 15, 06**
Little Bear	**10.0**	**1.3**	**11.3**	**55**	**0.4**	**08, 10, 96, 09**
Ogden	**82.1**	**2.9**	**85.0**	**46**	**-0.3**	**14, 96, 91, 04**
Weber	**157.2**	**7.9**	**165.1**	**48**	**-0.1**	**07, 04, 91, 06**
Provo River	**408.9**	**4.6**	**413.5**	**54**	**0.3**	**00, 01, 06, 09**
Western Uinta	**189.4**	**6.0**	**195.3**	**53**	**0.3**	**10, 01, 16, 06**
Eastern Uinta	**31.3**	**7.6**	**38.9**	**27**	**-1.9**	**12, 04, 93, 17**
Blacks Fork	**14.9**	**5.9**	**20.8**	**34**	**-1.3**	**89, 04, 06, 90**
Price	**48.3**	**0.9**	**49.2**	**66**	**1.3**	**93, 87, 05, 95**
Smiths Creek	**9.1**	**5.0**	**14.1**	**62**	**1.0**	**96, 15, 16, 10**
Joes Valley	**52.0**	**3.0**	**55.0**	**46**	**-0.3**	**14, 01, 88, 10**
Moab	**1.0**	**0.3**	**1.3**	**26**	**-2.0**	**00, 09, 96, 06**
Upper Sevier River	**57.5**	**1.0**	**58.5**	**54**	**0.3**	**12, 00, 81, 06**
San Pitch	**0.9**	**1.3**	**2.2**	**22**	**-2.3**	**92, 89, 90, 04**
Lower Sevier	**56.5**	**2.4**	**58.9**	**22**	**-2.3**	**02, 15, 14, 09**
Beaver	**8.3**	**1.8**	**10.2**	**46**	**-0.3**	**15, 89, 96, 12**
Virgin River	**34.5**	**4.3**	**38.8**	**46**	**-0.4**	**09, 18, 15, 16**

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

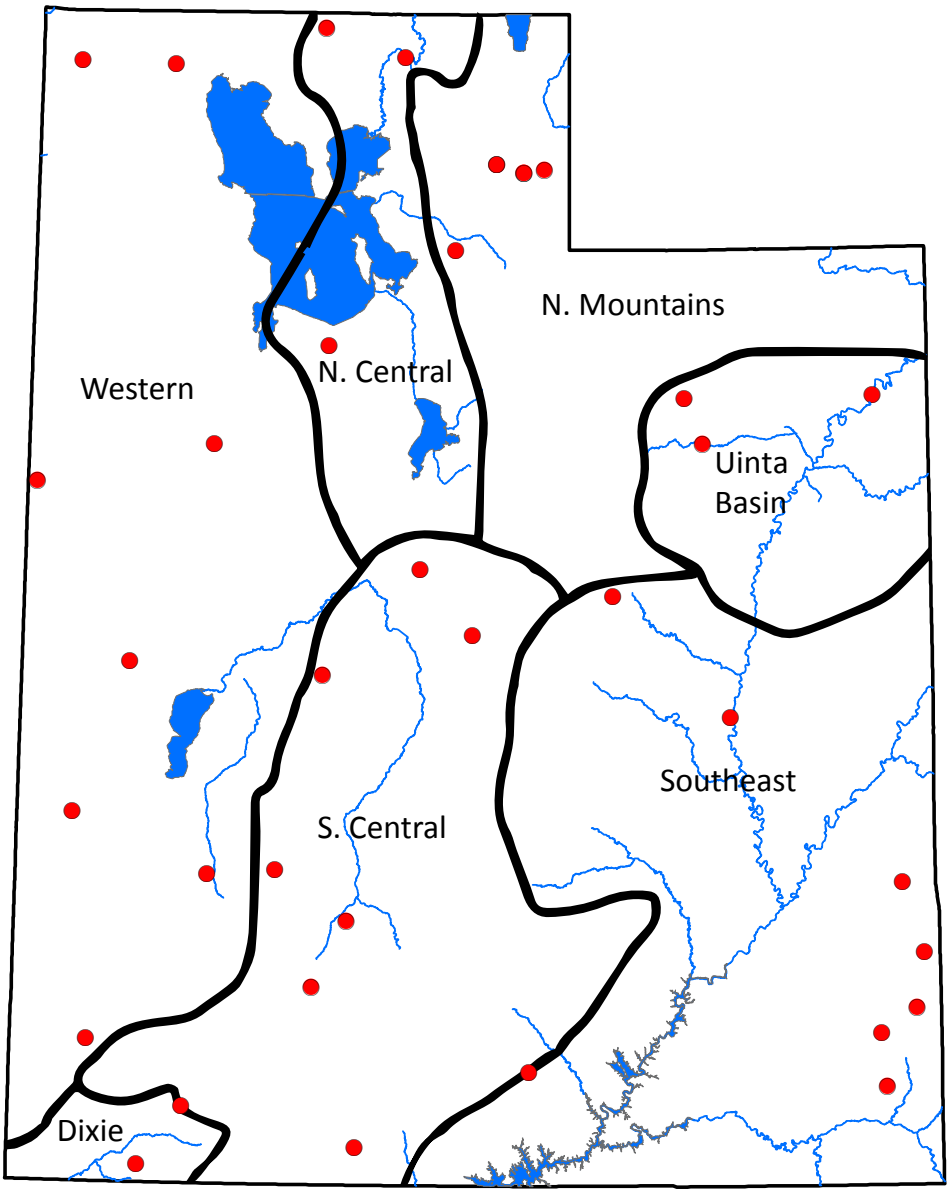
What is a Water Availability Index?

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.

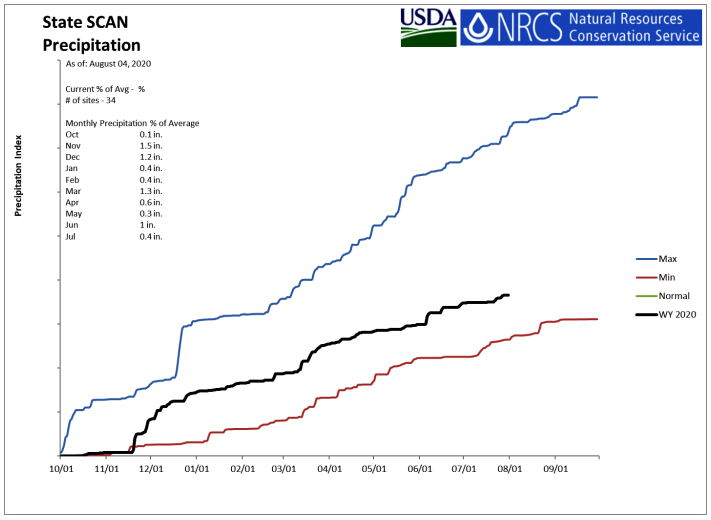
SCAN portion of report

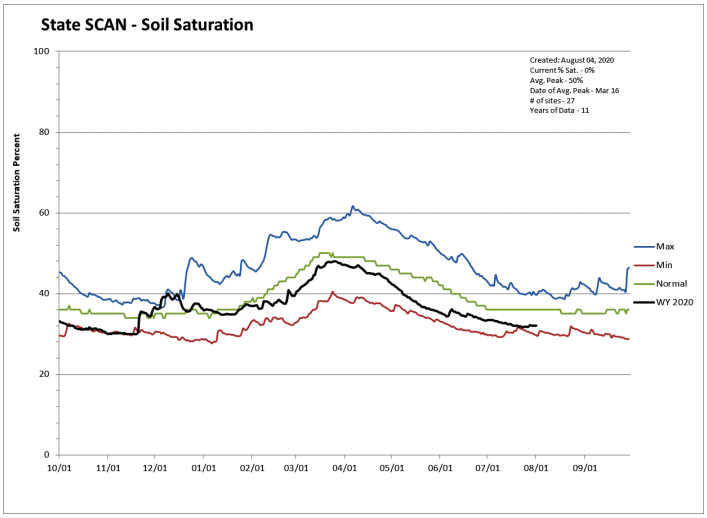


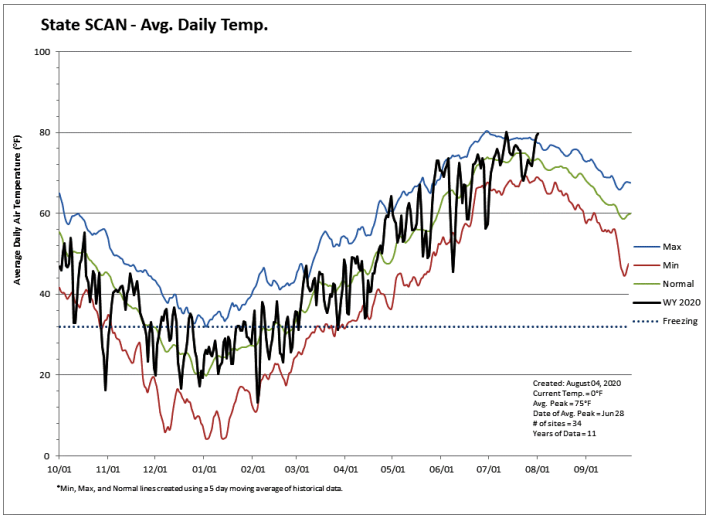
Statewide SCAN

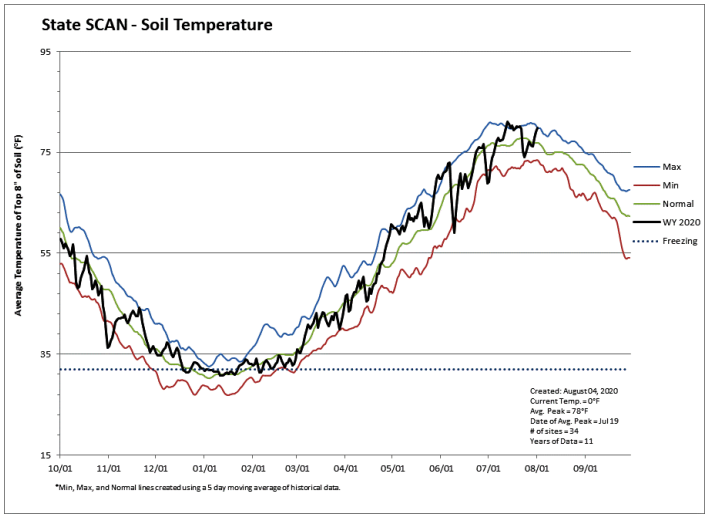
August 1, 2020

The average precipitation at SCAN sites within Utah was 0.4 inches in July, which brings the seasonal accumulation (Oct-Jul) to 7.3 inches. Soil moisture is at 32% compared to 34% last year.





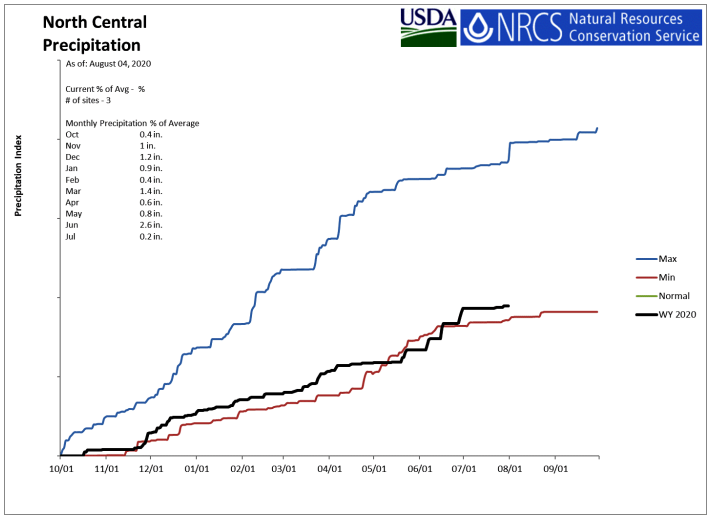


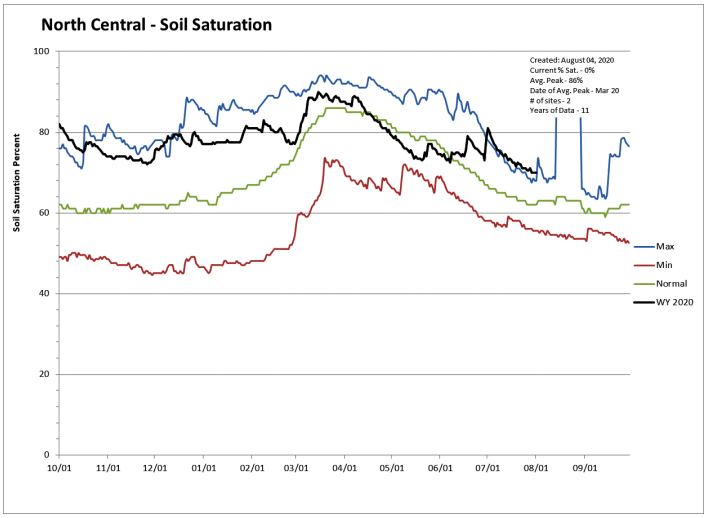


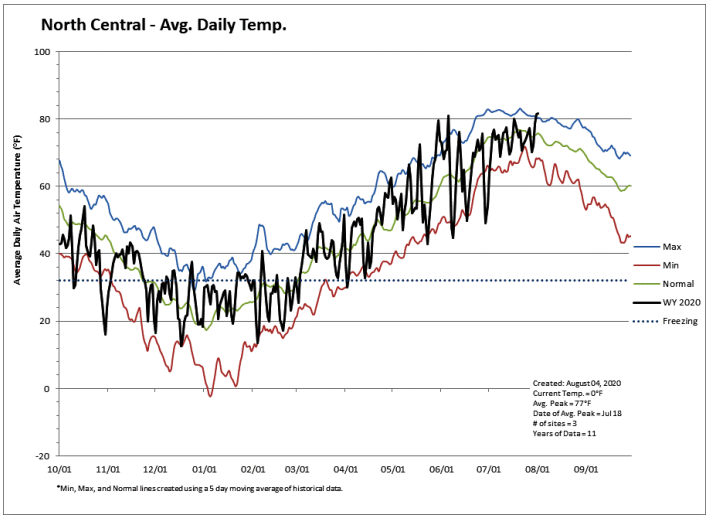
North Central

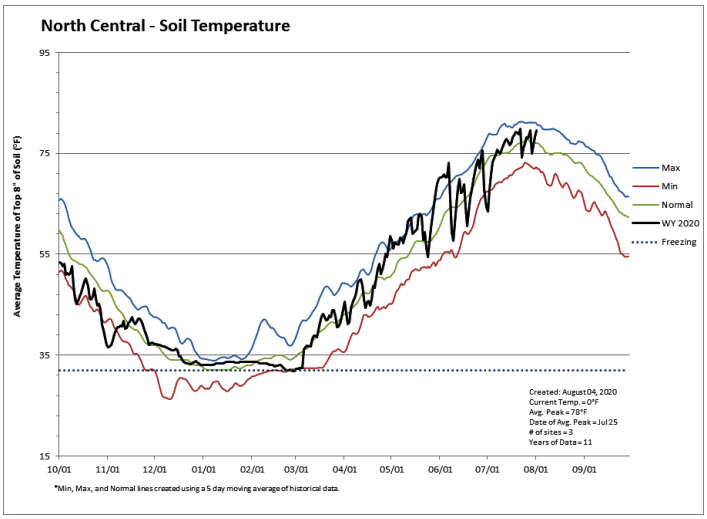
August 1, 2020

The average precipitation in July at SCAN sites within the basin was 0.2 inches, which brings the seasonal accumulation (Oct-Jul) to 9.5 inches. Soil moisture is at 70% compared to 70% last year.





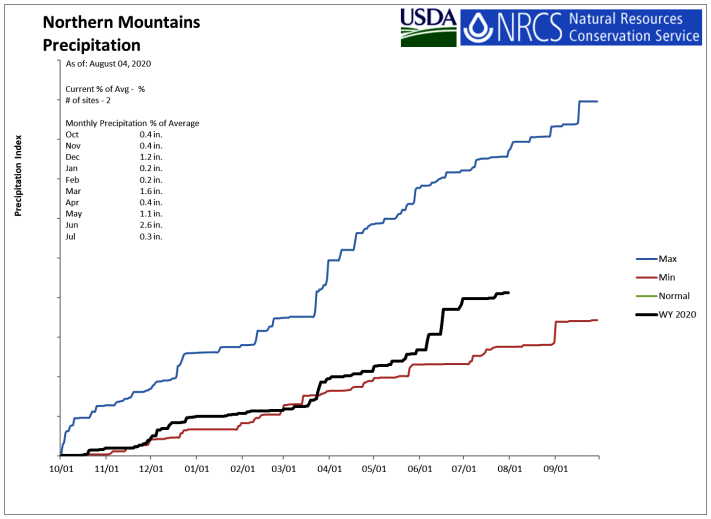


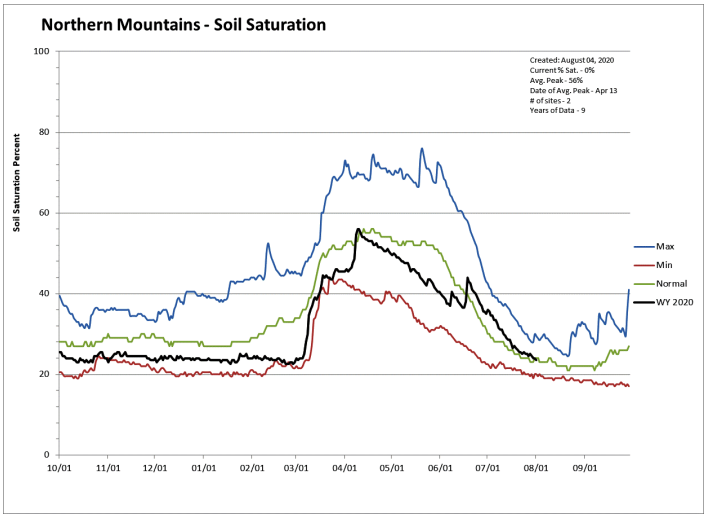


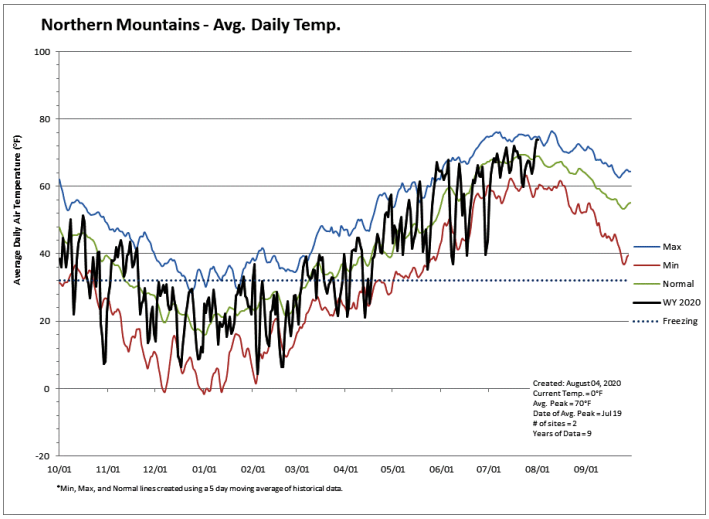
Northern Mountains

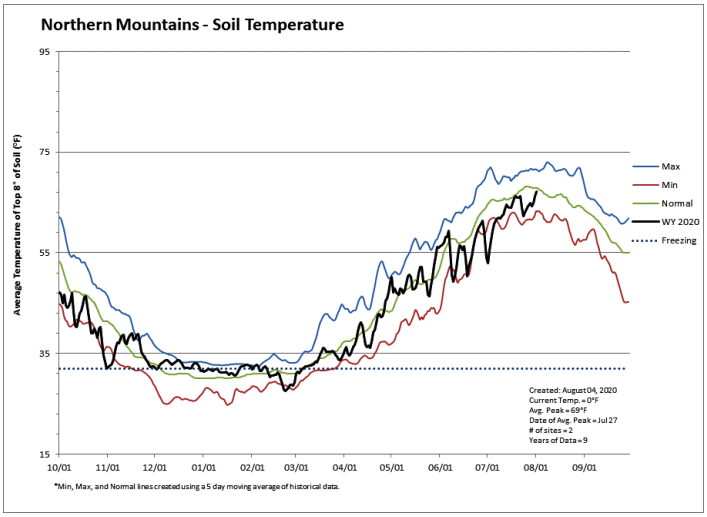
August 1, 2020

The average precipitation in July at SCAN sites within the basin was 0.3 inches, which brings the seasonal accumulation (Oct-Jul) to 8.2 inches. Soil moisture is at 24% compared to 26% last year.





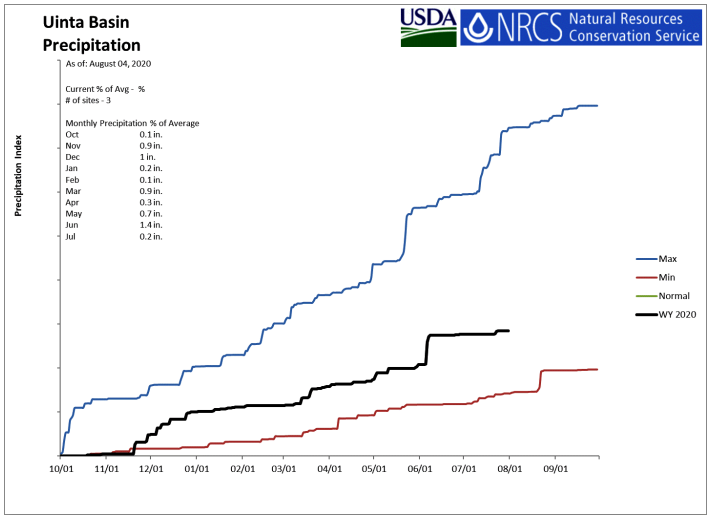


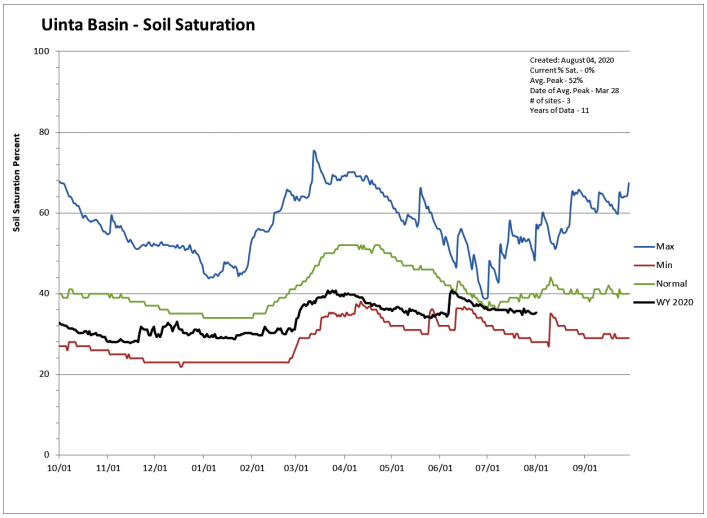


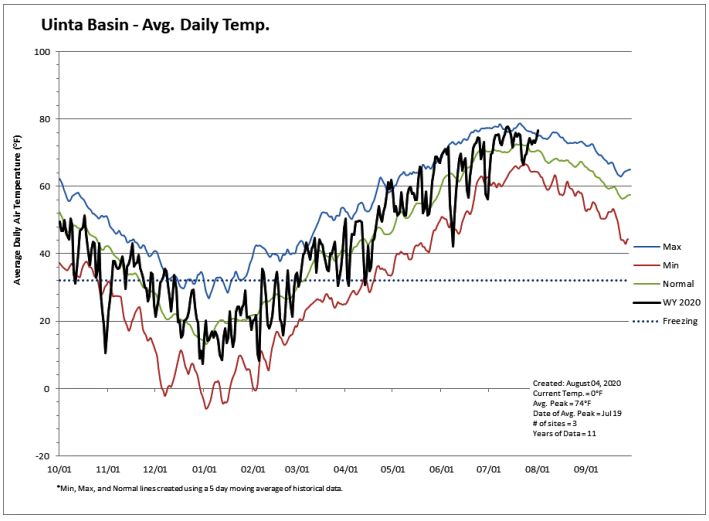
Uinta Basin

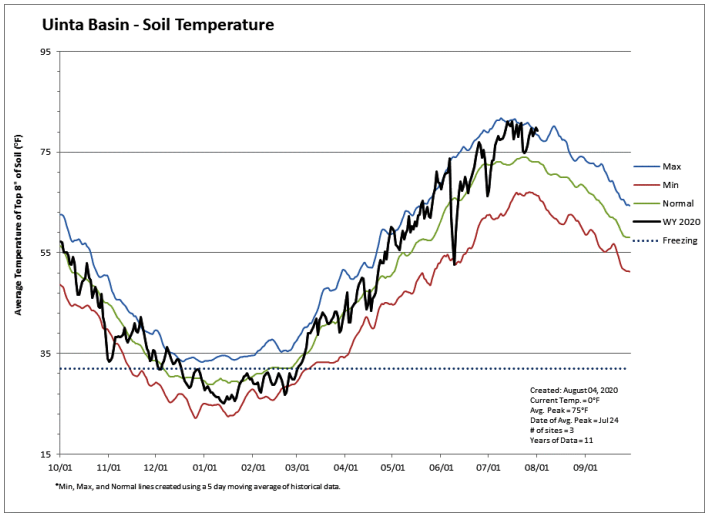
August 1, 2020

The average precipitation in July at SCAN sites within the basin was 0.2 inches, which brings the seasonal accumulation (Oct-Jul) to 5.7 inches. Soil moisture is at 35% compared to 36% last year.





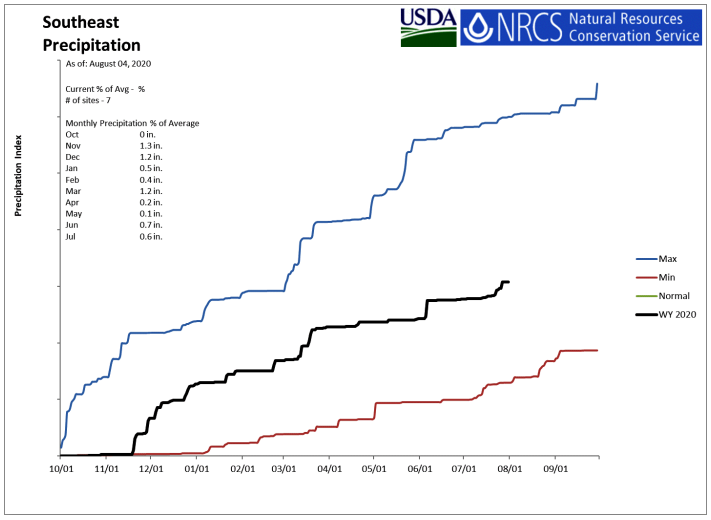


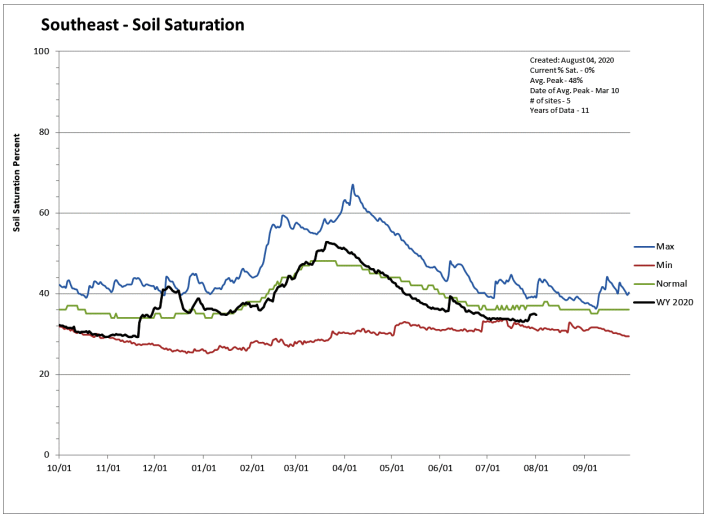


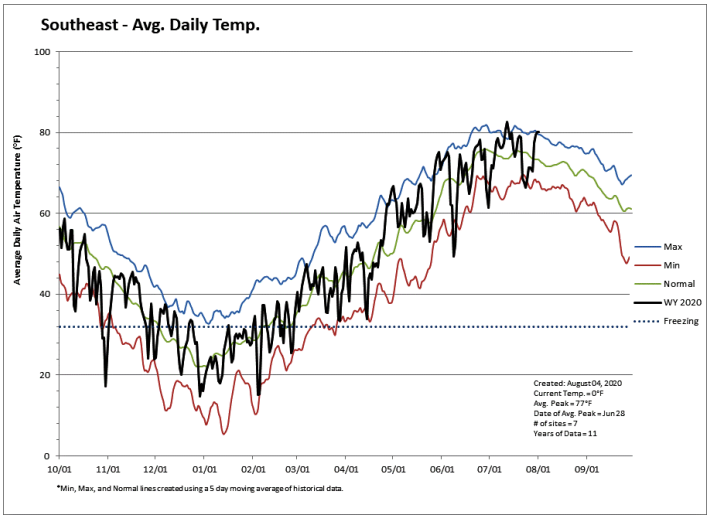
Southeast

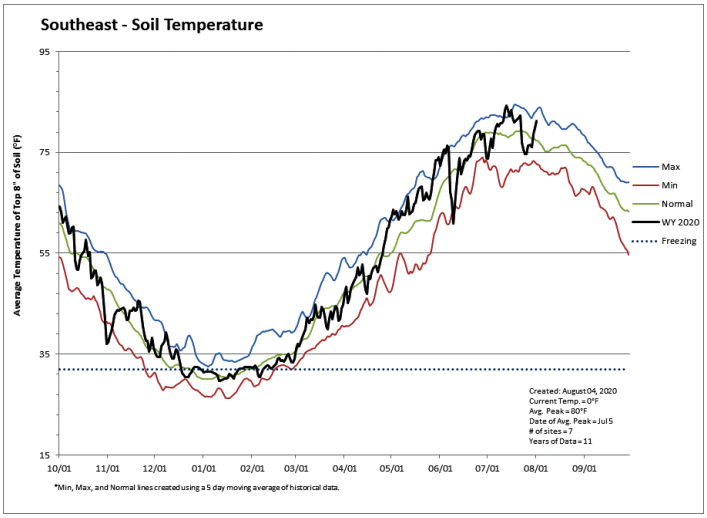
August 1, 2020

The average precipitation in July at SCAN sites within the basin was 0.6 inches, which brings the seasonal accumulation (Oct-Jul) to 6.2 inches. Soil moisture is at 35% compared to 38% last year.





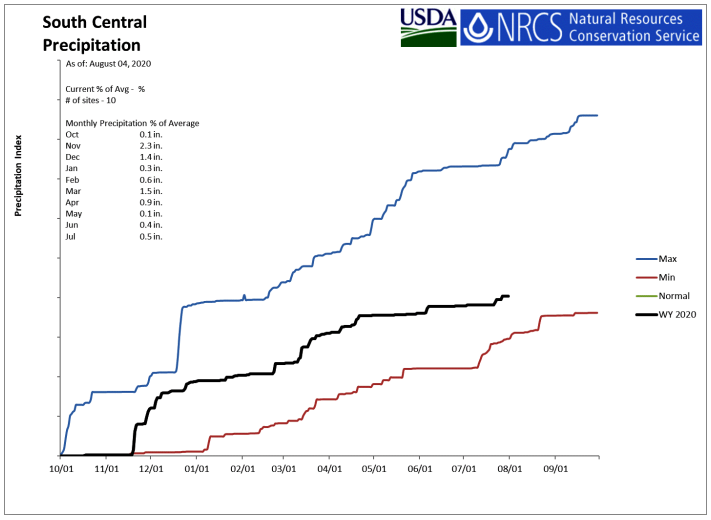


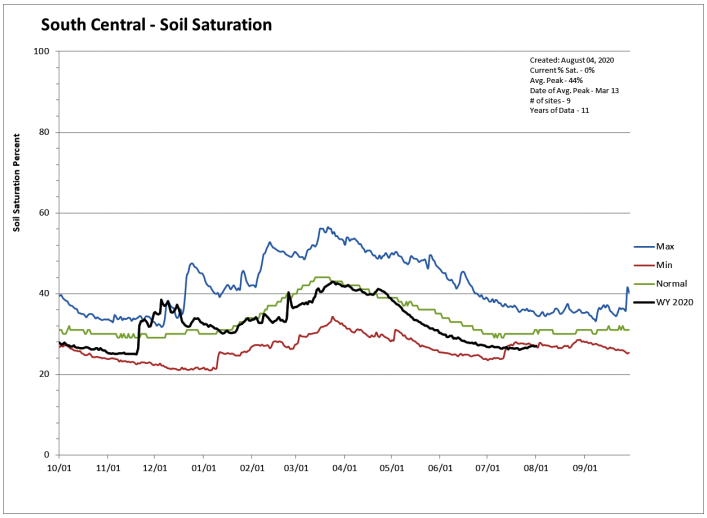


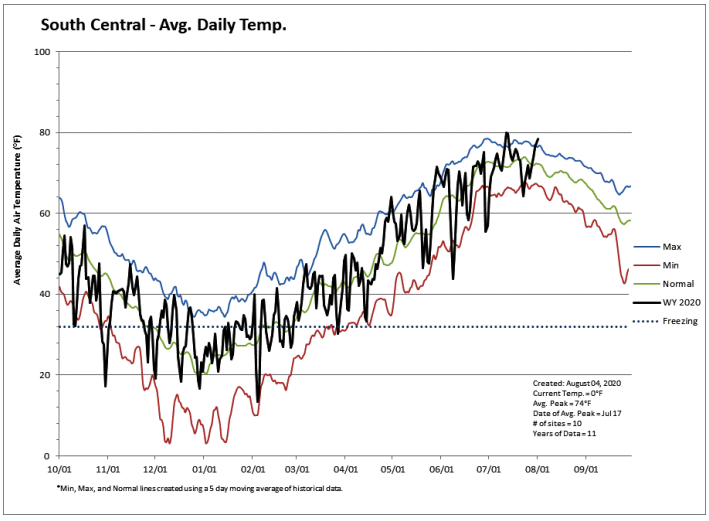
South Central

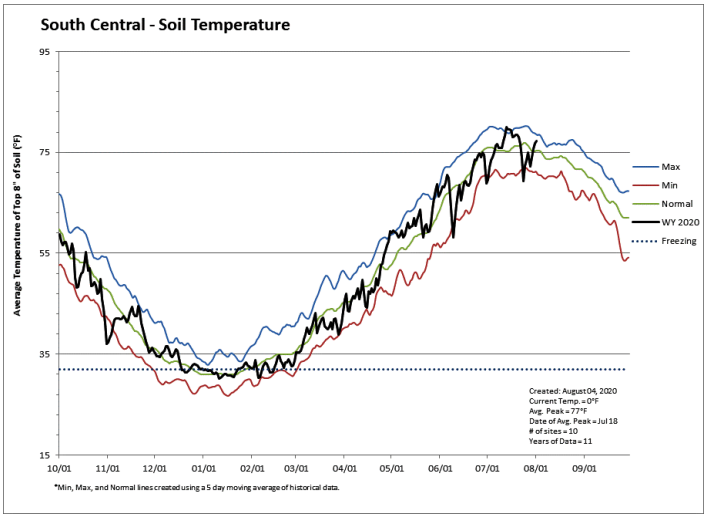
August 1, 2020

The average precipitation in July at SCAN sites within the basin was 0.5 inches, which brings the seasonal accumulation (Oct-Jul) to 8.1 inches. Soil moisture is at 27% compared to 29% last year.





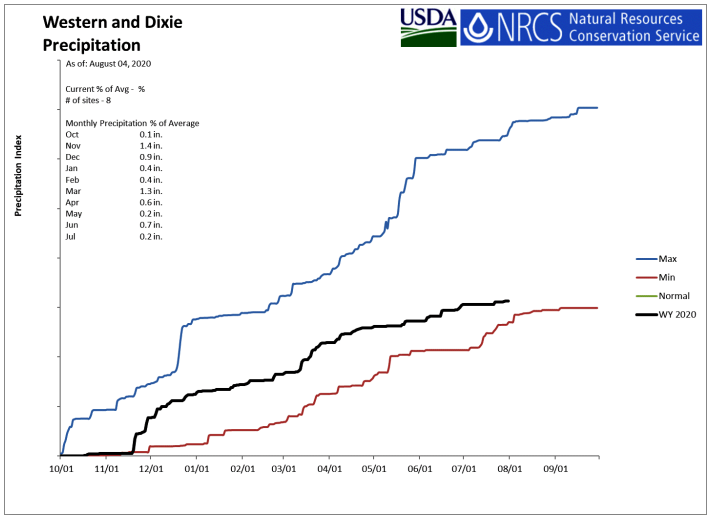


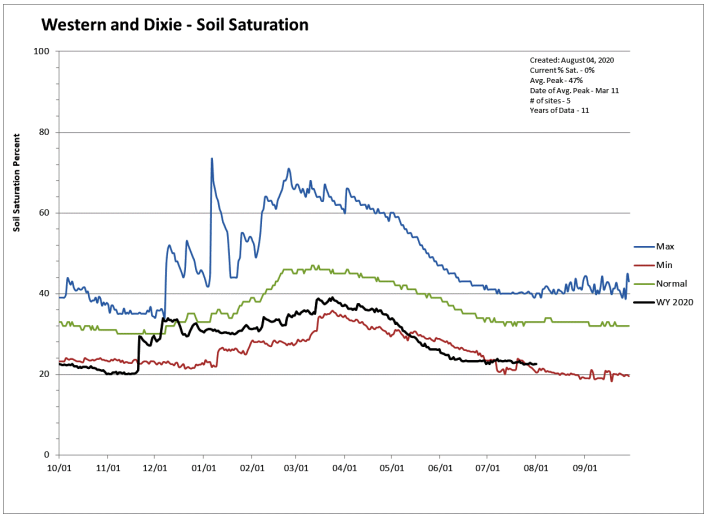


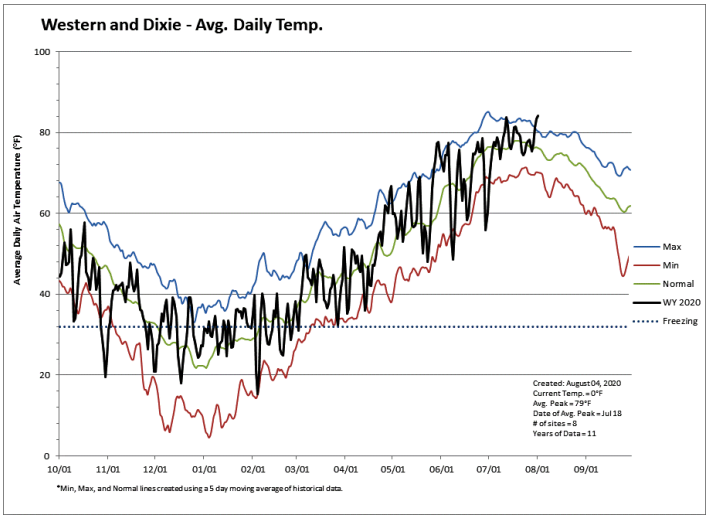
Western and Dixie

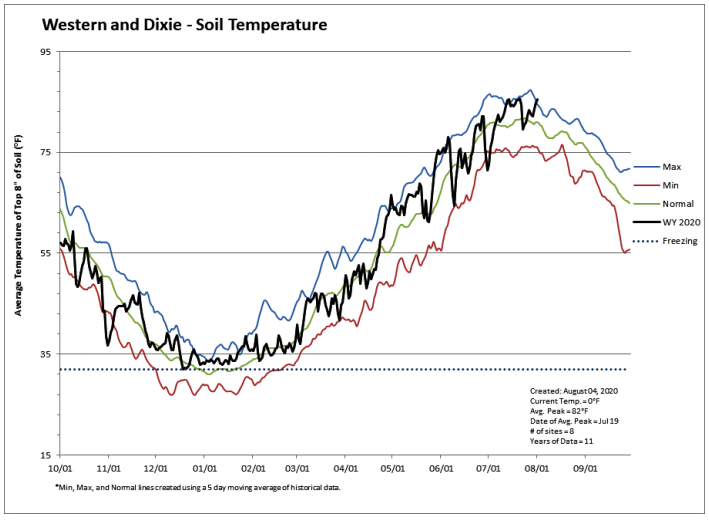
August 1, 2020

The average precipitation in July at SCAN sites within the basin was 0.2 inches, which brings the seasonal accumulation (Oct-Jul) to 6.3 inches. Soil moisture is at 22% compared to 24% last year.

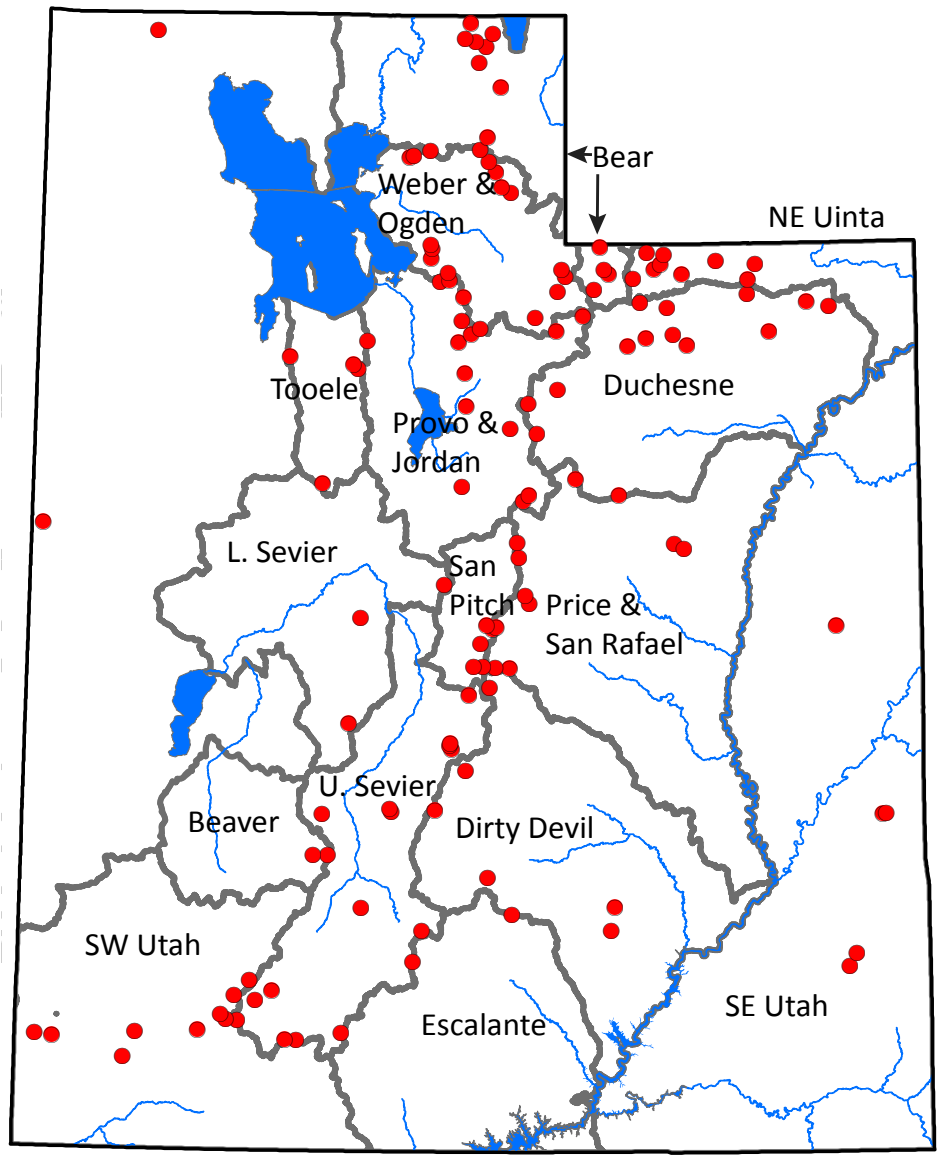








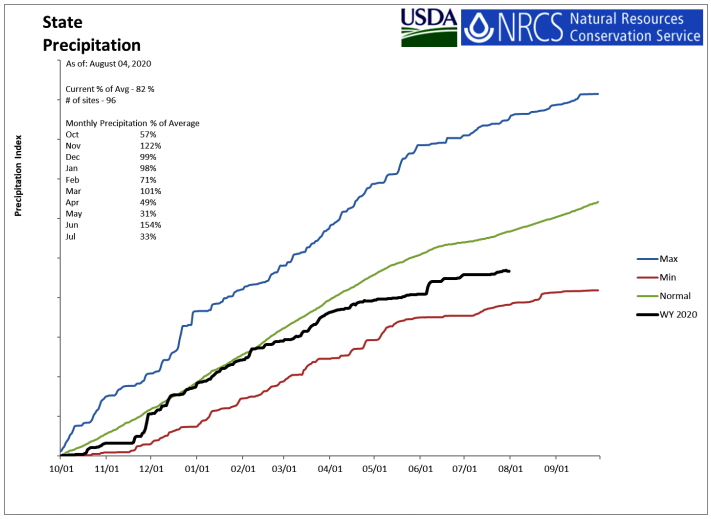
SNOTEL portion of report

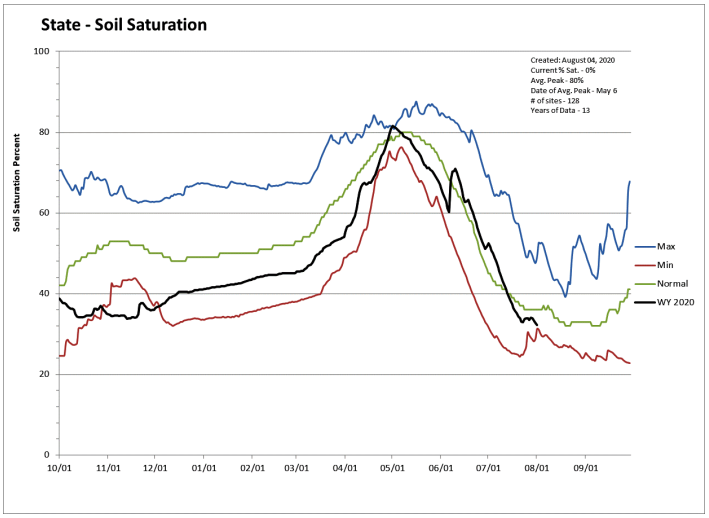


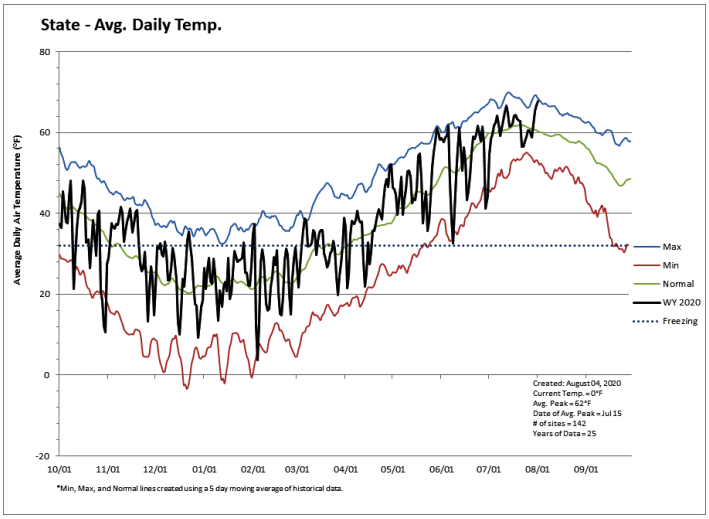
Statewide SNOTEL

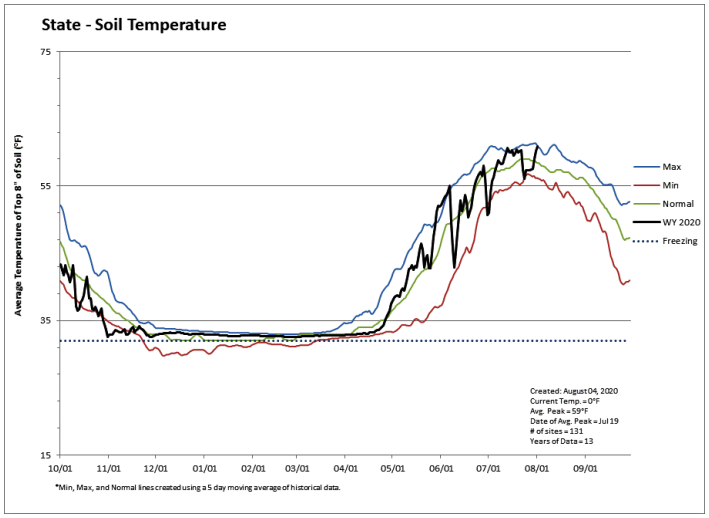
August 1, 2020

Precipitation at SNOTEL sites during July was much below average at 40%, which brings the seasonal accumulation (Oct-Jul) to 83% of average. Soil moisture is at 33% compared to 41% last year. Reservoir storage is at 76% of capacity, compared to 86% last year.





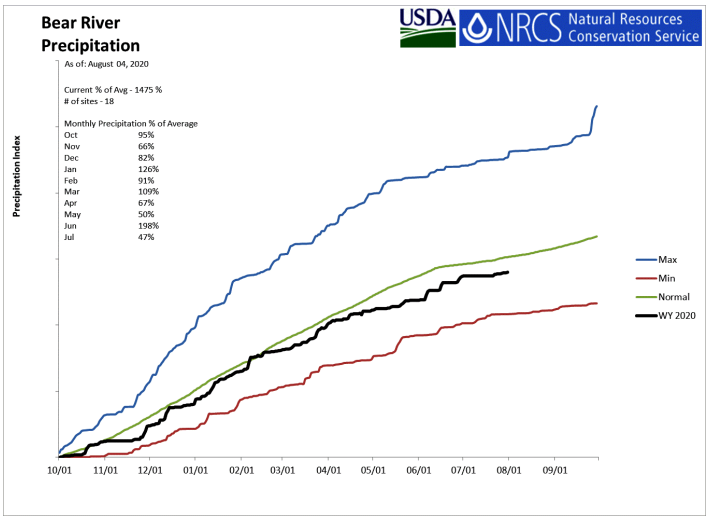


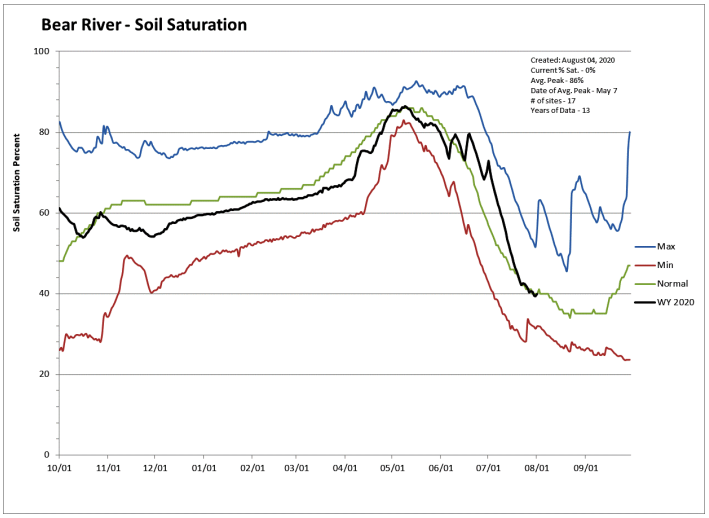


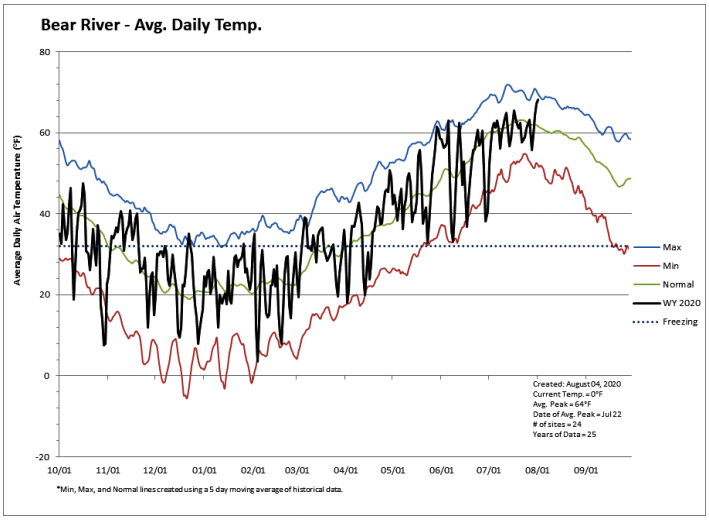
Bear River Basin

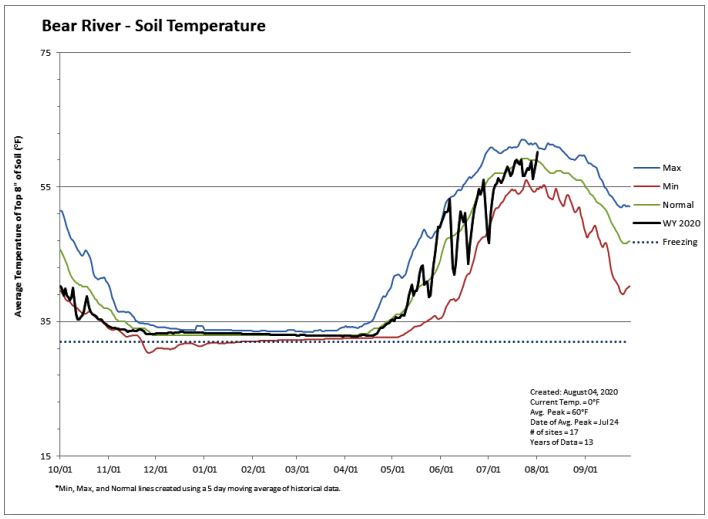
August 1, 2020

Precipitation in July was much below average at 47%, which brings the seasonal accumulation (Oct-Jul) to 93% of average. Soil moisture is at 40% compared to 40% last year. Reservoir storage is at 72% of capacity, compared to 79% last year. The water availability index for the Bear River is 66%, 51% for Woodruff Narrows and 55% for the Little Bear.









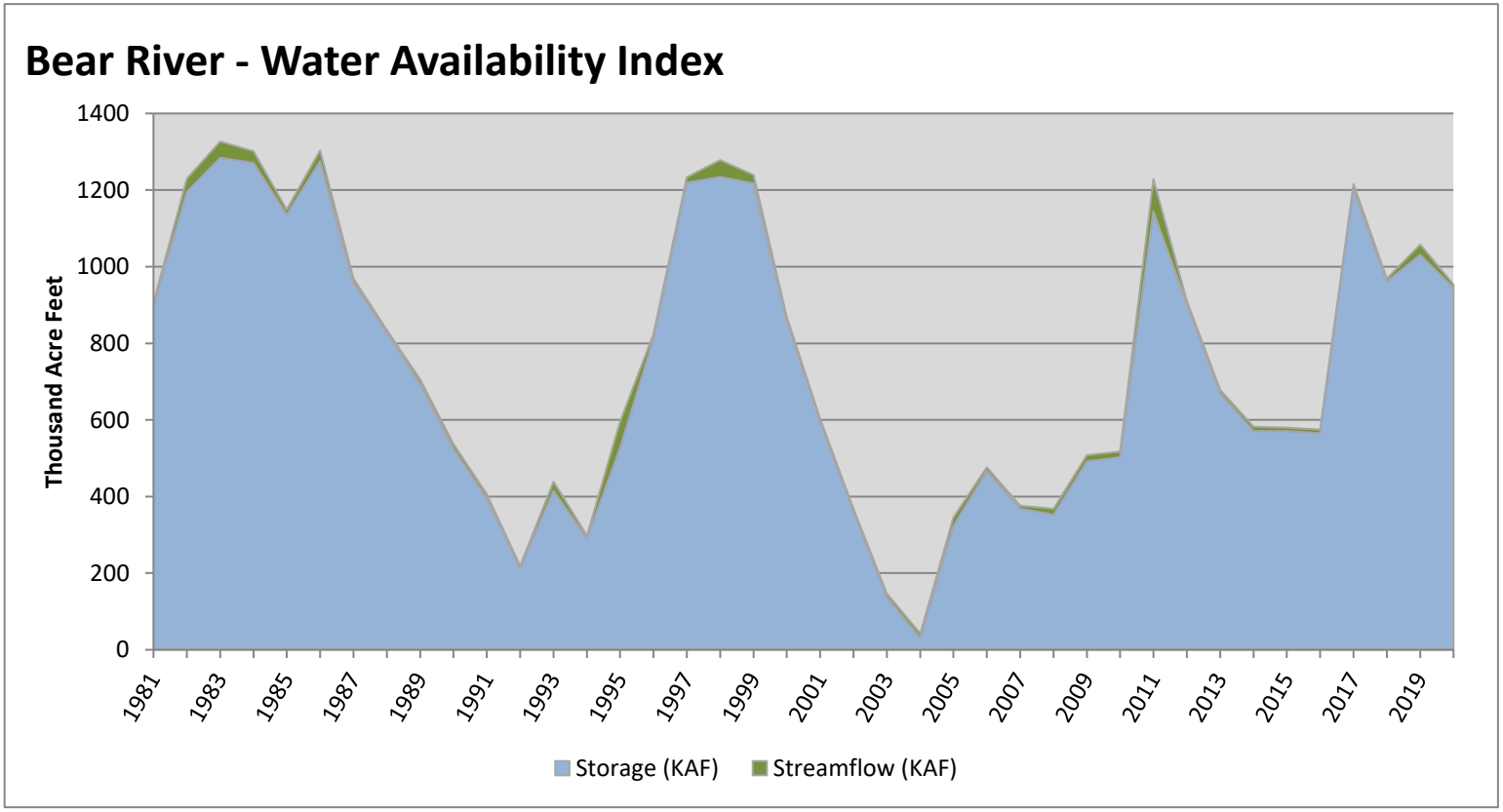
SNOTEL Data

August 1, 2020

Water Availability Index

Basin or Region	Jul EOM* Storage	July Flow	Storage + Flow	Percentile	WAI#	Years with similiar WAI
	KAF^	KAF^	KAF^	%		
Bear River	**944.92**	**8.64**	**953.56**	**66**	**1.32**	**81, 12, 87, 18**

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

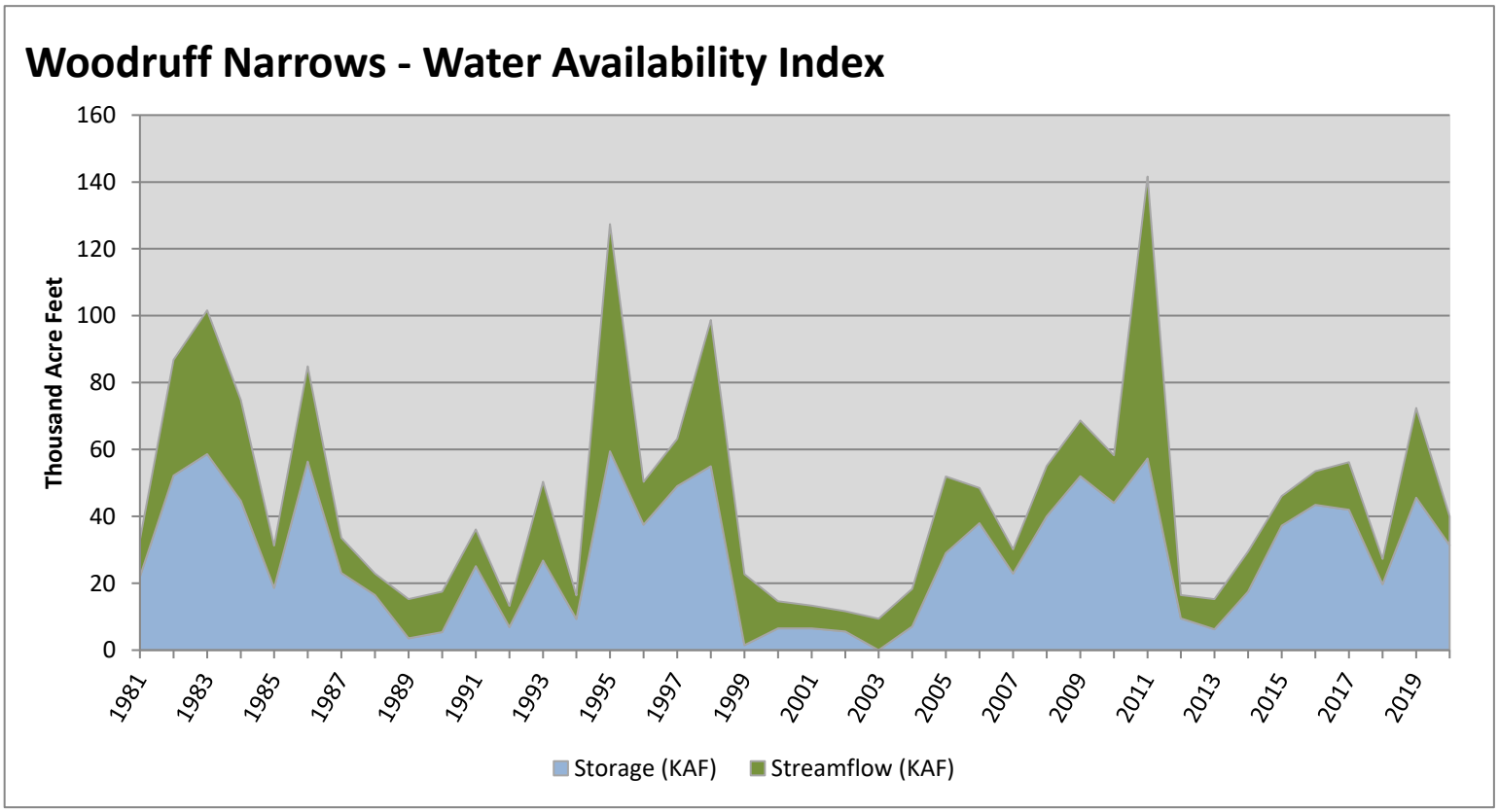


August 1, 2020

Water Availability Index

Basin or Region	Jul EOM* Storage	July Flow	Storage + Flow	Percentile	WAI#	Years with similiar WAI
	KAF^	KAF^	KAF^	%		
Woodruff Narrows	**31.36**	**8.64**	**40.00**	**51**	**0.1**	**87, 91, 15, 06**

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

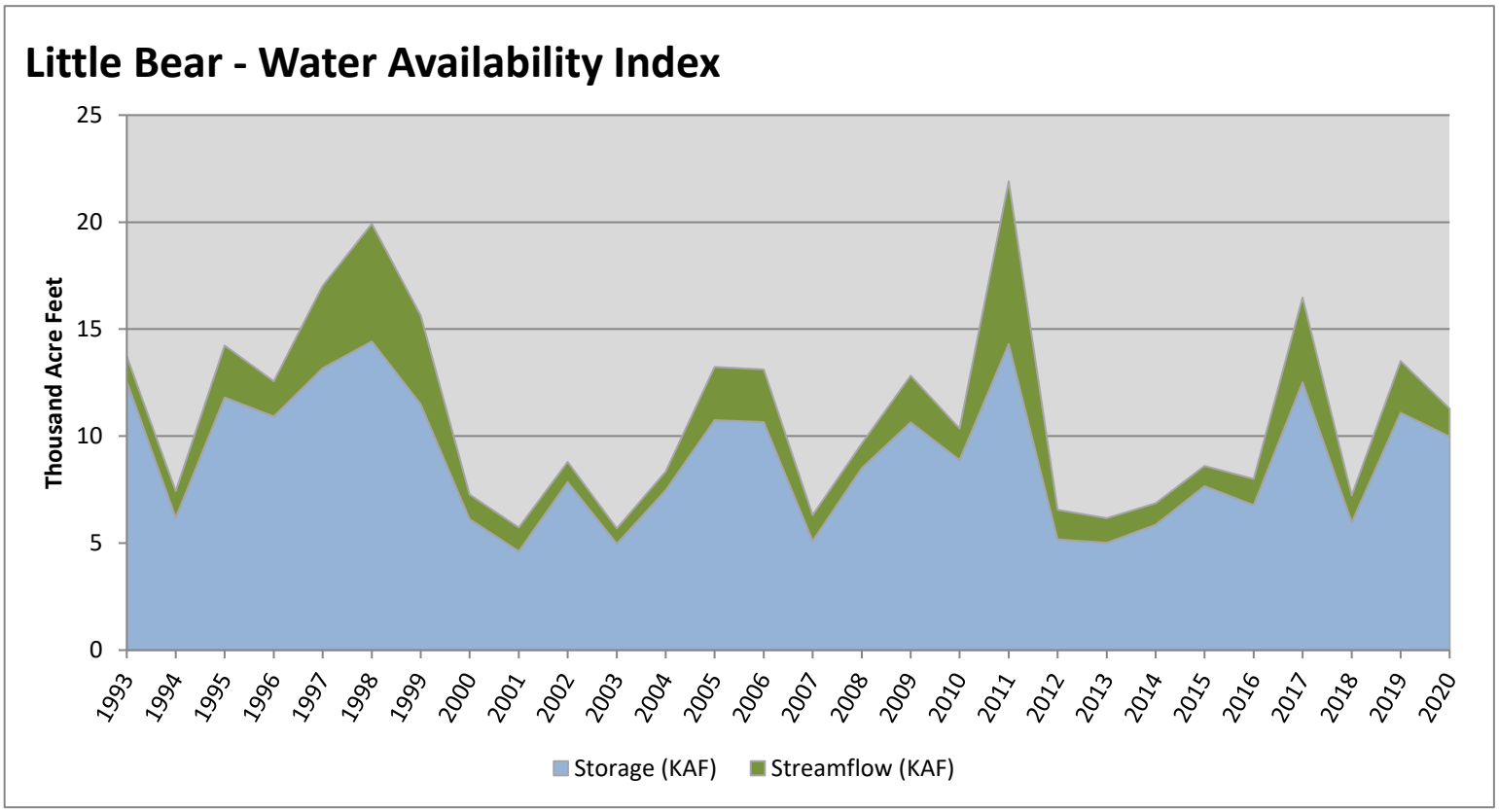


August 1, 2020

Water Availability Index

Basin or Region	Jul EOM* Storage	July Flow	Storage + Flow	Percentile	WAI#	Years with similiar WAI
	KAF^	KAF^	KAF^	%		
Little Bear	**9.98**	**1.31**	**11.29**	**55**	**0.43**	**08, 10, 96, 09**

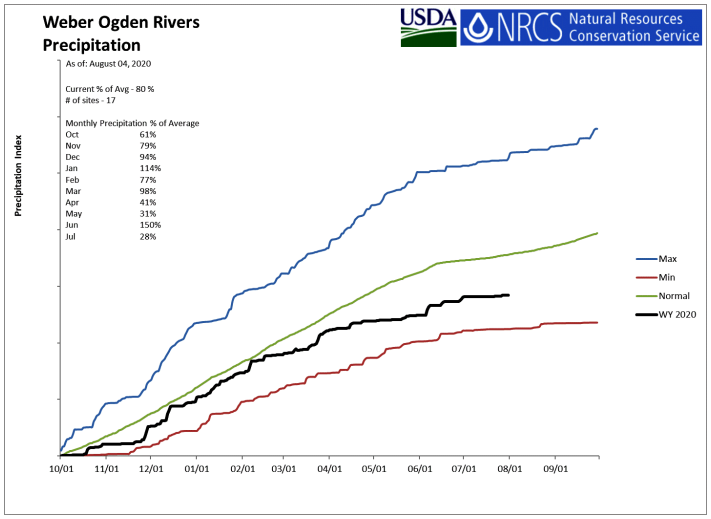
*EOM, end of month; #WAI, Water Availability Index; ^KAF, thousand acre-feet.

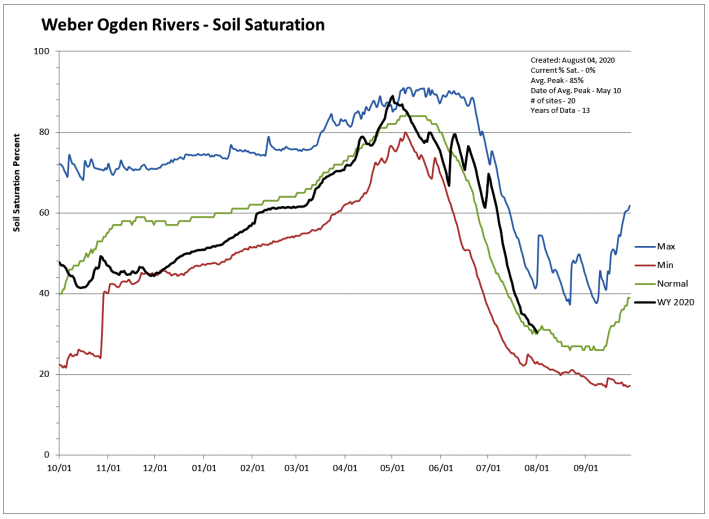


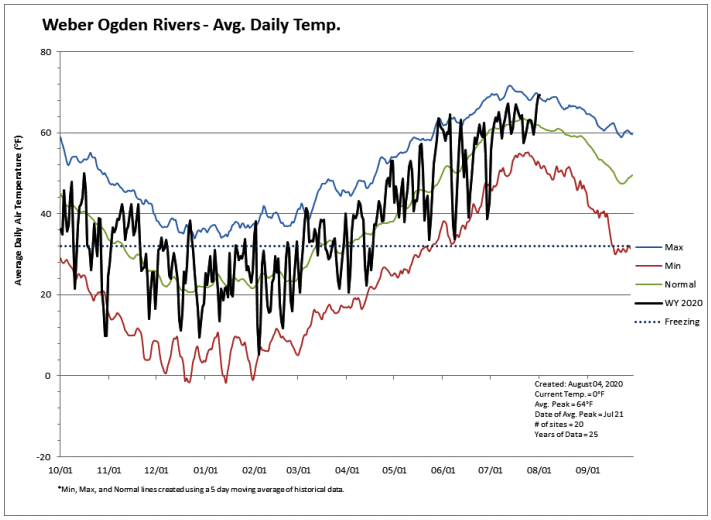
Weber & Ogden River Basins

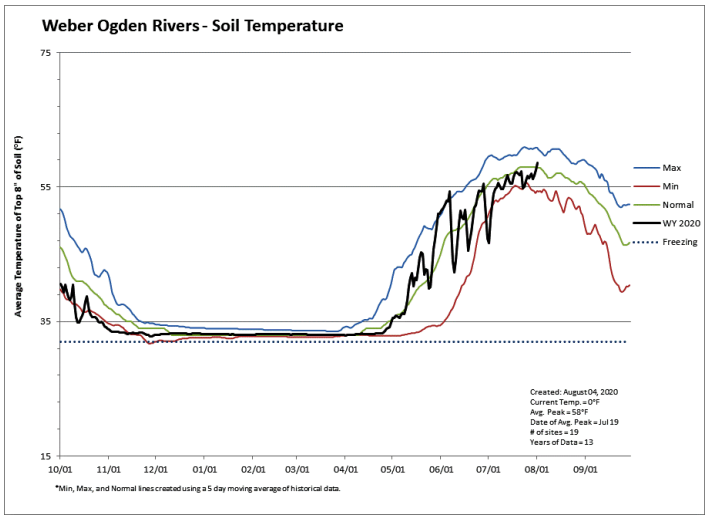
August 1, 2020

Precipitation in July was much below average at 28%, which brings the seasonal accumulation (Oct-Jul) to 80% of average. Soil moisture is at 31% compared to 33% last year. Reservoir storage is at 74% of capacity, compared to 89% last year. The water availability index for the Ogden River is 46% and 48% for the Weber River.









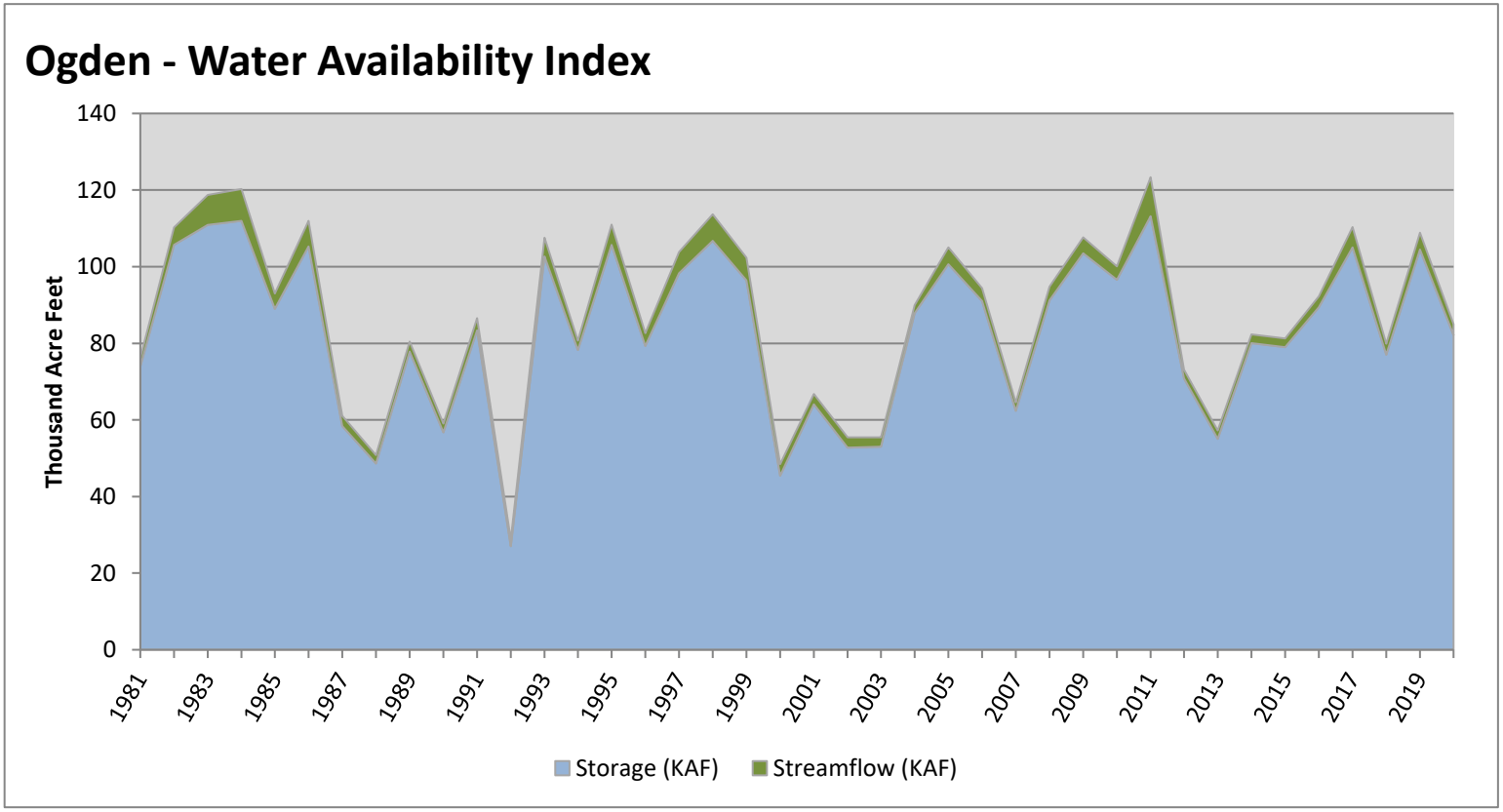
SNOTEL Data

August 1, 2020

Water Availability Index

Basin or Region	Jul EOM* Storage	July Flow	Storage + Flow	Percentile	WAI#	Years with similiar WAI
	KAF^	KAF^	KAF^	%		
Ogden	**82.13**	**2.88**	**85.01**	**46**	**-0.3**	**14, 96, 91, 04**

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

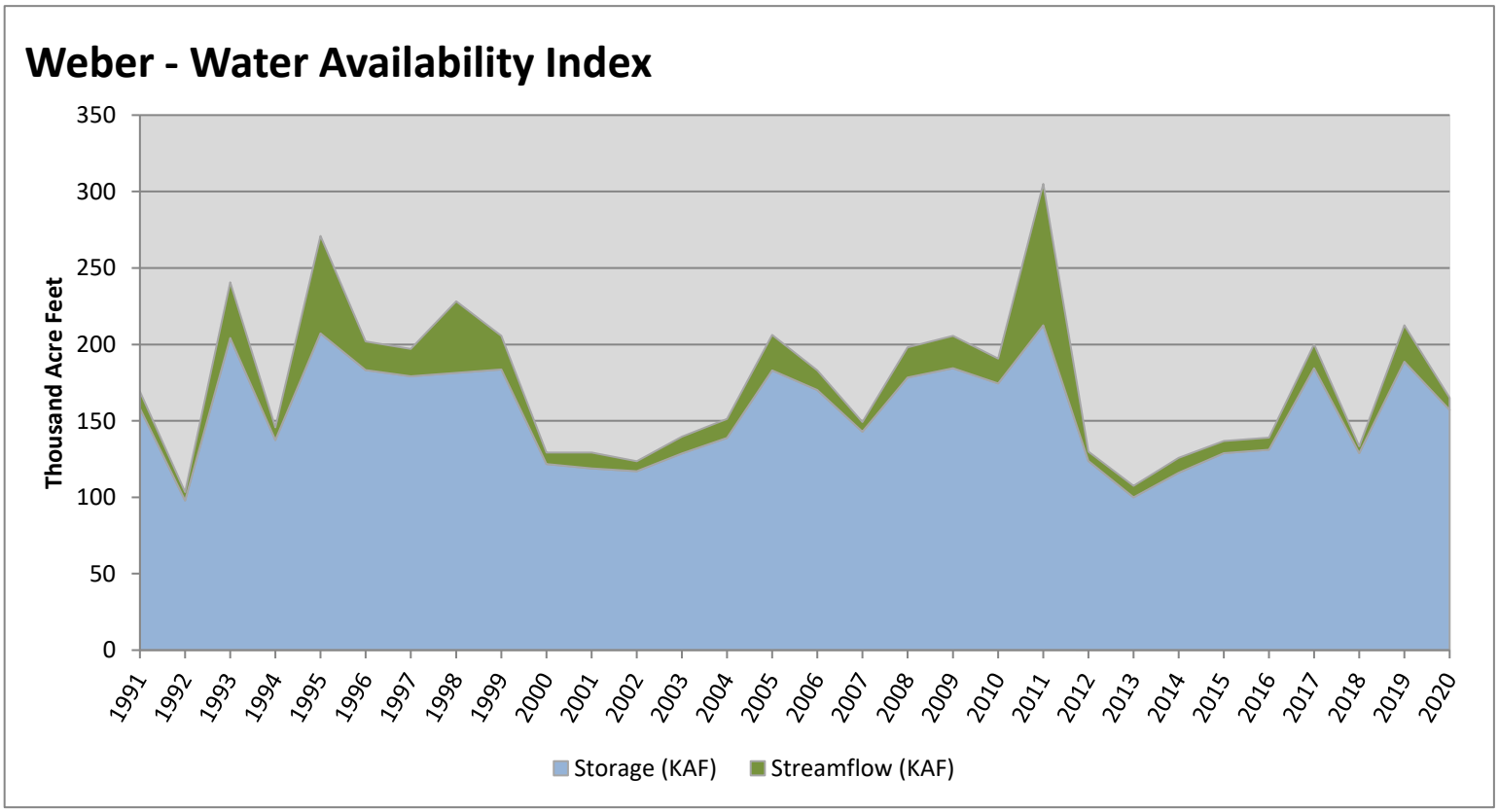


August 1, 2020

Water Availability Index

Basin or Region	Jul EOM* Storage	July Flow	Storage + Flow	Percentile	WAI#	Years with similiar WAI
	KAF^	KAF^	KAF^	%		
Weber	**157.19**	**7.91**	**165.10**	**48**	**-0.13**	**07, 04, 91, 06**

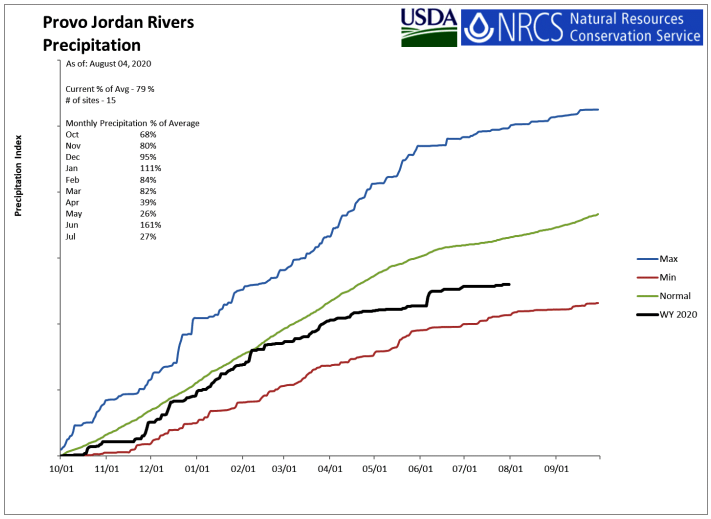
*EOM, end of month; #WAI, Water Availability Index; ^KAF, thousand acre-feet.

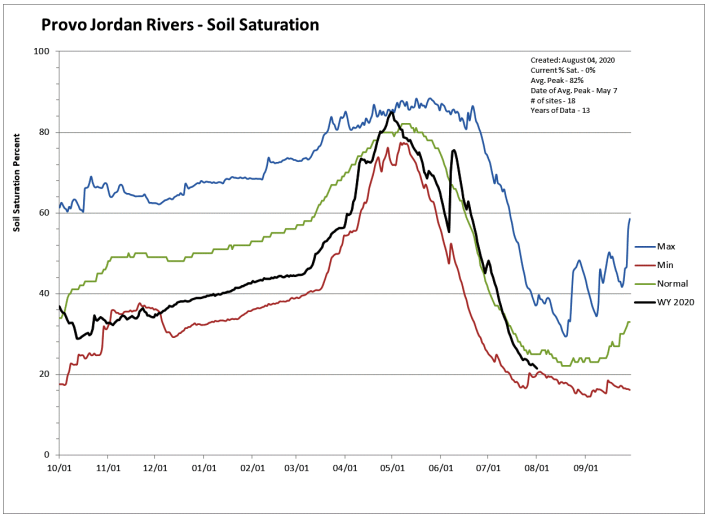


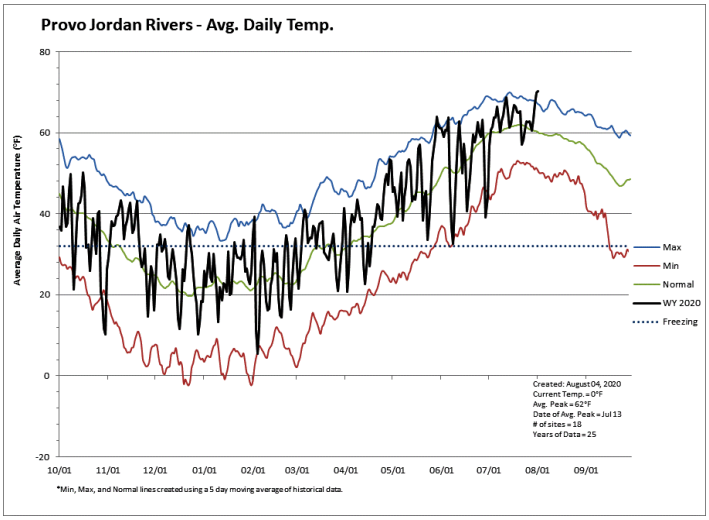
Provo & Jordan River Basins

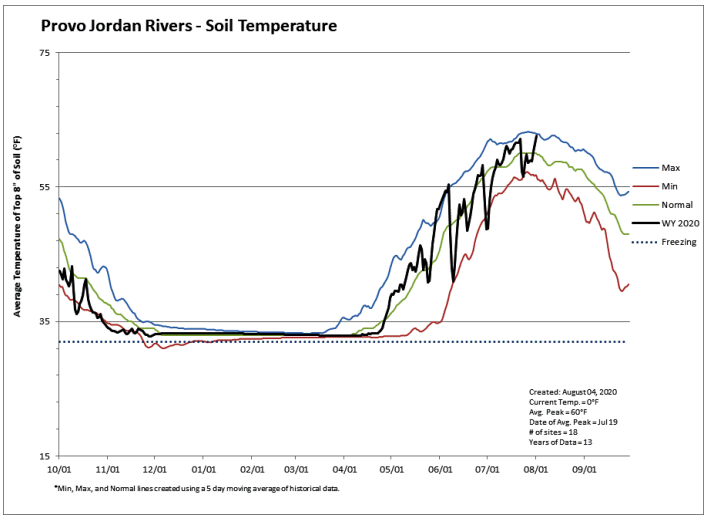
August 1, 2020

Precipitation in July was much below average at 26%, which brings the seasonal accumulation (Oct-Jul) to 79% of average. Soil moisture is at 22% compared to 30% last year. Reservoir storage is at 86% of capacity, compared to 92% last year. The water availability index for the Provo River is 54%.









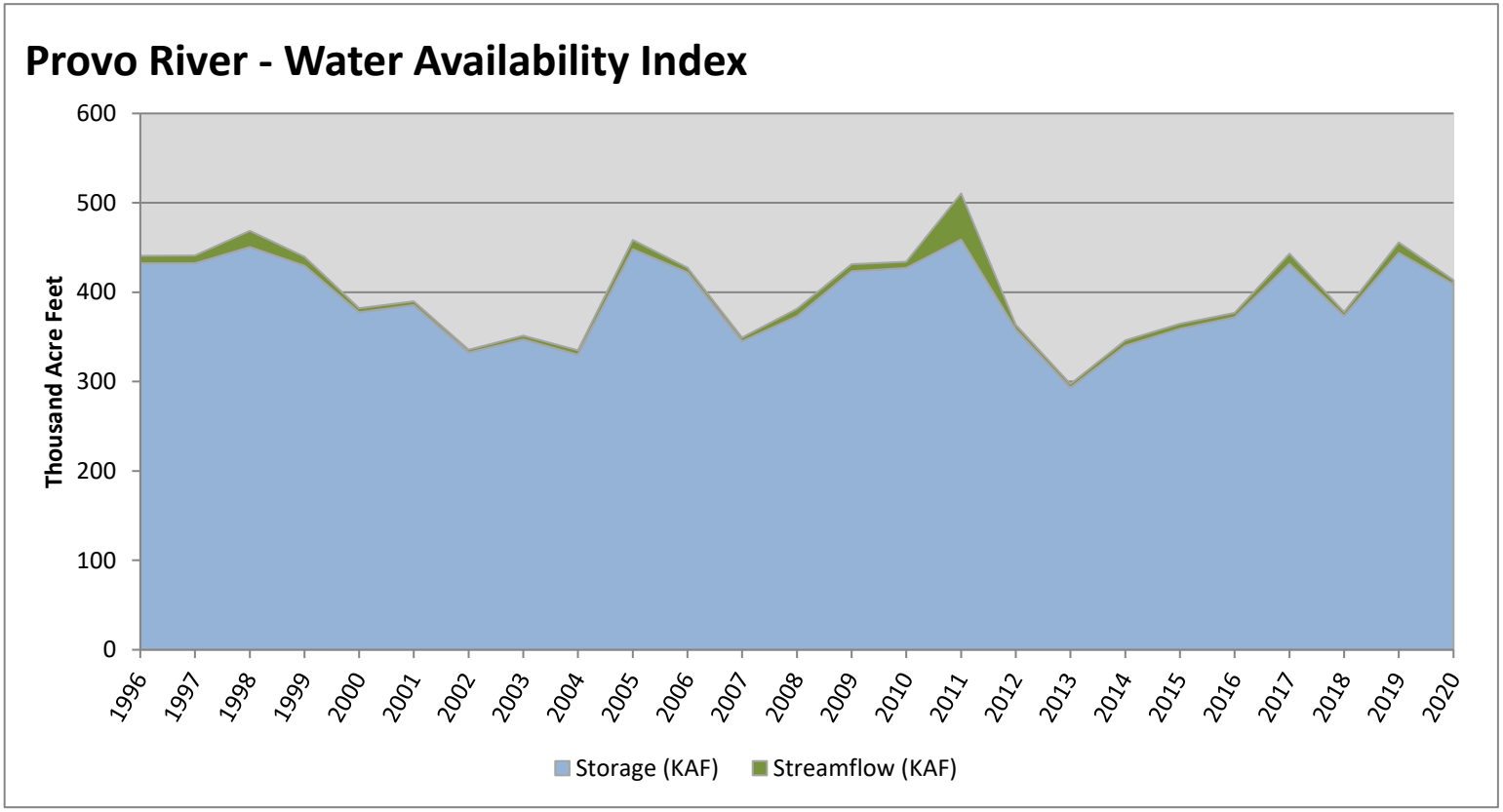
SNOTEL Data

August 1, 2020

Water Availability Index

Basin or Region	Jul EOM* Storage	July Flow	Storage + Flow	Percentile	WAI#	Years with similiar WAI
	KAF^	KAF^	KAF^	%		
Provo River	**408.87**	**4.58**	**413.45**	**54**	**0.32**	**00, 01, 06, 09**

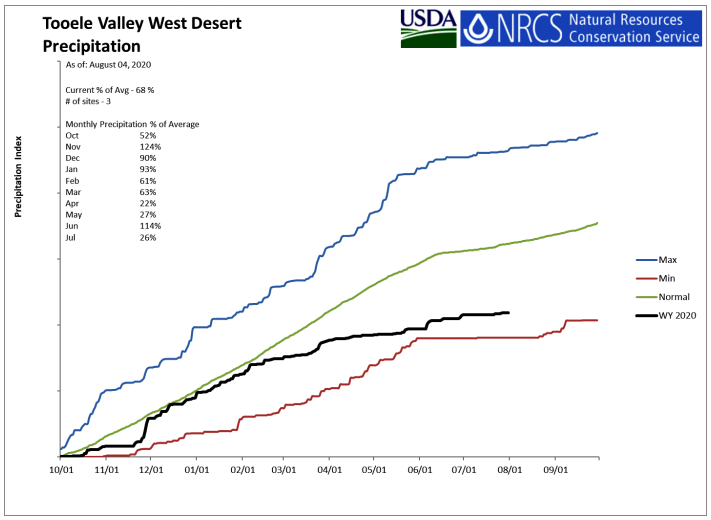
*EOM, end of month; #WAI, Water Availability Index; ^KAF, thousand acre-feet.

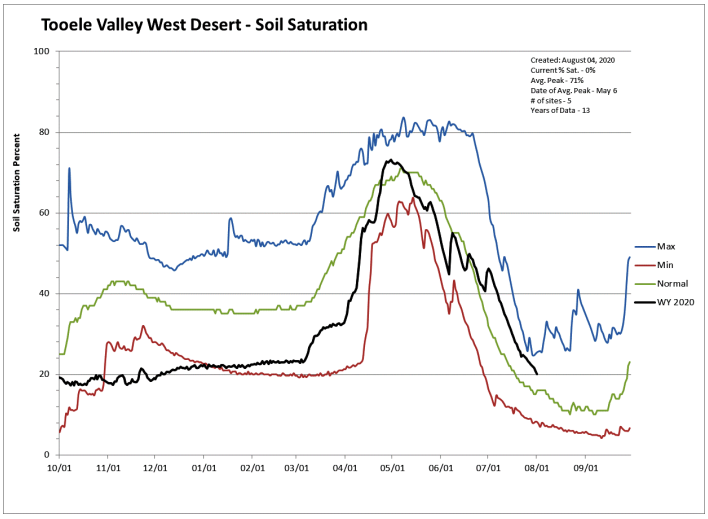


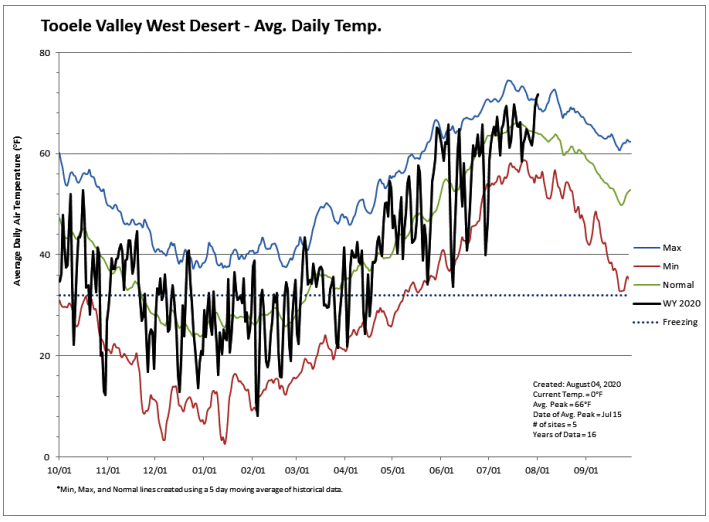
Tooele Valley & West Desert Basins

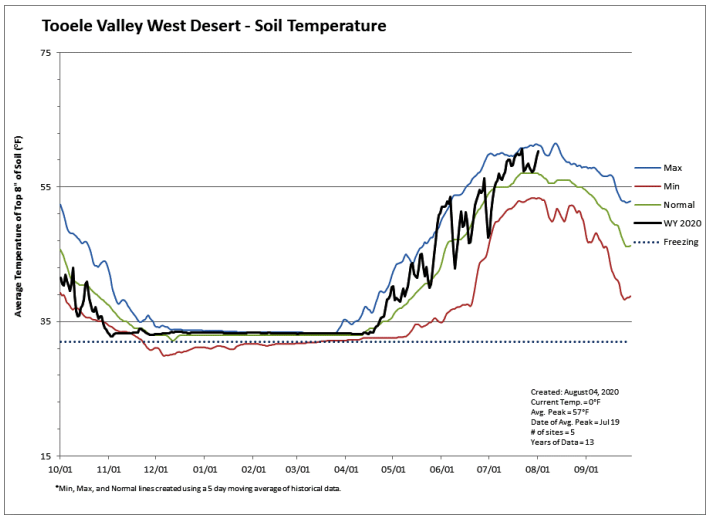
August 1, 2020

Precipitation in July was much below average at 26%, which brings the seasonal accumulation (Oct-Jul) to 67% of average. Soil moisture is at 21% compared to 30% last year. Reservoir storage is at 46% of capacity, compared to 72% last year.







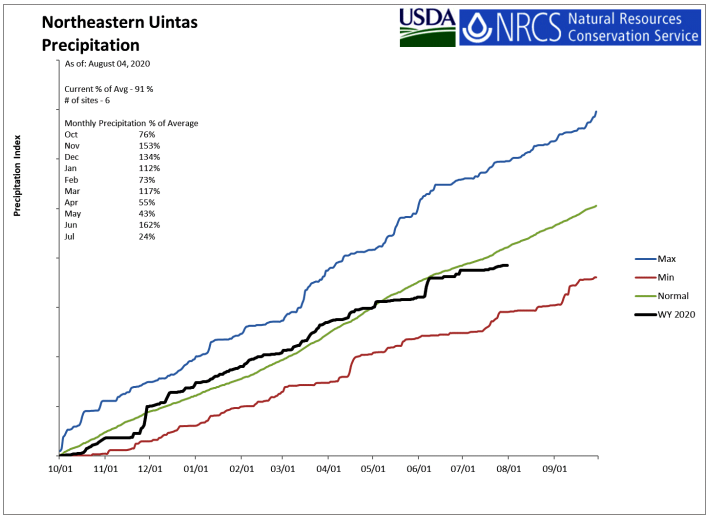


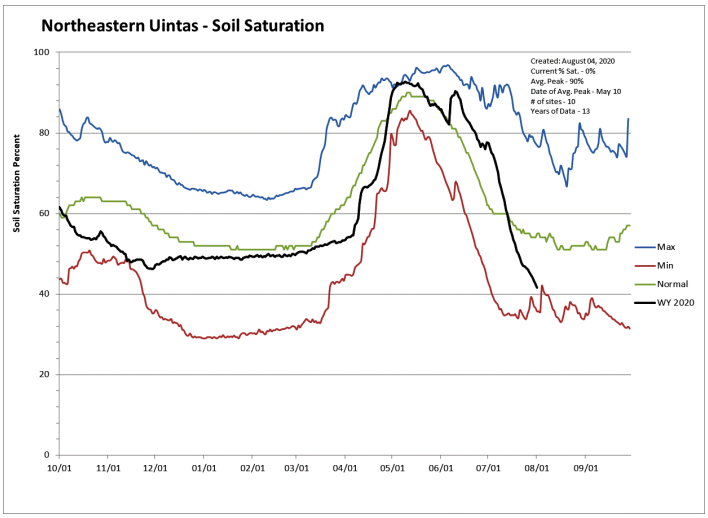
SNOTEL Data

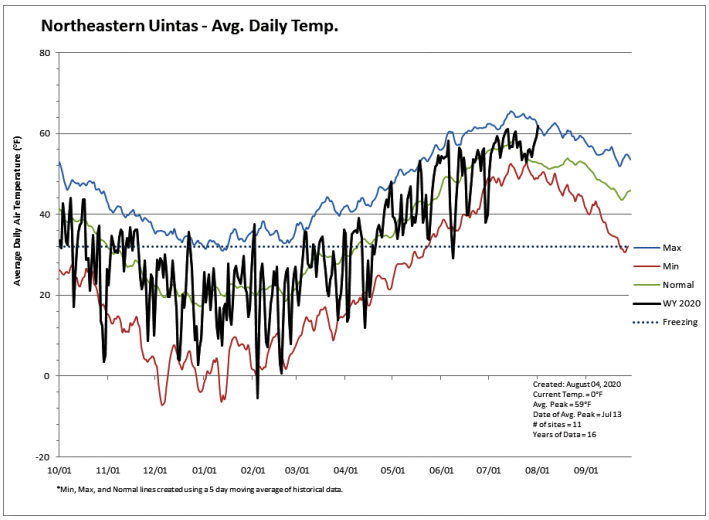
Northeastern Uinta Basin

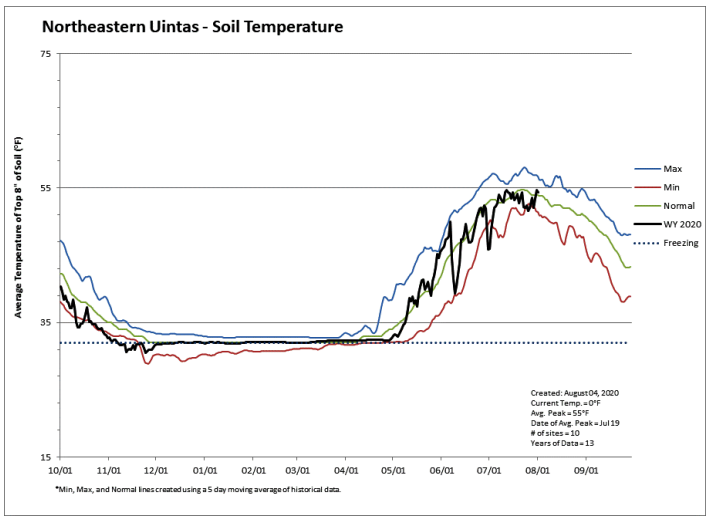
August 1, 2020

Precipitation in July was much below average at 24%, which brings the seasonal accumulation (Oct-Jul) to 91% of average. Soil moisture is at 39% compared to 56% last year. Reservoir storage is at 87% of capacity, compared to 93% last year. The water availability index for Blacks Fork is 34% and 62% for Smiths Creek.







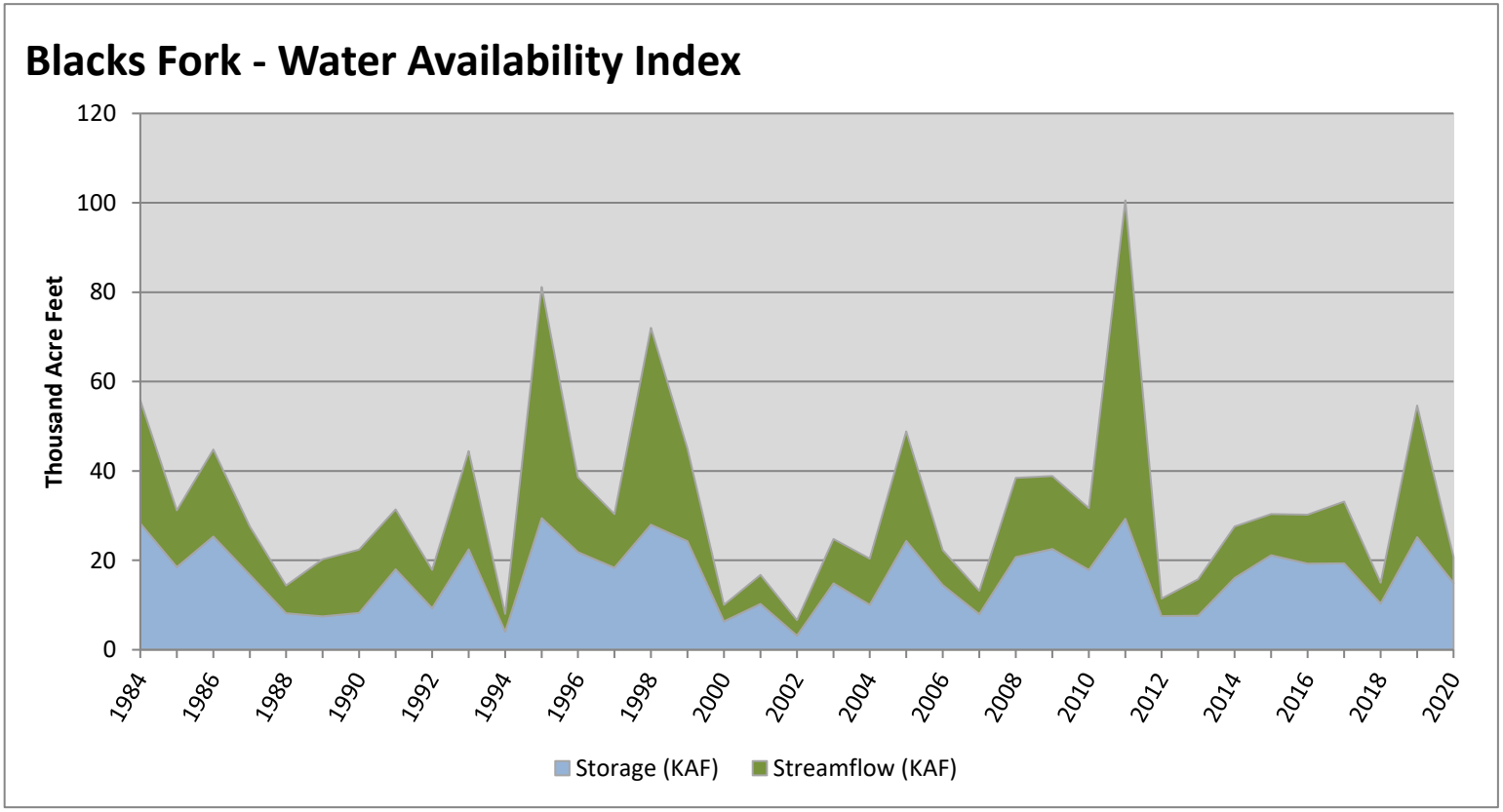


August 1, 2020

Water Availability Index

Basin or Region	Jul EOM* Storage	July Flow	Storage + Flow	Percentile	WAI#	Years with similiar WAI
	KAF^	KAF^	KAF^	%		
Blacks Fork	**14.91**	**5.87**	**20.78**	**34**	**-1.32**	**89, 04, 06, 90**

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

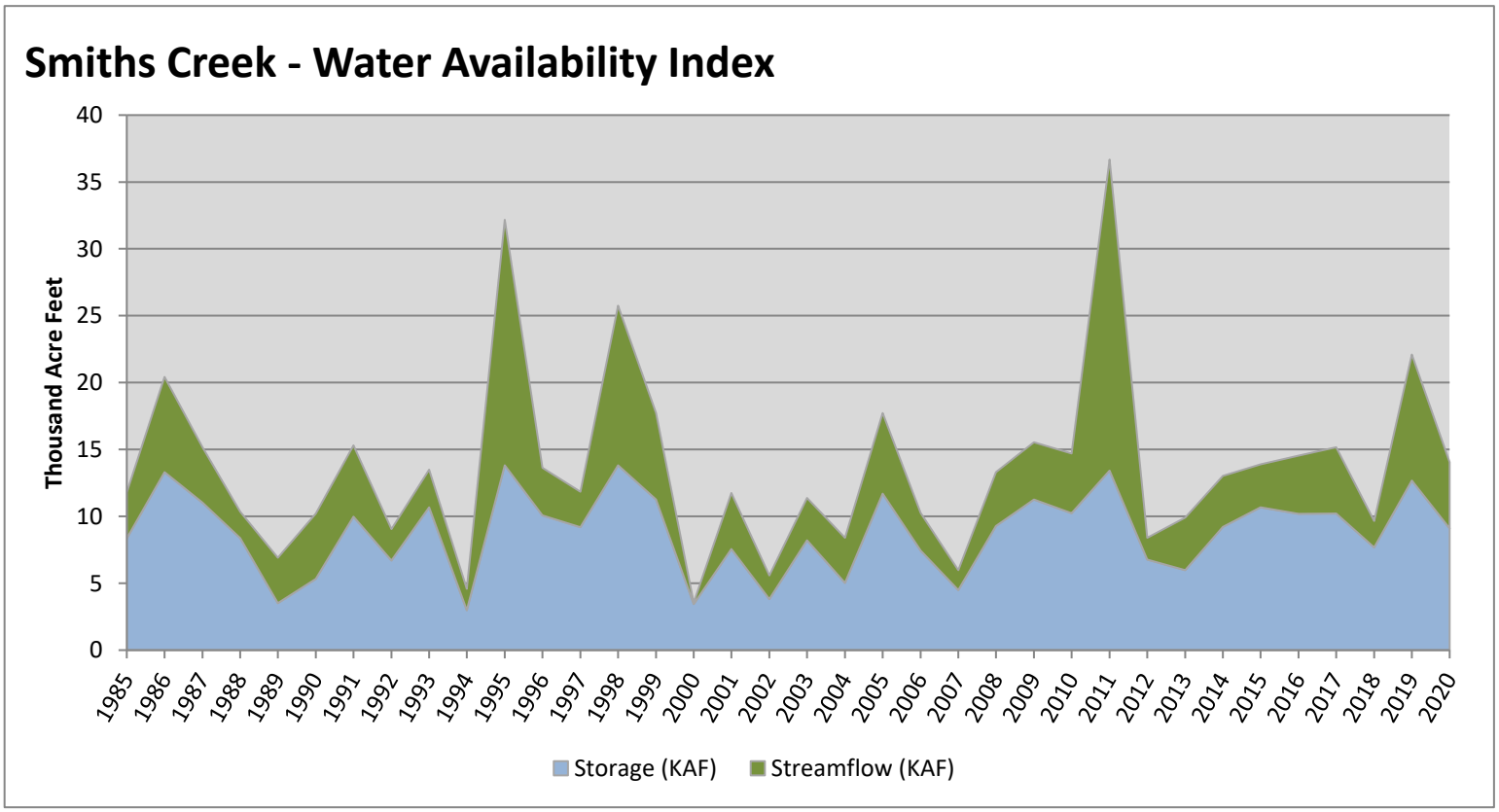


August 1, 2020

Water Availability Index

Basin or Region	Jul EOM* Storage	July Flow	Storage + Flow	Percentile	WAI#	Years with similiar WAI
	KAF^	KAF^	KAF^	%		
Smiths Creek	**9.10**	**4.96**	**14.06**	**62**	**1.01**	**96, 15, 16, 10**

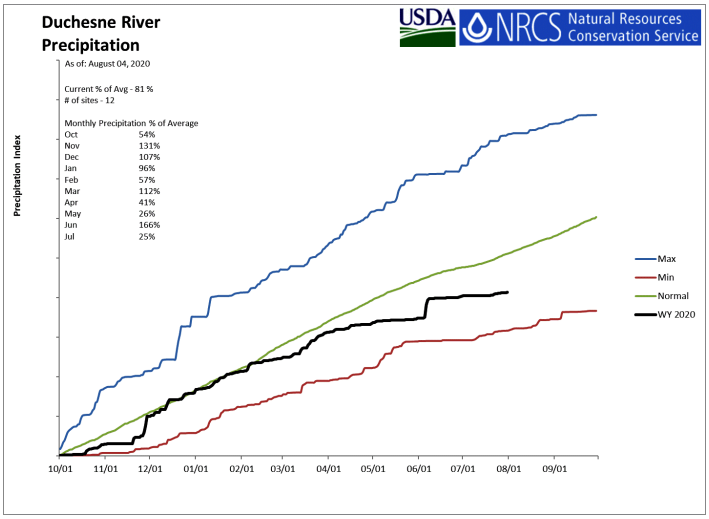
*EOM, end of month; #WAI, Water Availability Index; ^KAF, thousand acre-feet.

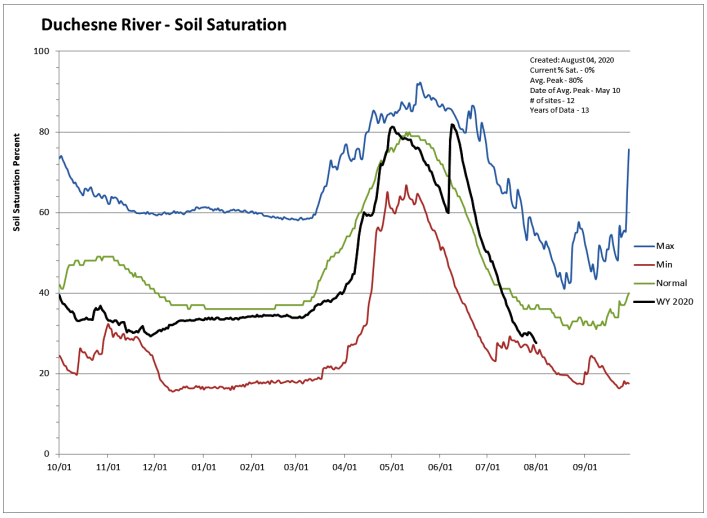


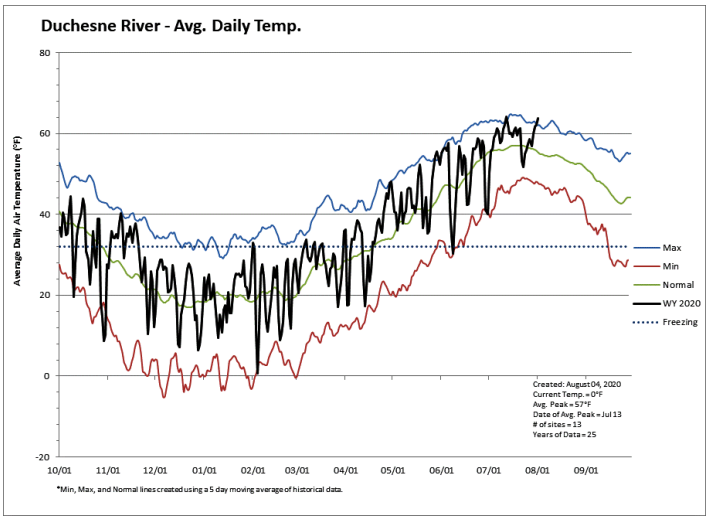
Duchesne River Basin

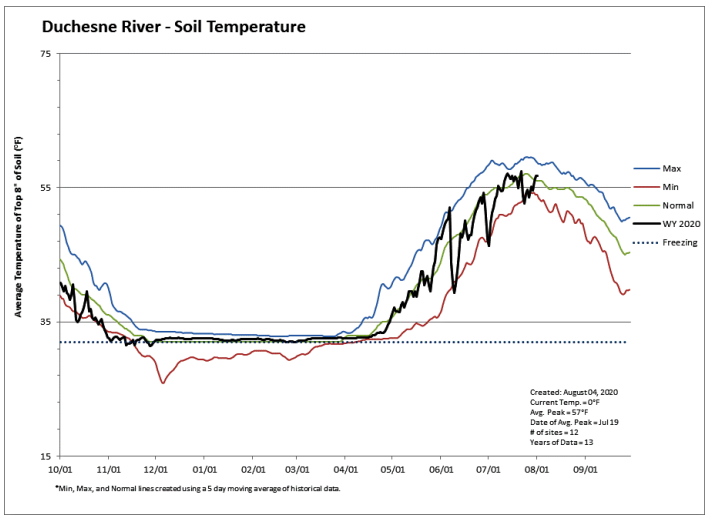
August 1, 2020

Precipitation in July was much below average at 25%, which brings the seasonal accumulation (Oct-Jul) to 81% of average. Soil moisture is at 33% compared to 48% last year. Reservoir storage is at 86% of capacity, compared to 91% last year. The water availability index for the Western Uintas is 53% and 27% for the Eastern Uintas.









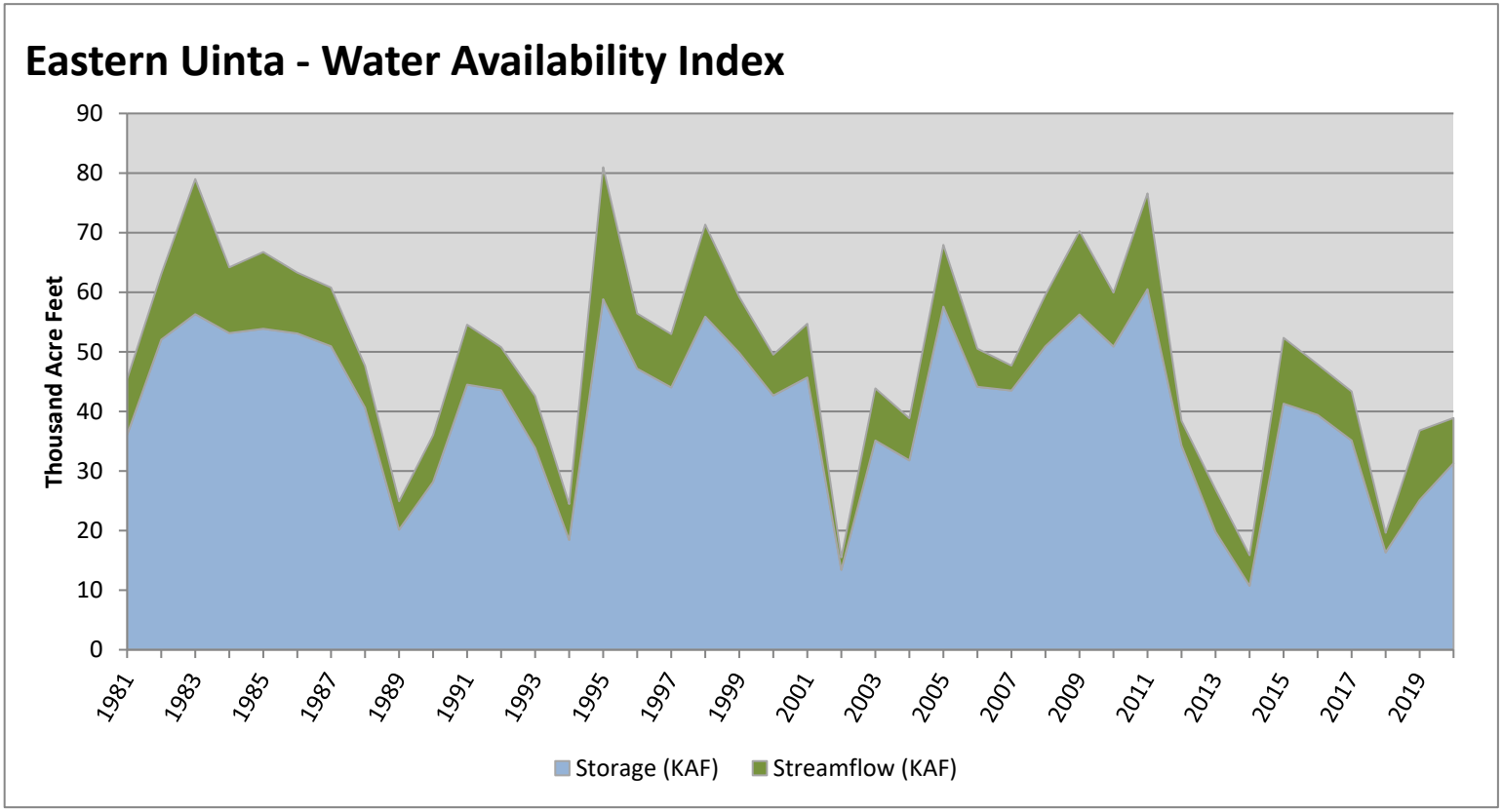
SNOTEL Data

August 1, 2020

Water Availability Index

Basin or Region	Jul EOM* Storage	July Flow	Storage + Flow	Percentile	WAI#	Years with similiar WAI
	KAF^	KAF^	KAF^	%		
Eastern Uinta	**31.33**	**7.55**	**38.88**	**27**	**-1.93**	**12, 04, 93, 17**

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

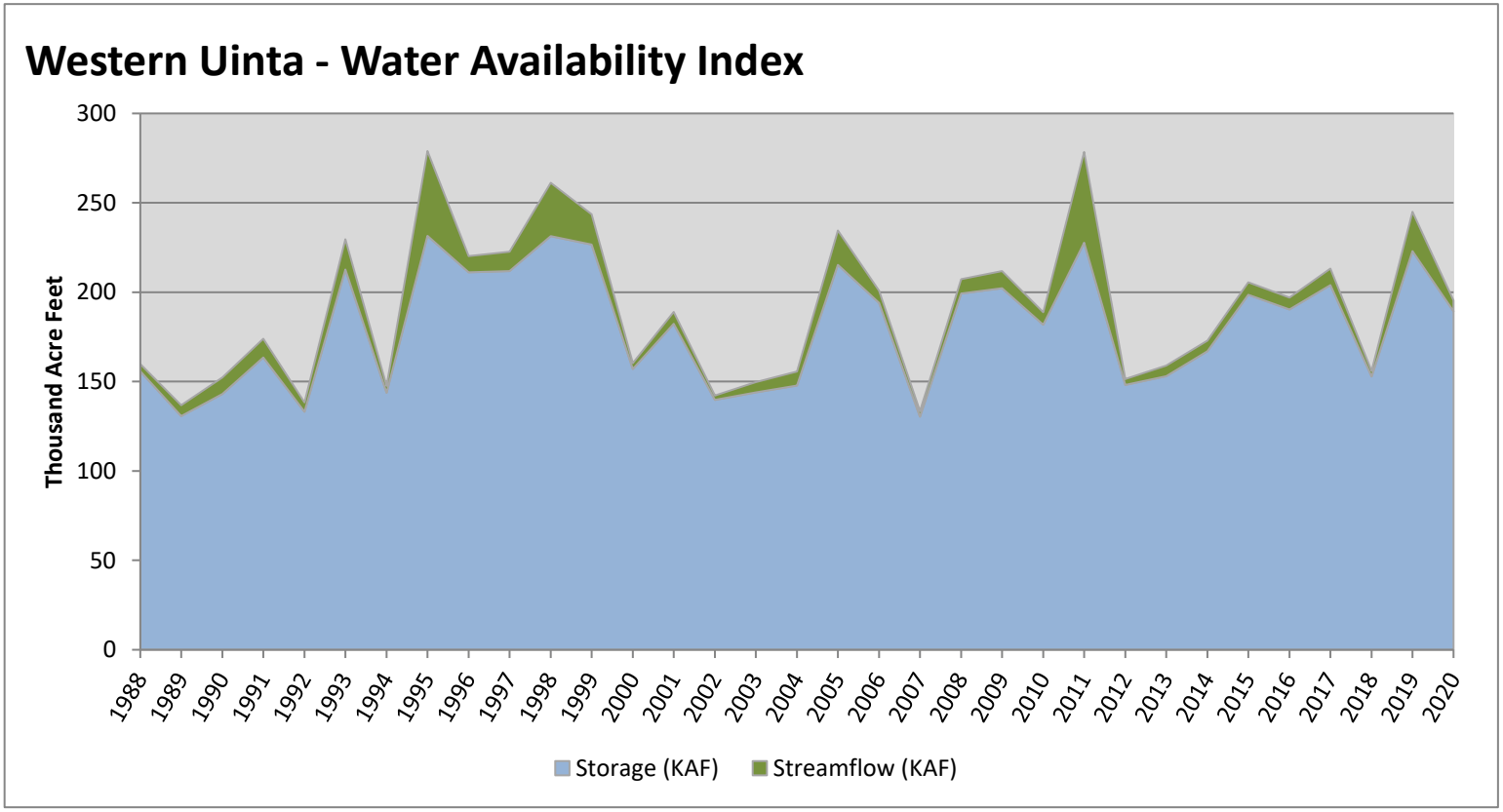


August 1, 2020

Water Availability Index

Basin or Region	Jul EOM* Storage	July Flow	Storage + Flow	Percentile	WAI#	Years with similiar WAI
	KAF^	KAF^	KAF^	%		
Western Uinta	**189.37**	**5.97**	**195.34**	**53**	**0.25**	**10, 01, 16, 06**

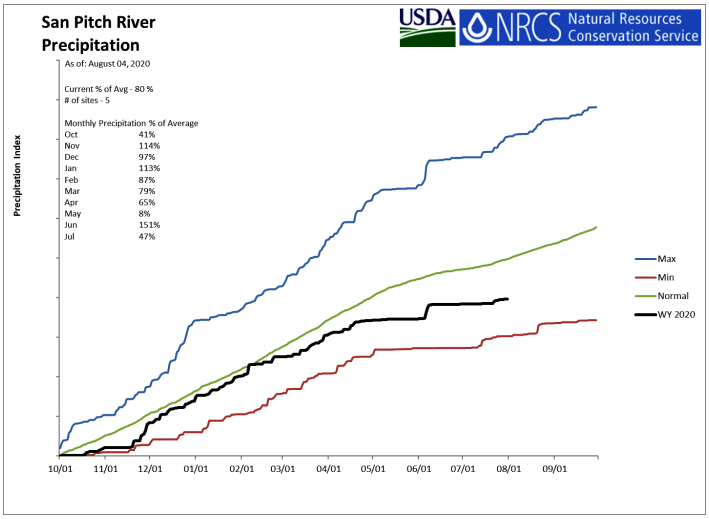
*EOM, end of month; #WAI, Water Availability Index; ^KAF, thousand acre-feet.

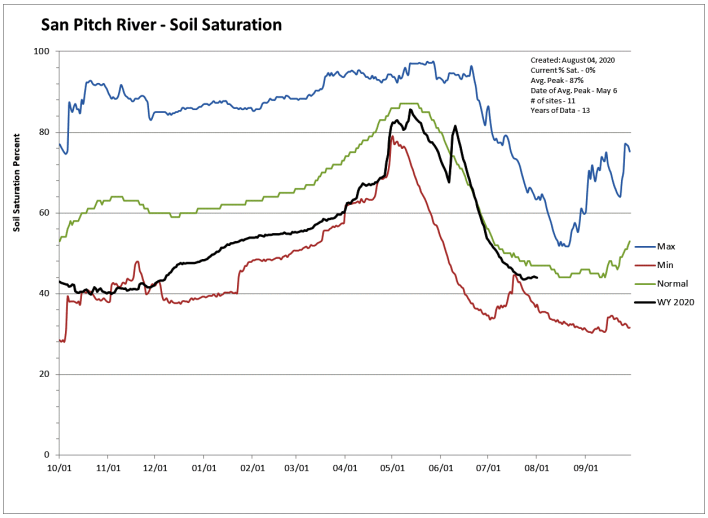


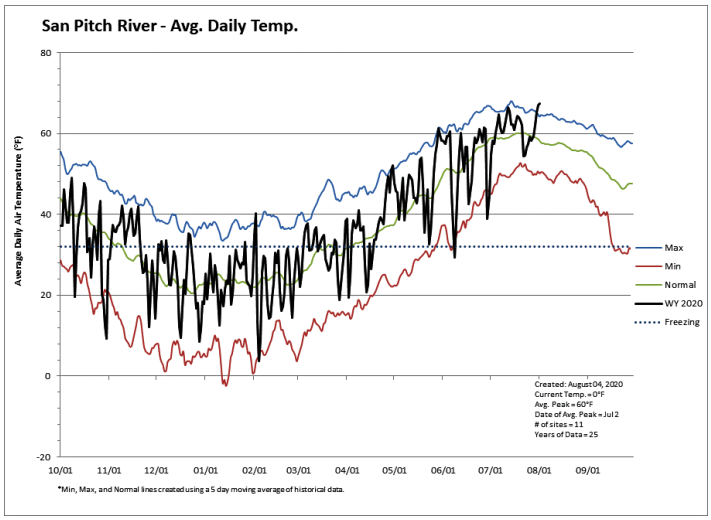
San Pitch River Basin

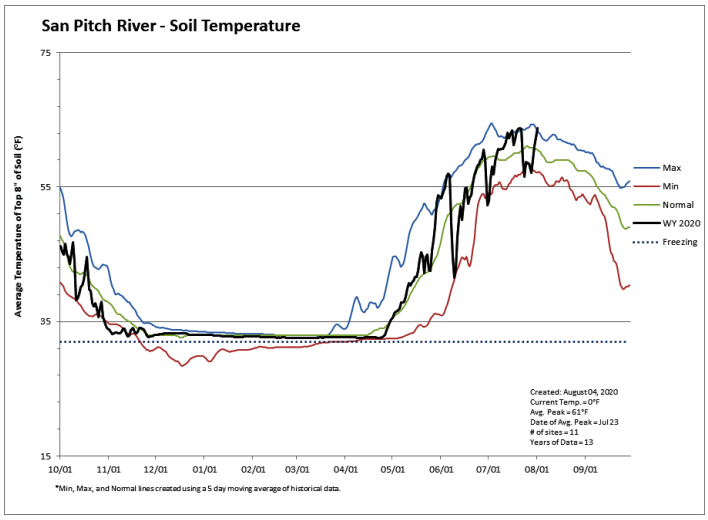
August 1, 2020

Precipitation in July was much below average at 47%, which brings the seasonal accumulation (Oct-Jul) to 80% of average. Soil Moisture is at 44% compared to 53% last year. Reservoir storage is at 5% of capacity, compared to 88% last year.The water availability index for the San Pitch is 22%.









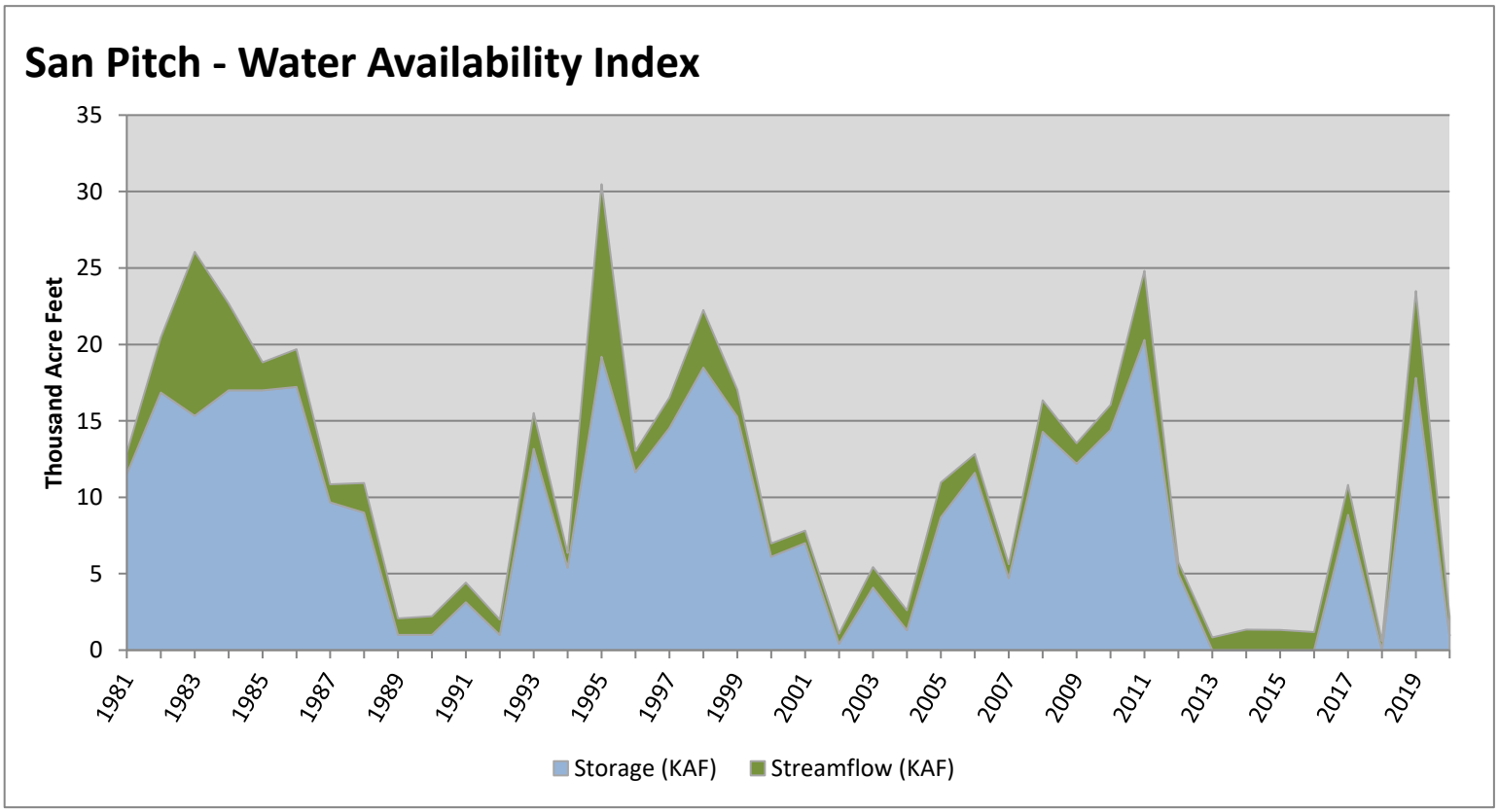
SNOTEL Data

August 1, 2020

Water Availability Index

Basin or Region	Jul EOM* Storage	July Flow	Storage + Flow	Percentile	WAI#	Years with similiar WAI
	KAF^	KAF^	KAF^	%		
San Pitch	**0.94**	**1.25**	**2.19**	**22**	**-2.34**	**92, 89, 90, 04**

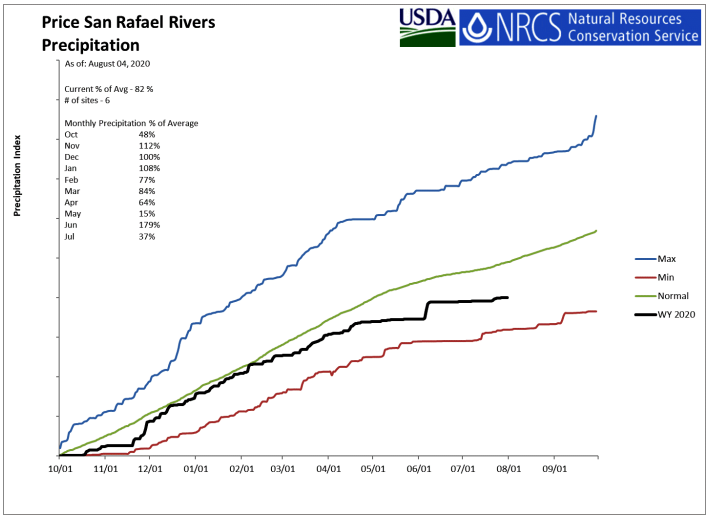
*EOM, end of month; #WAI, Water Availability Index; ^KAF, thousand acre-feet.

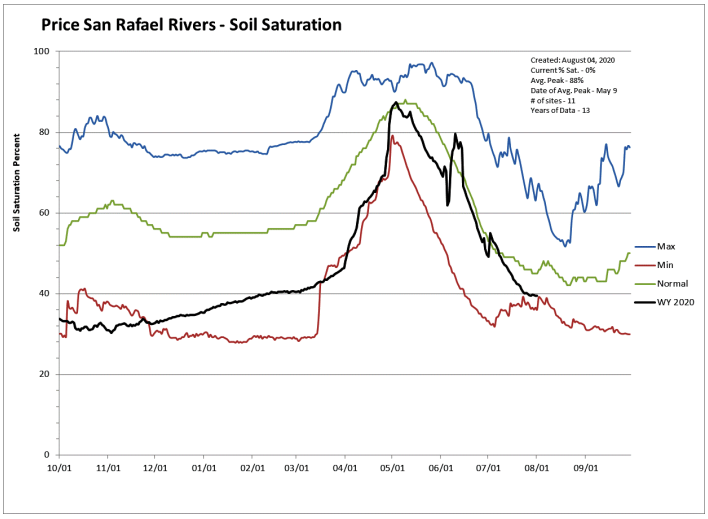


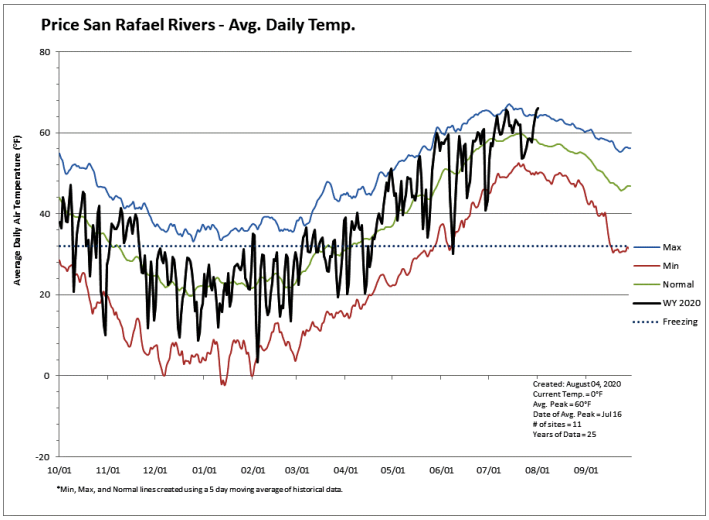
Price & San Rafael Basins

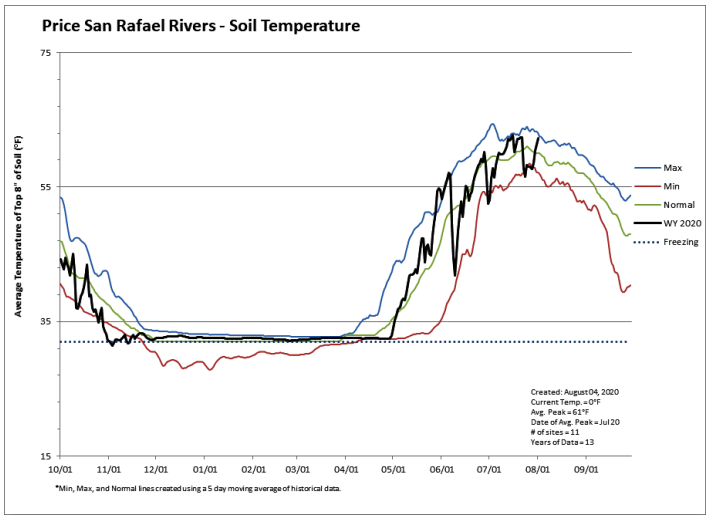
August 1, 2020

Precipitation in July was much below average at 37%, which brings the seasonal accumulation (Oct-Jul) to 82% of average. Soil moisture is at 39% compared to 49% last year. Reservoir storage is at 76% of capacity, compared to 93% last year. The water availability index for the Price River is 66%, and 46% for Joe's Valley.







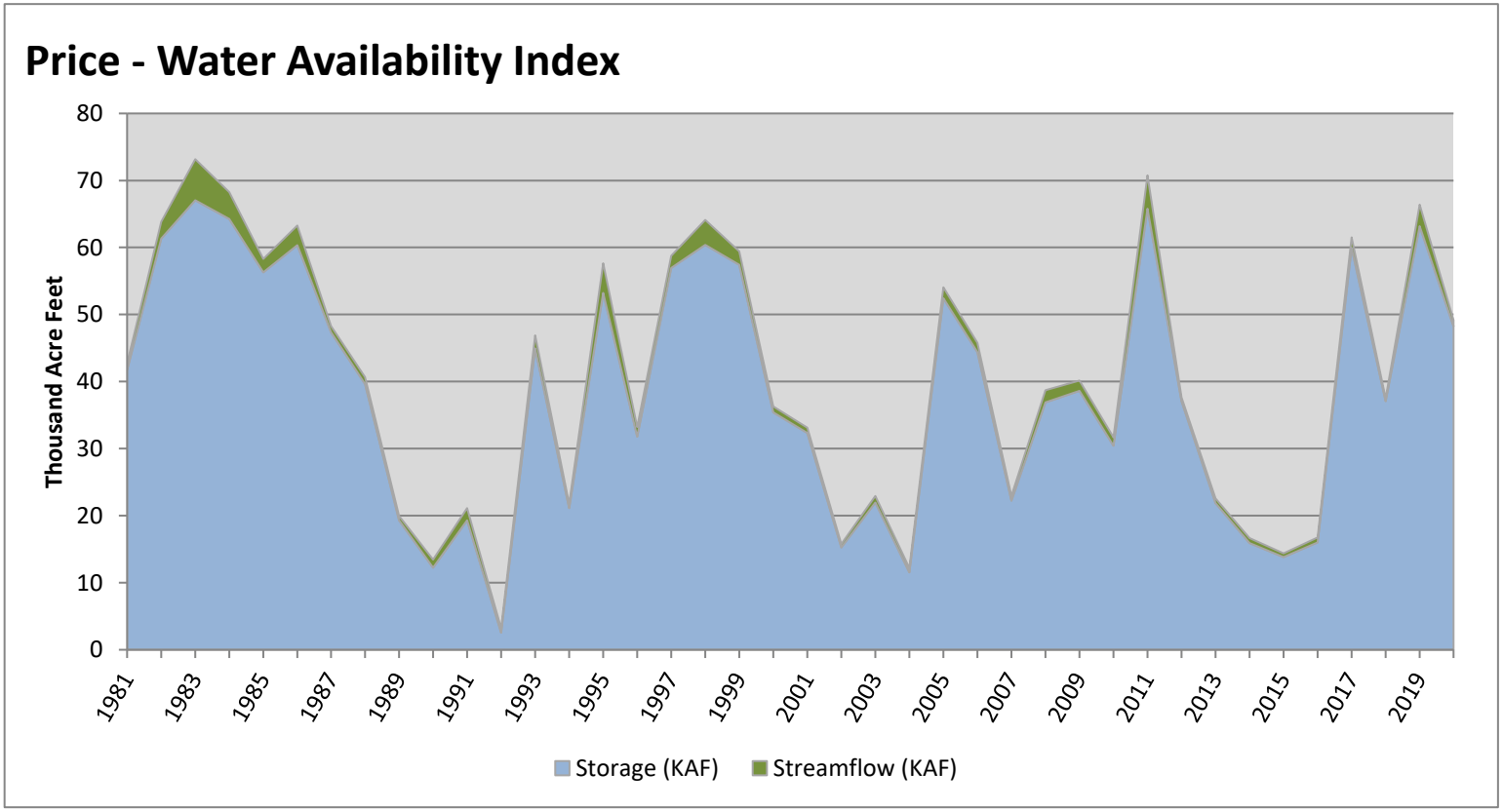


August 1, 2020

Water Availability Index

Basin or Region	Jul EOM* Storage	July Flow	Storage + Flow	Percentile	WAI#	Years with similiar WAI
	KAF^	KAF^	KAF^	%		
Price	**48.26**	**0.93**	**49.19**	**66**	**1.32**	**93, 87, 05, 95**

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

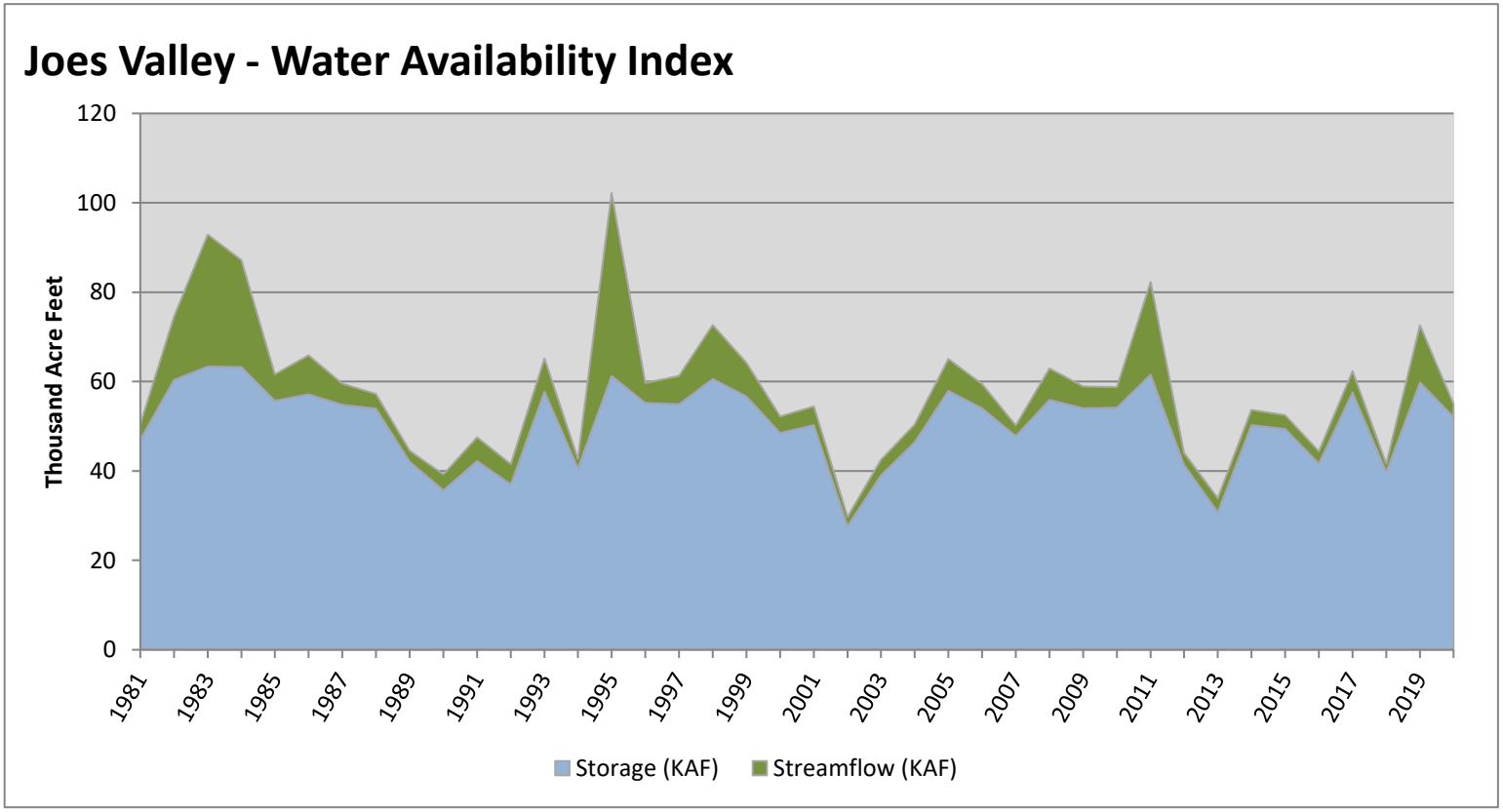


August 1, 2020

Water Availability Index

Basin or Region	Jul EOM* Storage	July Flow	Storage + Flow	Percentile	WAI#	Years with similiar WAI
	KAF^	KAF^	KAF^	%		
Joes Valley	**52.04**	**2.98**	**55.02**	**46**	**-0.3**	**14, 01, 88, 10**

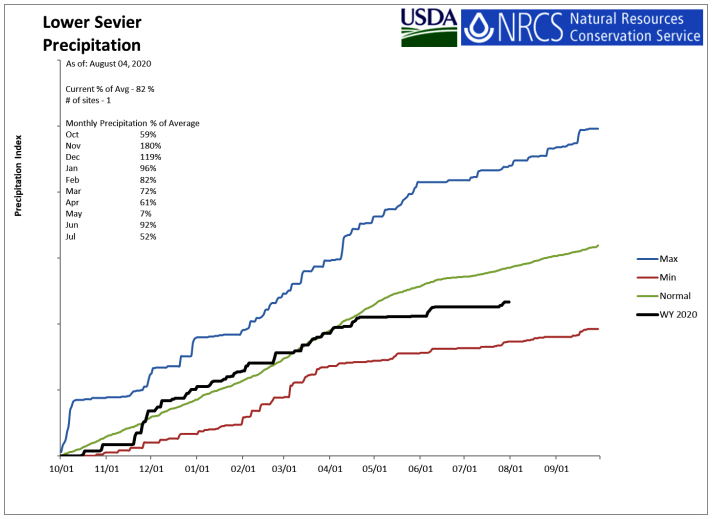
*EOM, end of month; #WAI, Water Availability Index; ^KAF, thousand acre-feet.

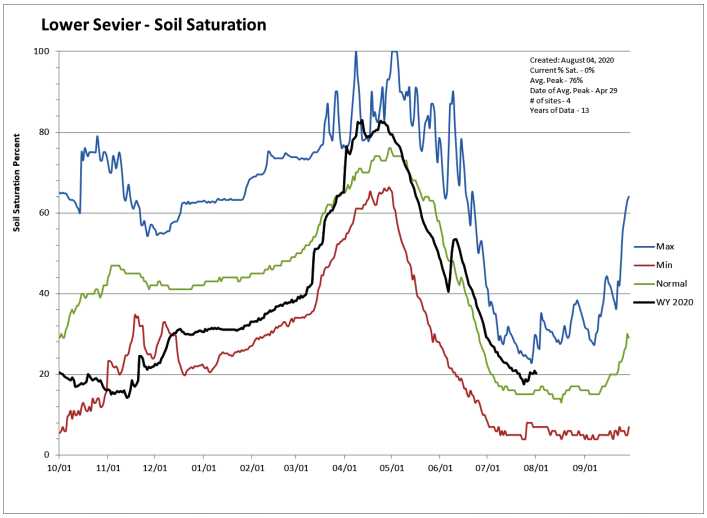


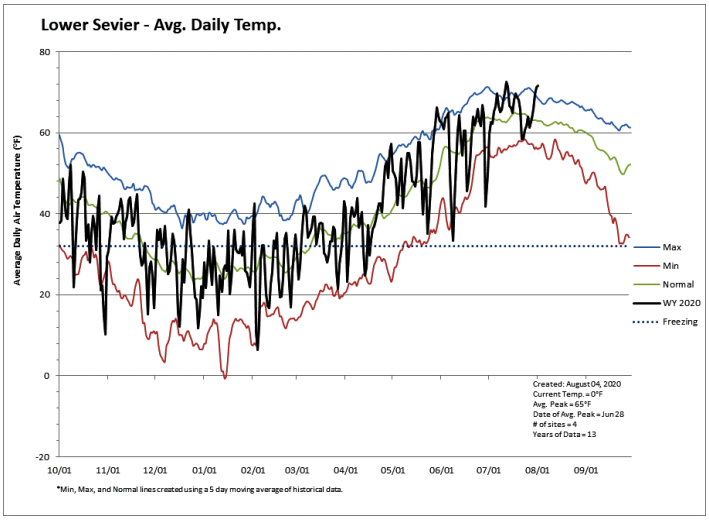
Lower Sevier Basin

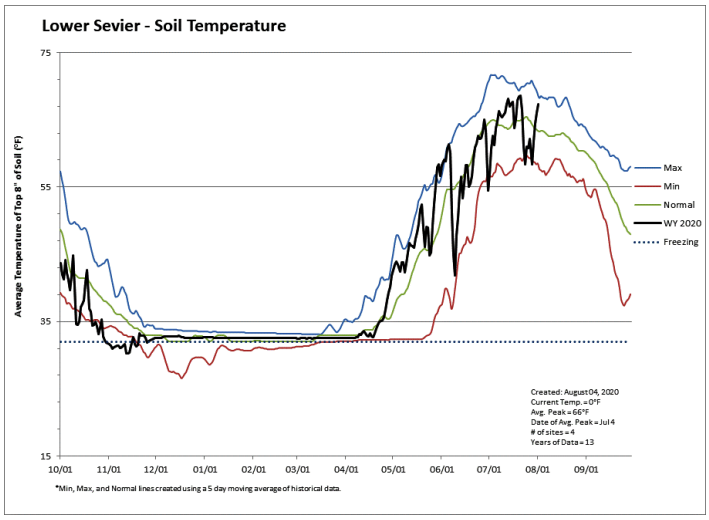
August 1, 2020

Precipitation in July was much below average at 54%, which brings the seasonal accumulation (Oct-Jul) to 82% of average. Soil moisture is at 20% compared to 26% last year. Reservoir storage is at 24% of capacity, compared to 45% last year. The water availability index for the Lower Sevier is 22%.









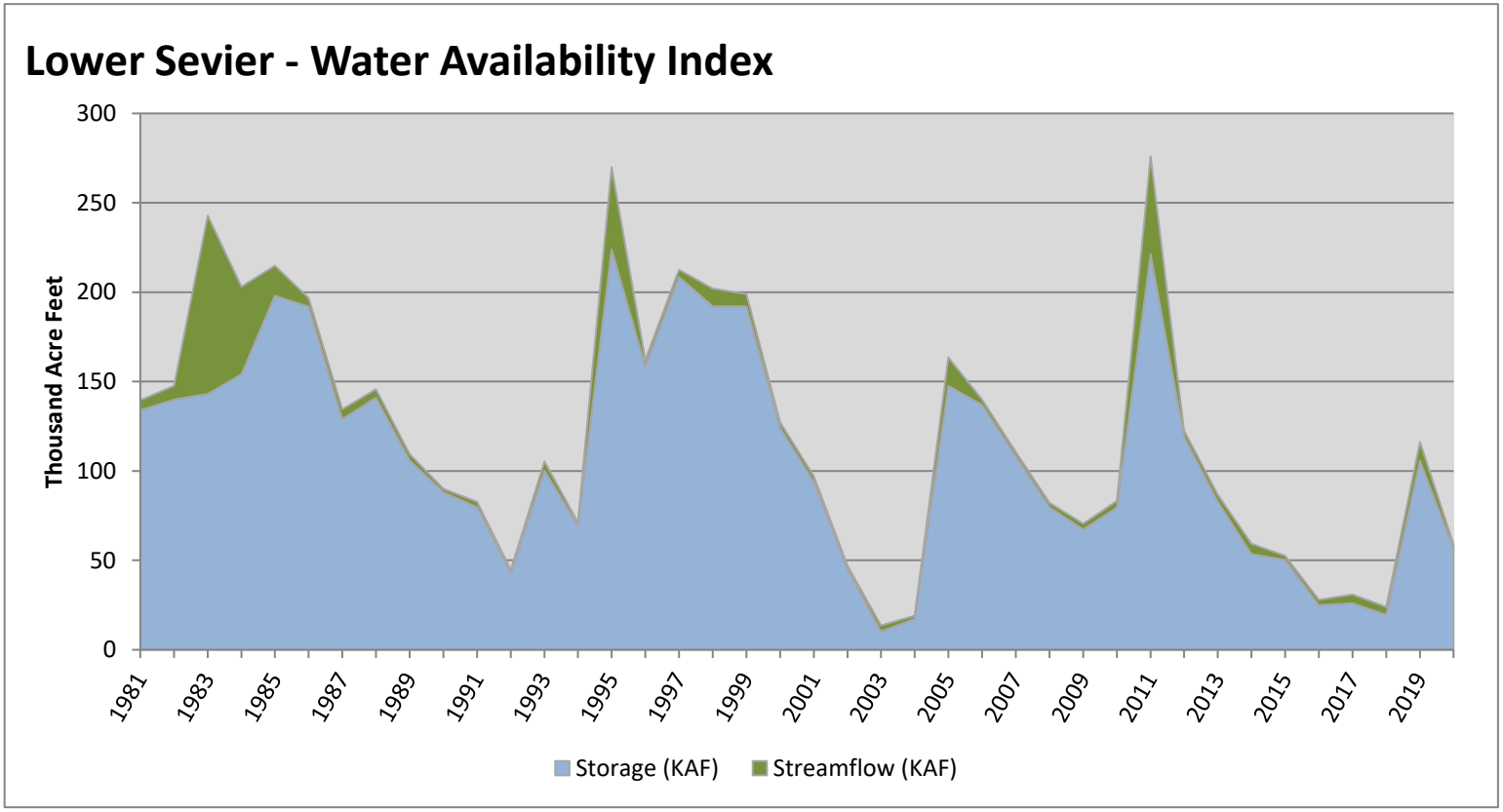
SNOTEL Data

August 1, 2020

Water Availability Index

Basin or Region	Jul EOM* Storage	July Flow	Storage + Flow	Percentile	WAI#	Years with similiar WAI
	KAF^	KAF^	KAF^	%		
Lower Sevier	**56.47**	**2.43**	**58.90**	**22**	**-2.34**	**02, 15, 14, 09**

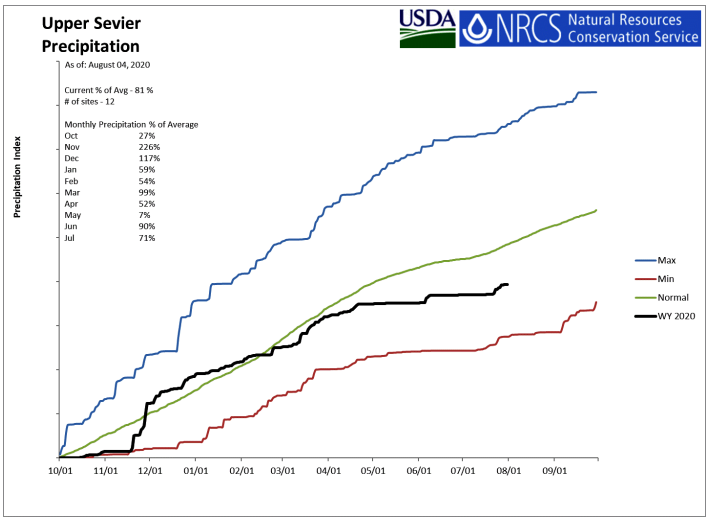
*EOM, end of month; #WAI, Water Availability Index; ^KAF, thousand acre-feet.

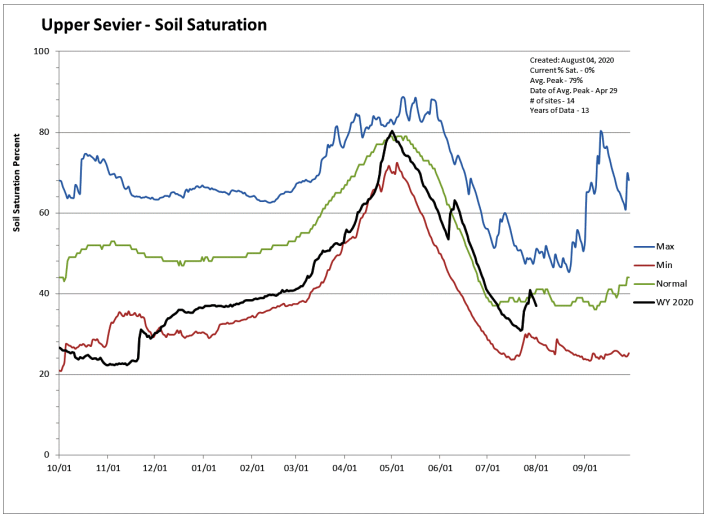


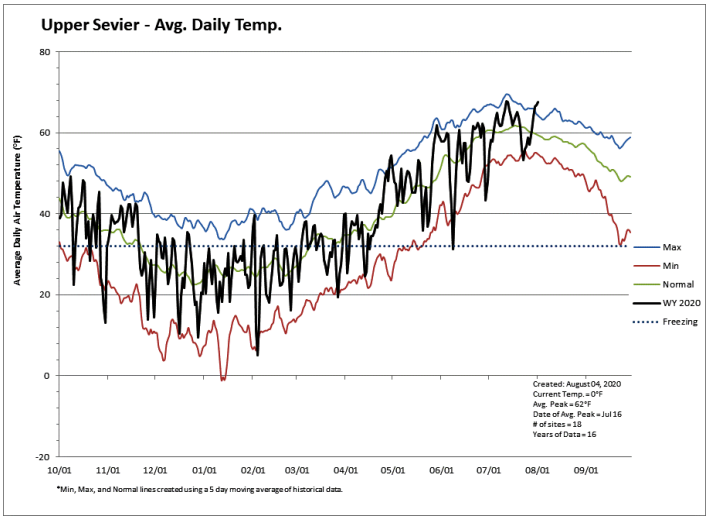
Upper Sevier Basin

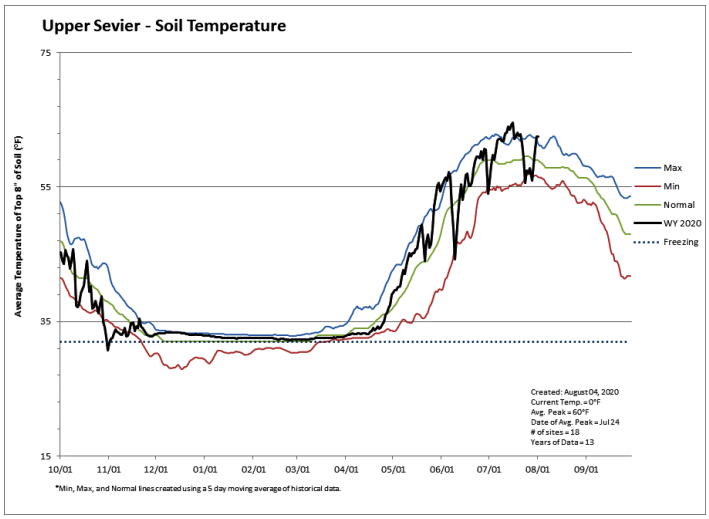
August 1, 2020

Precipitation in July was below average at 71%, which brings the seasonal accumulation (Oct-Jul) to 81% of average. Soil moisture is at 37% compared to 46% last year. Reservoir storage is at 52% of capacity, compared to 81% last year. The water availability index for the Upper Sevier is 54%.









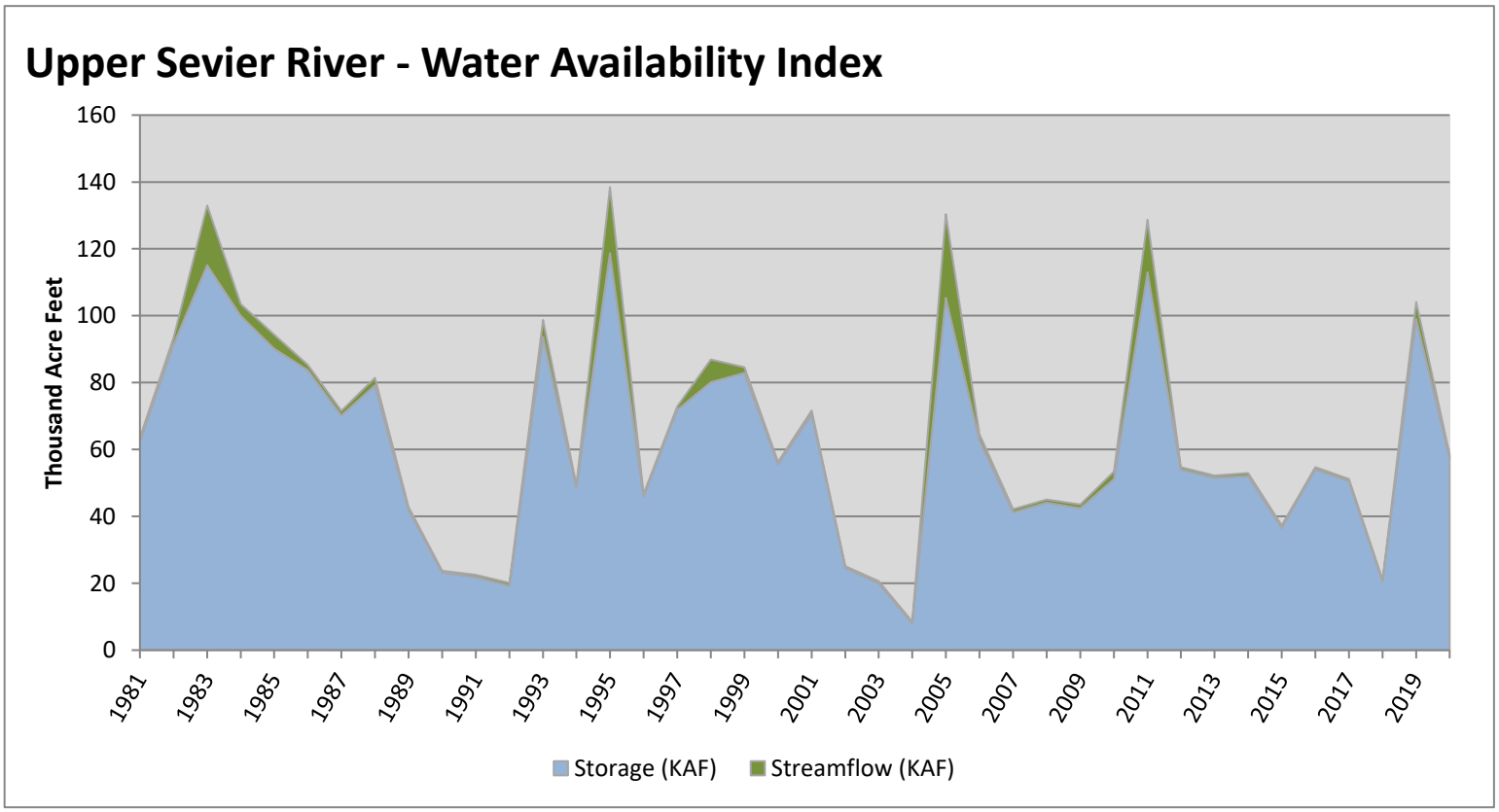
SNOTEL Data

August 1, 2020

Water Availability Index

Basin or Region	Jul EOM* Storage	July Flow	Storage + Flow	Percentile	WAI#	Years with similiar WAI
	KAF^	KAF^	KAF^	%		
Upper Sevier River	**57.48**	**1.03**	**58.51**	**54**	**0.3**	**12, 00, 81, 06**

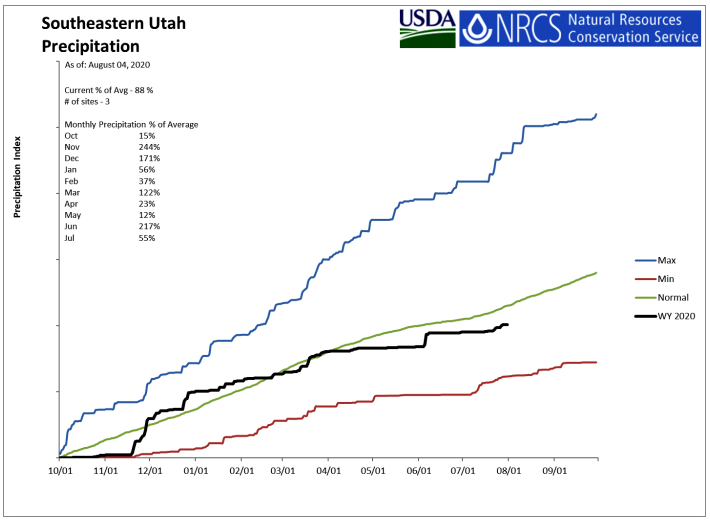
*EOM, end of month; #WAI, Water Availability Index; ^KAF, thousand acre-feet.

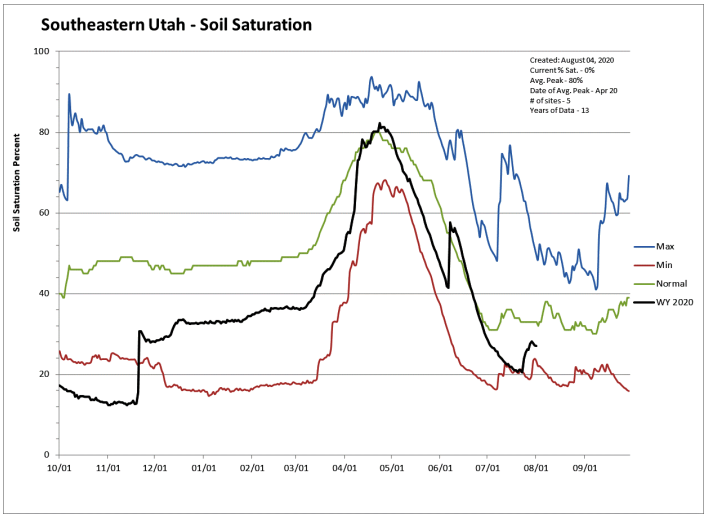


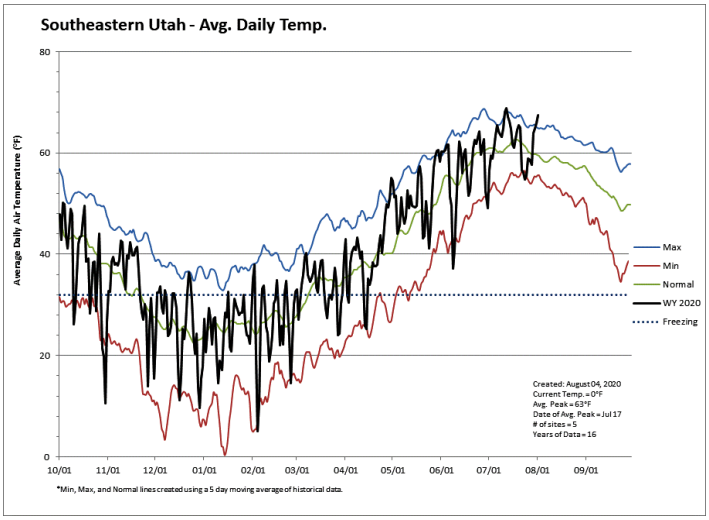
Southeastern Utah

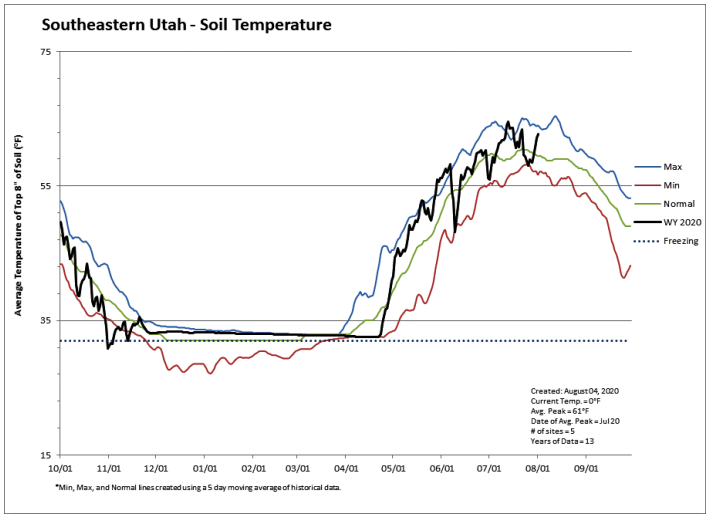
August 1, 2020

Precipitation in July was much below average at 55%, which brings the seasonal accumulation (Oct-Jul) to 88% of average. Soil moisture is at 27% compared to 30% last year. Reservoir storage is at 45% of capacity, compared to 110% last year. The water availability index for Moab is 26%.









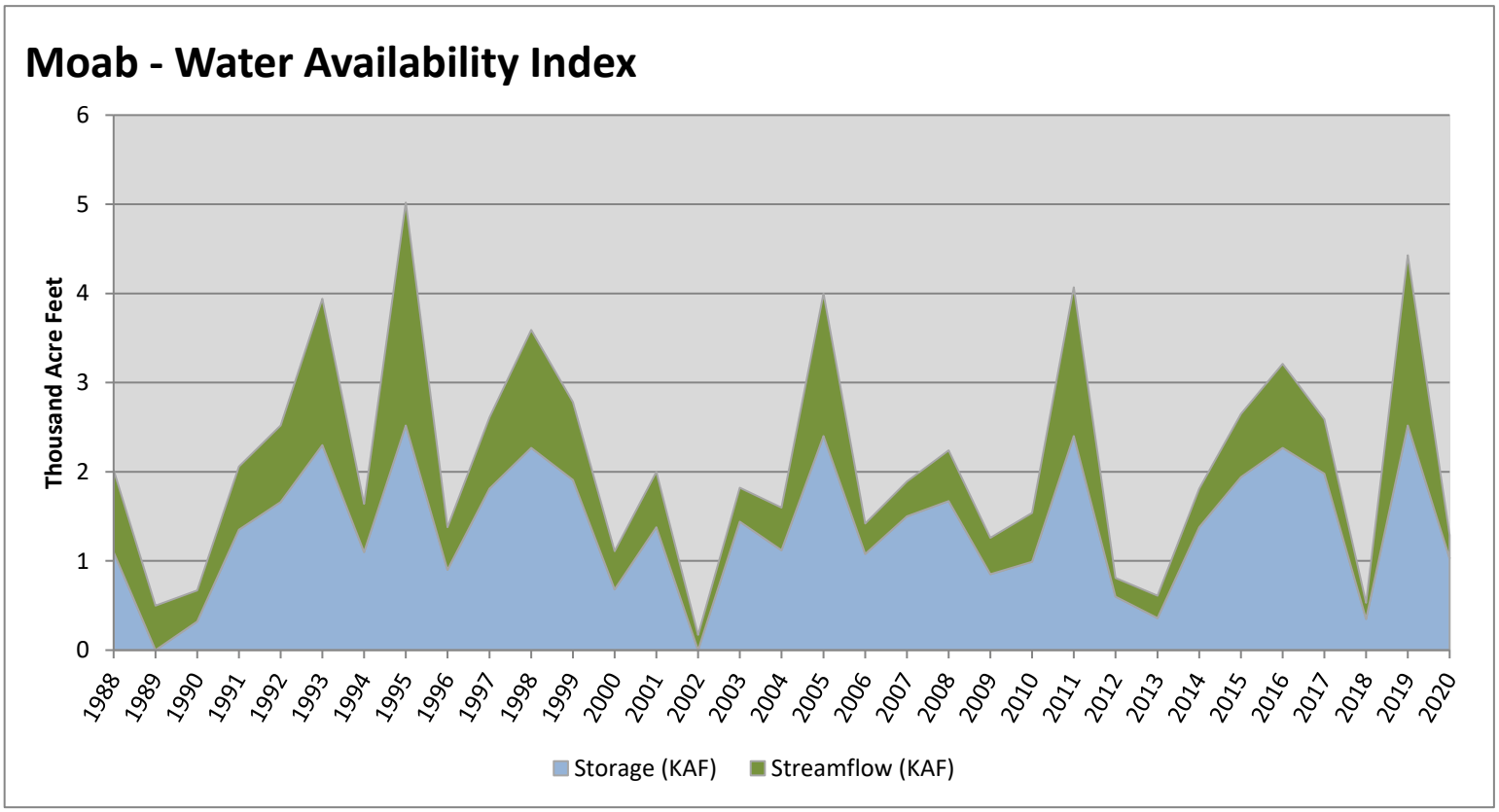
SNOTEL Data

August 1, 2020

Water Availability Index

Basin or Region	Jul EOM* Storage	July Flow	Storage + Flow	Percentile	WAI#	Years with similiar WAI
	KAF^	KAF^	KAF^	%		
Moab	**1.03**	**0.26**	**1.29**	**26**	**-1.96**	**00, 09, 96, 06**

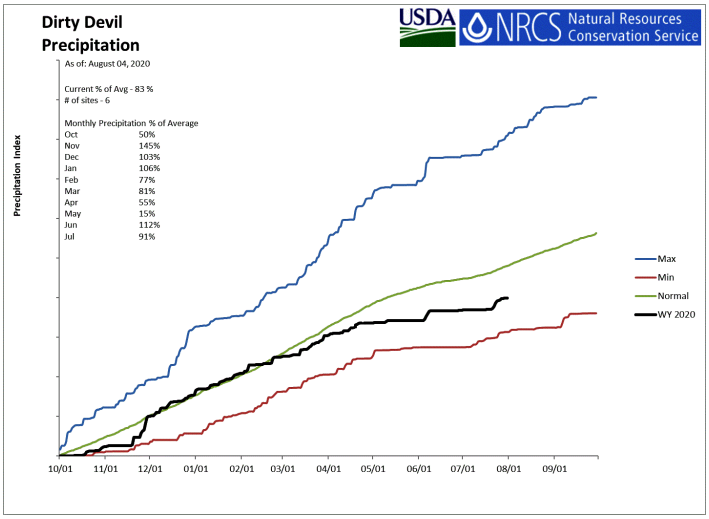
*EOM, end of month; #WAI, Water Availability Index; ^KAF, thousand acre-feet.

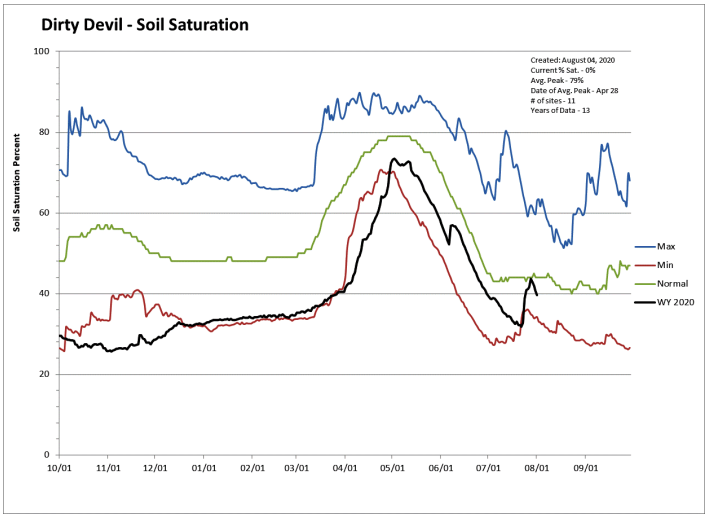


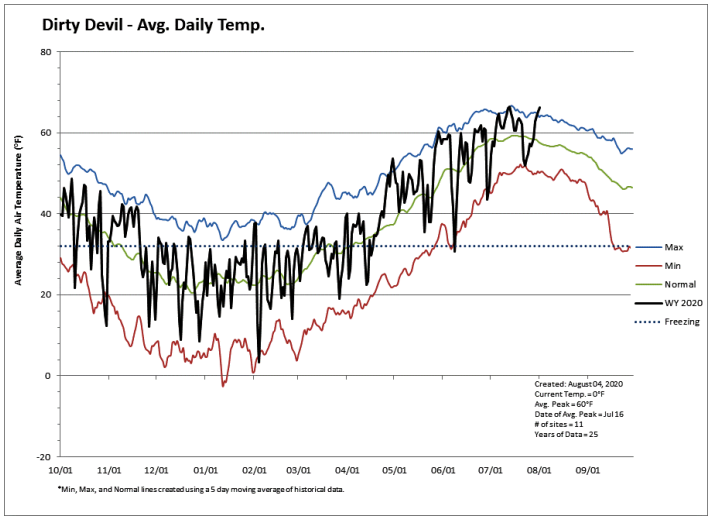
Dirty Devil Basin

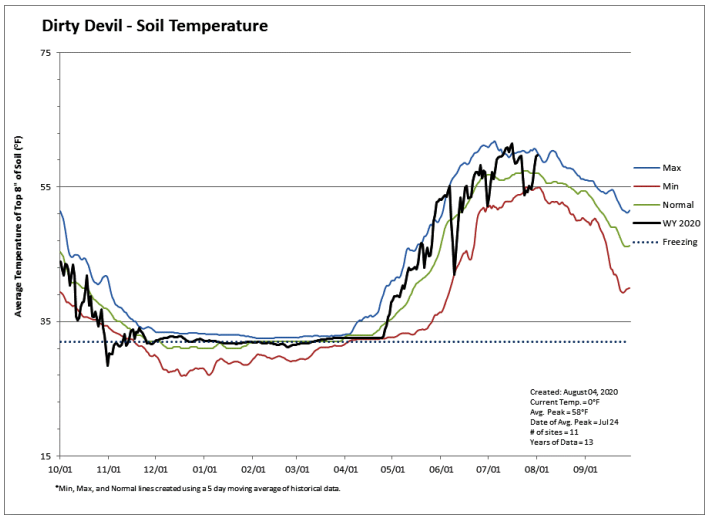
August 1, 2020

Precipitation in July was near average at 93%, which brings the seasonal accumulation (Oct-Jul) to 83% of average. Soil moisture is at 40% compared to 49% last year.





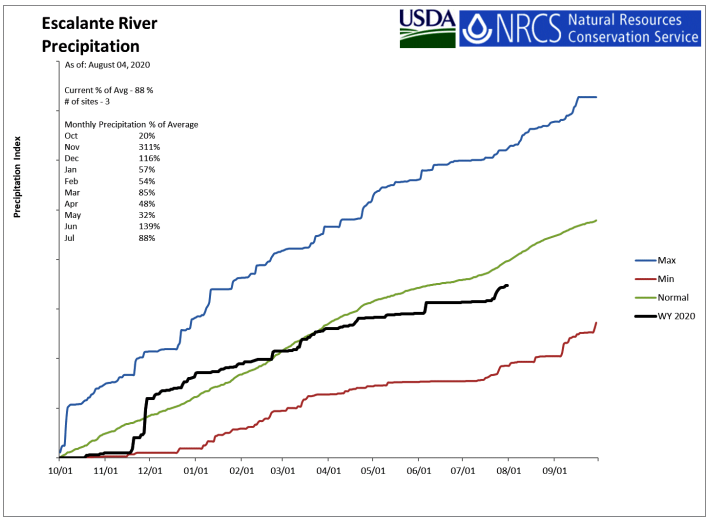


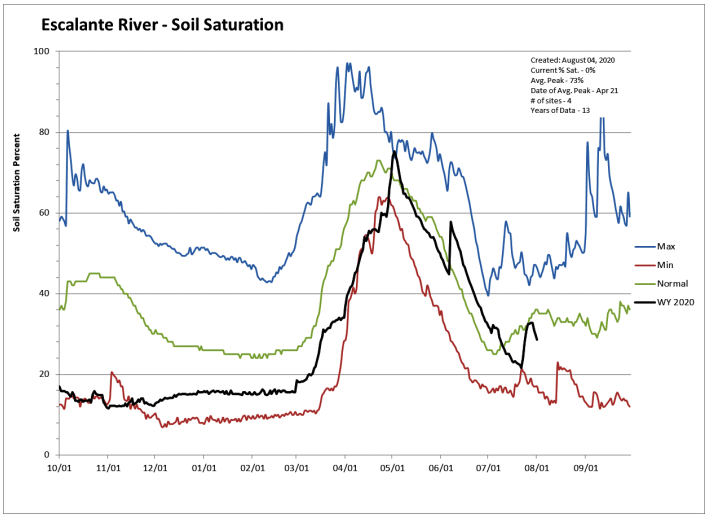


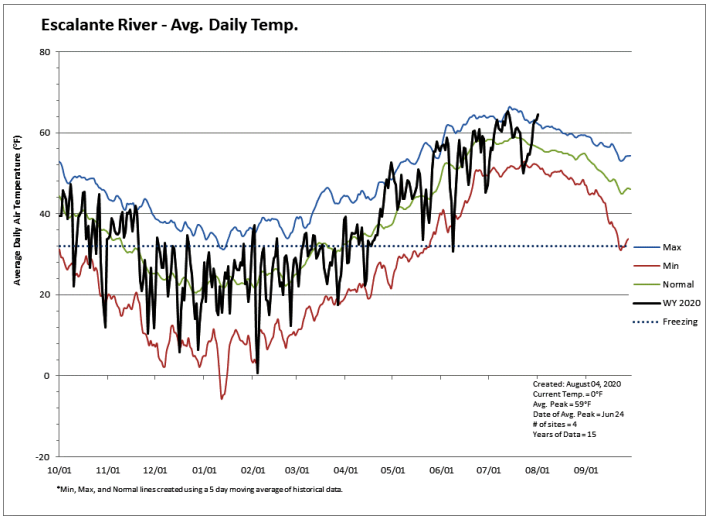
Escalante River Basin

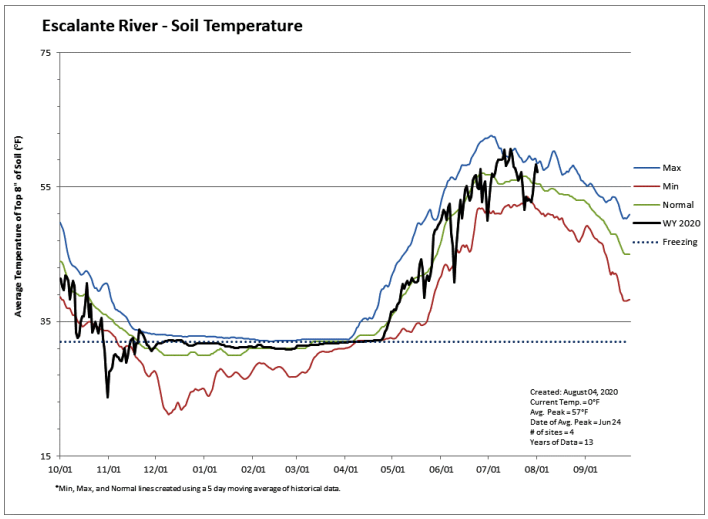
August 1, 2020

Precipitation in July was below average at 88%, which brings the seasonal accumulation (Oct-Jul) to 88% of average. Soil moisture is at 29% compared to 43% last year.





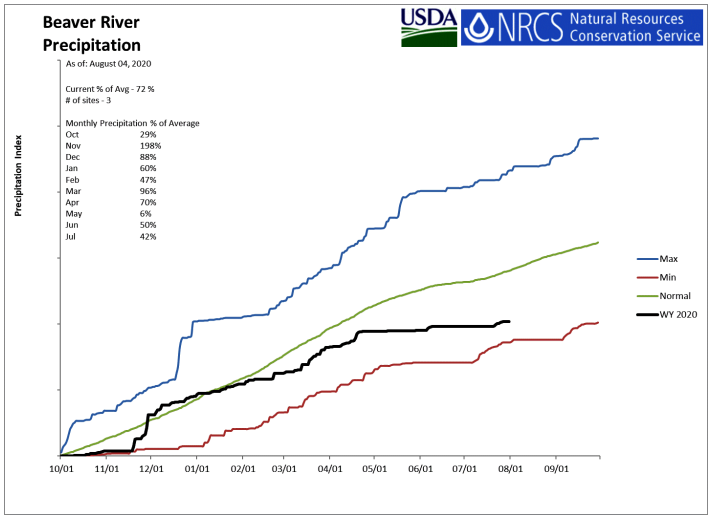


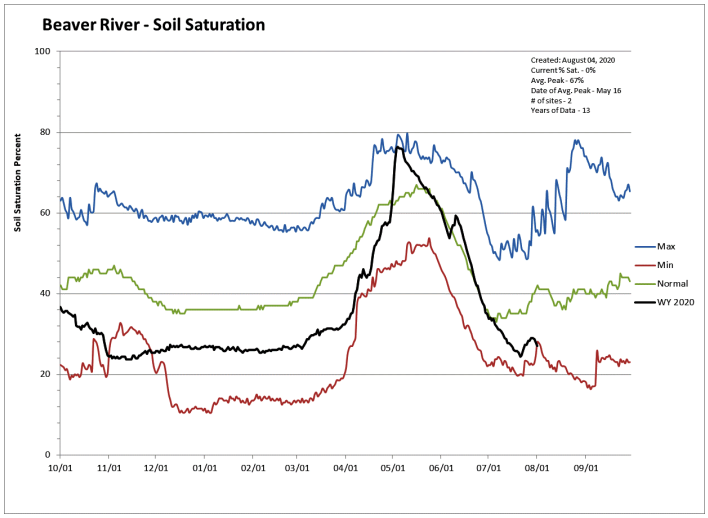


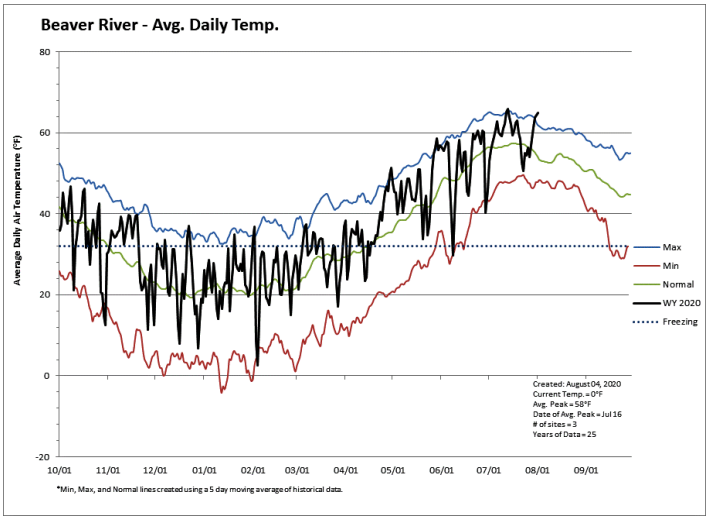
Beaver River Basin

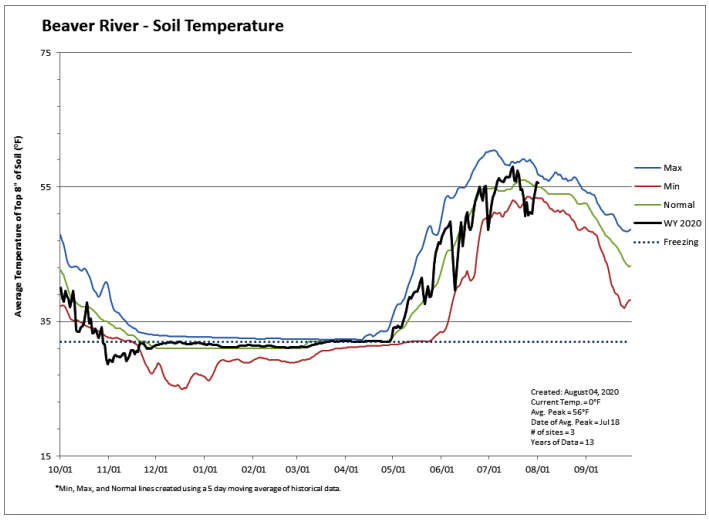
August 1, 2020

Precipitation in July was much below average at 42%, which brings the seasonal accumulation (Oct-Jul) to 72% of average. Soil moisture is at 27% compared to 56% last year. Reservoir storage is at 36% of capacity, compared to 92% last year. The water availability index for the Beaver River is 46%.









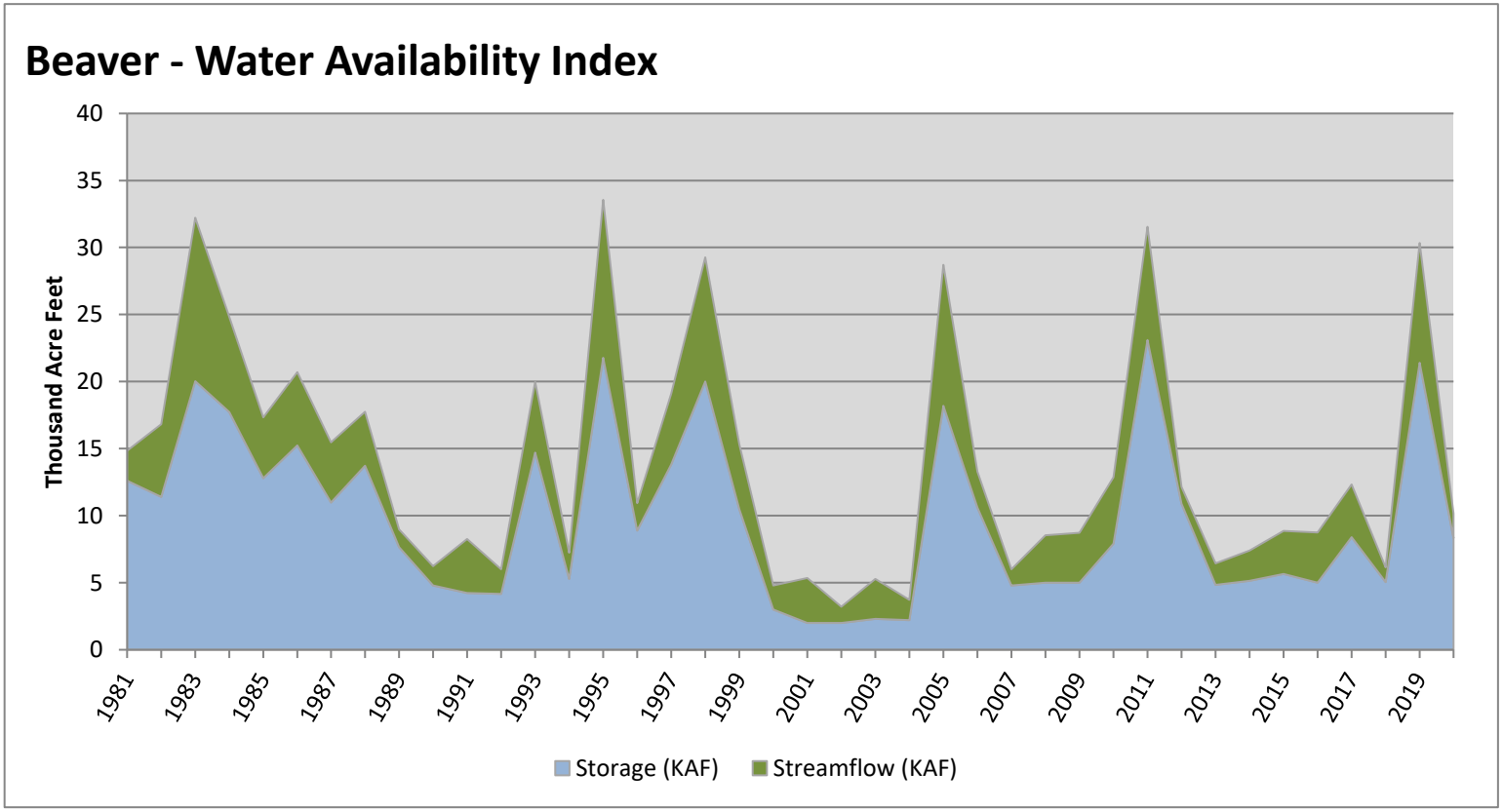
SNOTEL Data

August 1, 2020

Water Availability Index

Basin or Region	Jul EOM* Storage	July Flow	Storage + Flow	Percentile	WAI#	Years with similiar WAI
	KAF^	KAF^	KAF^	%		
Beaver	**8.34**	**1.82**	**10.16**	**46**	**-0.3**	**15, 89, 96, 12**

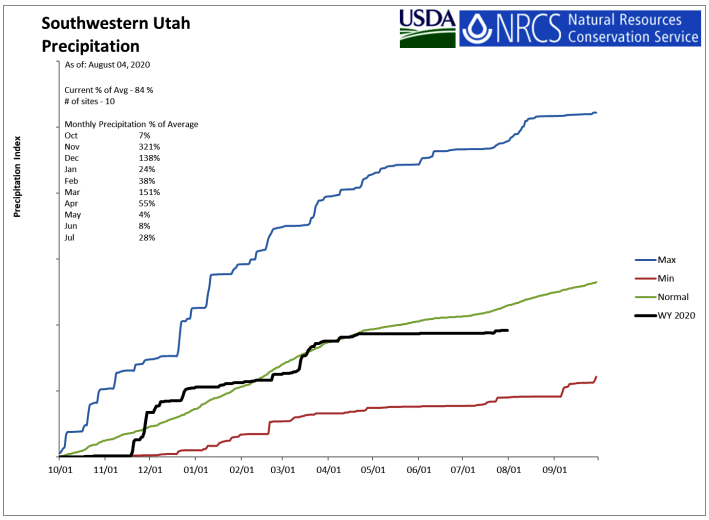
*EOM, end of month; #WAI, Water Availability Index; ^KAF, thousand acre-feet.

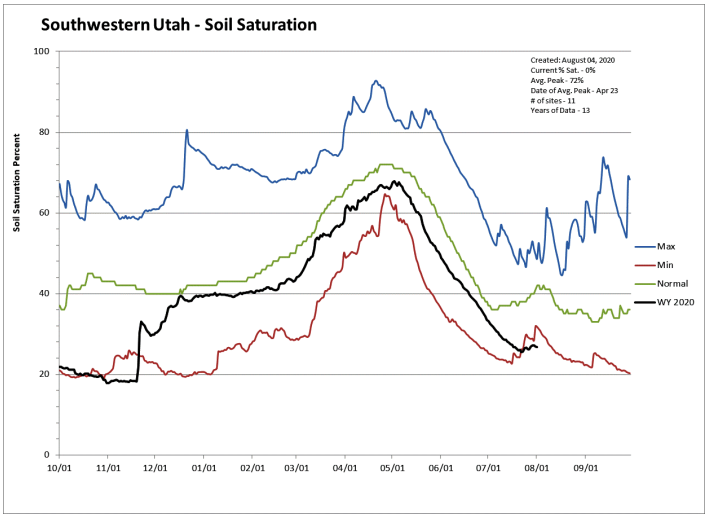


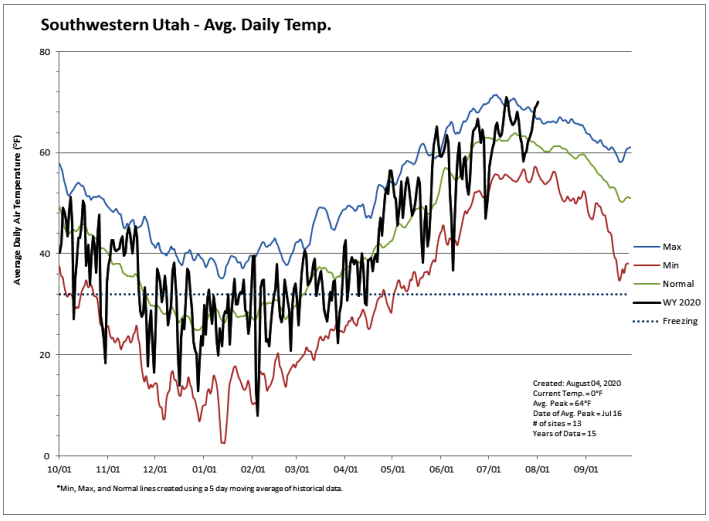
Southwestern Utah

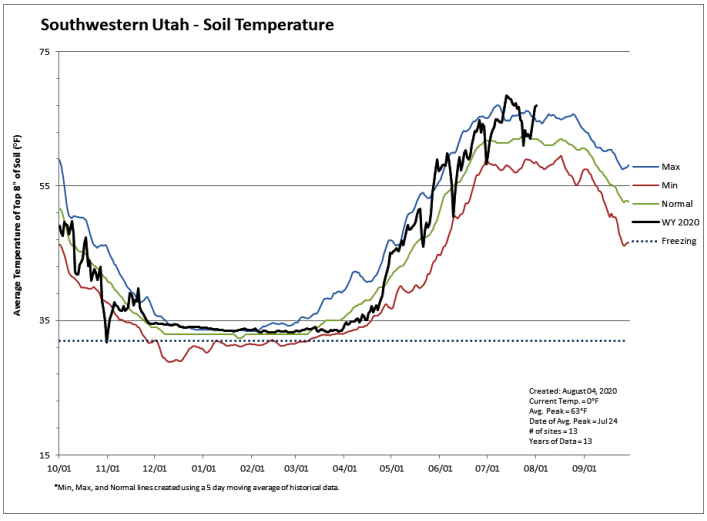
August 1, 2020

Precipitation in July was much below average at 27%, which brings the seasonal accumulation (Oct-Jul) to 84% of average. Soil moisture is at 27% compared to 40% last year. Reservoir storage is at 51% of capacity, compared to 57% last year. The water availability index for the Virgin River is 46%.







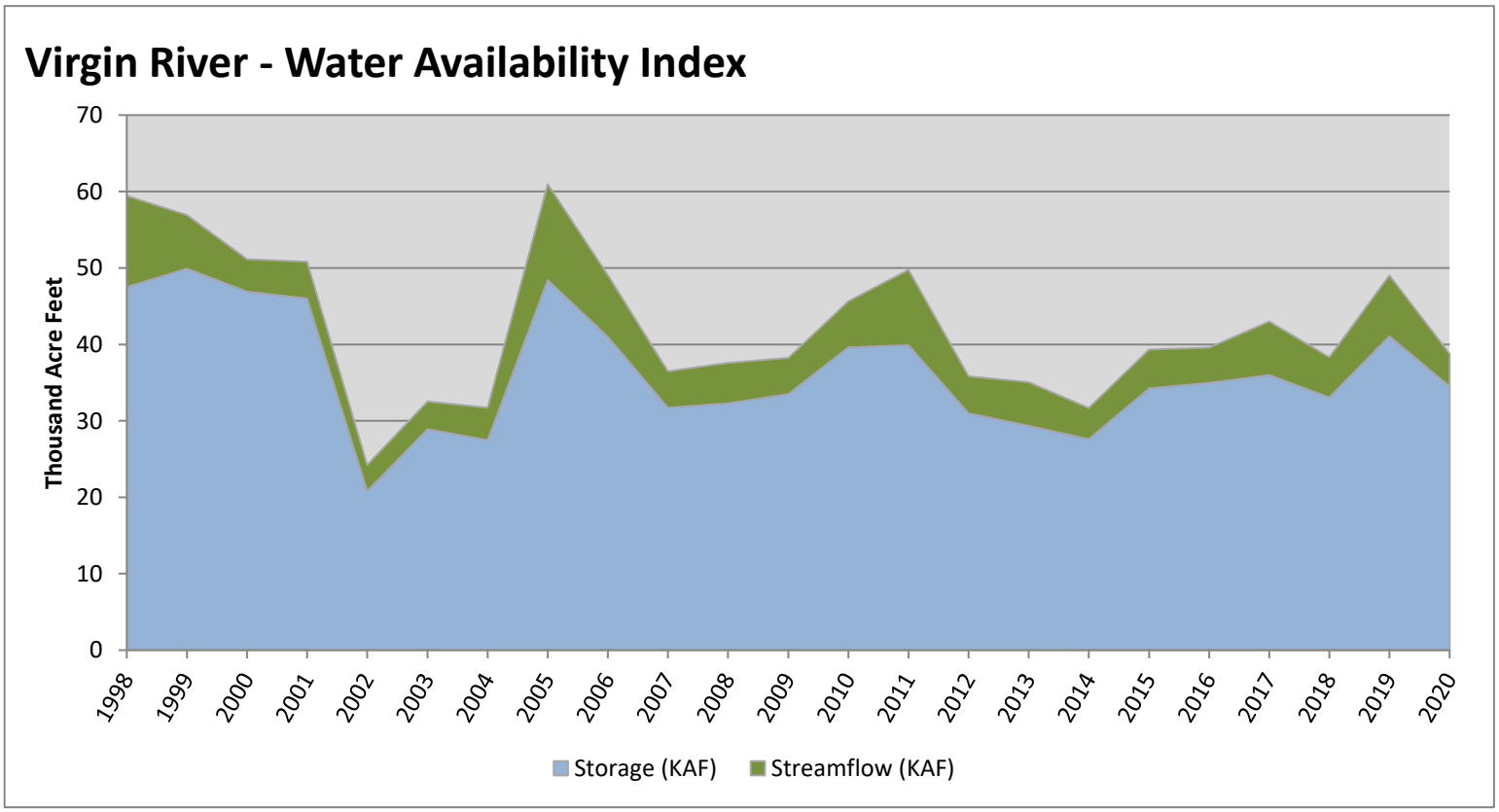


August 1, 2020

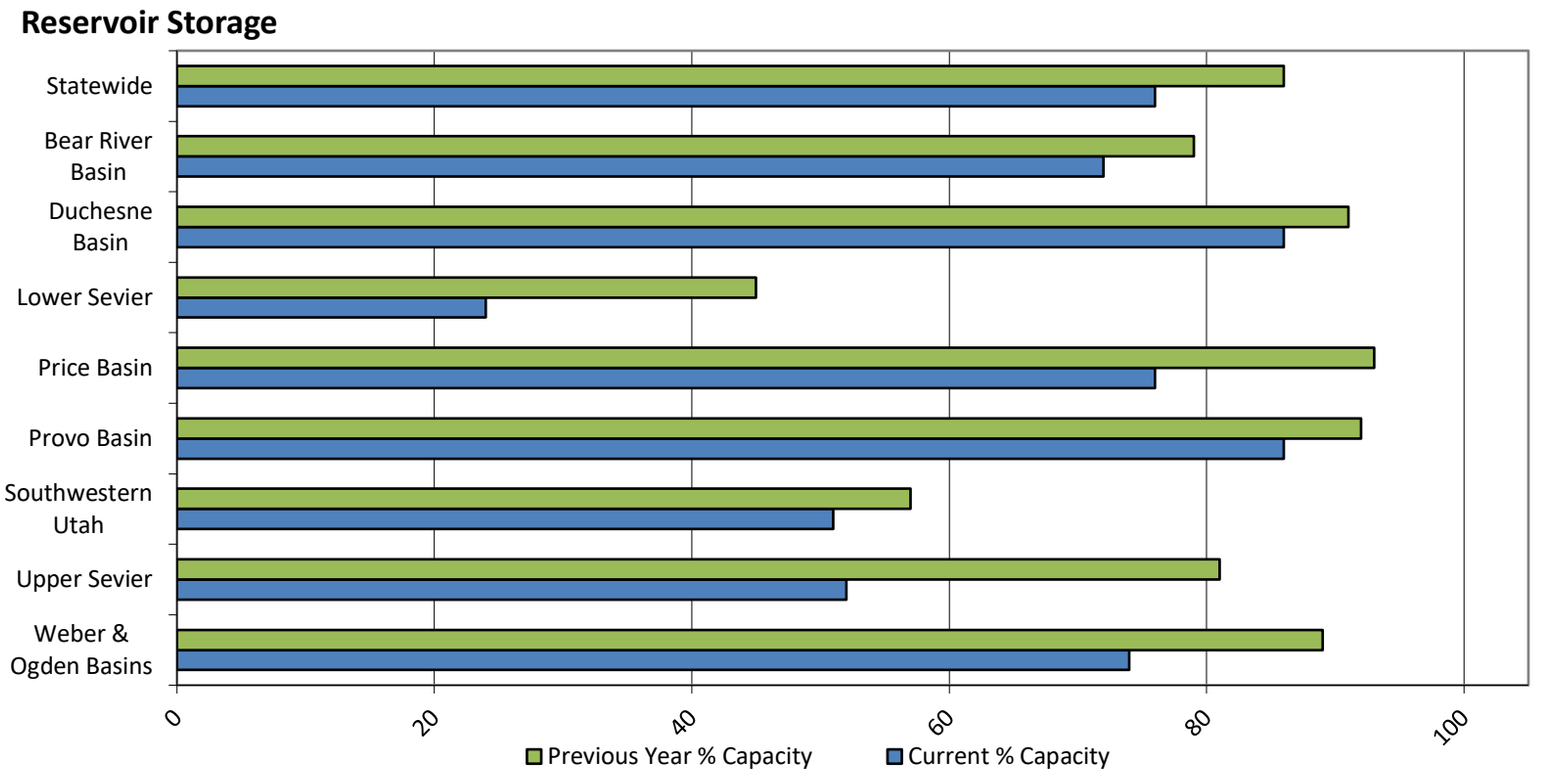
Water Availability Index

Basin or Region	Jul EOM* Storage	July Flow	Storage + Flow	Percentile	WAI#	Years with similiar WAI
	KAF^	KAF^	KAF^	%		
Virgin River	**34.50**	**4.26**	**38.76**	**46**	**-0.35**	**09, 18, 15, 16**

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



Reservoir Storage Summary for the end of July 2020	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	12.5	22.4		25.7	49%	87%			
Causey Reservoir	5.3	6.7	5.2	7.1	75%	94%	73%	102%	128%
Cleveland Lake	3.1	5.2		5.4	58%	96%			
Currant Creek Reservoir	14.5	14.9	15.2	15.5	93%	96%	98%	95%	98%
Deer Creek Reservoir	131.6	147.8	123.4	149.7	88%	99%	82%	107%	120%
East Canyon Reservoir	40.6	46.1	40.9	49.5	82%	93%	83%	99%	113%
Echo Reservoir	42.3	58.0	49.0	73.9	57%	78%	66%	86%	118%
Grantsville Reservoir	1.6	2.3	1.7	3.3	48%	70%	51%	94%	136%
Gunlock	7.4	10.3	7.2	10.4	71%	99%	69%	102%	143%
Gunnison Reservoir	0.9	17.8	10.4	20.3	5%	88%	51%	9%	171%
Huntington North Reservoir	3.6	3.1	2.6	4.2	86%	75%	62%	138%	121%
Hyrum Reservoir	10.0	11.1	9.5	15.3	65%	72%	62%	105%	117%
Joes Valley Reservoir	52.0	59.8	51.0	61.6	84%	97%	83%	102%	117%
Jordanelle Reservoir	277.3	296.0	288.4	314.0	88%	94%	92%	96%	103%
Ken's Lake	1.0	2.5	1.4	2.3	45%	110%	62%	72%	176%
Kolob Reservoir	5.4	5.6		5.6	96%	100%			
Lost Creek Reservoir	18.9	20.4	16.0	22.5	84%	91%	71%	118%	127%
Lower Enterprise	1.4	0.2	0.4	2.6	54%	9%	16%	341%	56%
Miller Flat Reservoir	3.8	4.2		5.2	72%	80%			
Millsite	8.7	11.7	14.5	16.7	52%	70%	87%	60%	81%
Minersville Reservoir	8.3	21.4	10.0	23.3	36%	92%	43%	83%	214%
Moon Lake Reservoir	22.9	38.1	26.1	35.8	64%	106%	73%	88%	146%
Otter Creek Reservoir	36.8	48.6	29.4	52.5	70%	93%	56%	125%	165%
Panguitch Lake	18.7	20.2	14.6	22.3	84%	90%	65%	128%	138%
Pineview Reservoir	76.8	97.8	77.0	110.1	70%	89%	70%	100%	127%
Piute Reservoir	20.7	50.5	32.1	71.8	29%	70%	45%	64%	157%
Porcupine Reservoir	9.6	10.6	8.5	11.3	85%	94%	75%	113%	125%
Quail Creek	27.1	30.8	26.1	40.0	68%	77%	65%	104%	118%
Red Fleet Reservoir	19.6	23.7	21.2	25.7	76%	92%	82%	93%	112%
Rockport Reservoir	48.8	56.0	51.5	60.9	80%	92%	85%	95%	109%
Sand Hollow Reservoir	44.9	48.0		50.0	90%	96%			
Scofield Reservoir	48.3	63.2	39.7	65.8	73%	96%	60%	122%	159%
Settlement Canyon Reservoir	0.4	0.8	0.7	1.0	39%	78%	67%	57%	117%
Sevier Bridge Reservoir	56.5	105.8	120.0	236.0	24%	45%	51%	47%	88%
Smith And Morehouse Reservoir	6.6	8.2	6.5	8.1	81%	101%	80%	101%	126%
Starvation Reservoir	139.4	155.2	143.2	164.1	85%	95%	87%	97%	108%
Stateline Reservoir	9.1	12.7	8.9	12.0	76%	106%	74%	102%	143%
Steinaker Reservoir	11.7	1.4	22.5	33.4	35%	4%	67%	52%	6%
Strawberry Reservoir	976.2	1023.6	713.1	1105.9	88%	93%	64%	137%	144%
Upper Enterprise	2.3	6.7	2.8	10.0	23%	67%	28%	83%	238%
Upper Stillwater Reservoir	27.0	29.7	24.5	32.5	83%	91%	75%	110%	121%
Utah Lake	713.6	786.2	756.4	870.9	82%	90%	87%	94%	104%
Willard Bay	168.2	191.9	148.3	215.0	78%	89%	69%	113%	129%
Woodruff Creek	0.9	2.0	1.3	4.0	23%	50%	32%	73%	159%
Woodruff Narrows Reservoir	31.4	45.6	25.7	57.3	55%	80%	45%	122%	178%
Meeks Cabin Reservoir	14.9	25.2	16.7	32.5	46%	78%	51%	89%	151%
Bear Lake	944.9	1031.3	696.0	1302.0	73%	79%	53%	136%	148%
Basin-wide Total	4057.8	4595.8	3659.6	5373.1	76%	86%	68%	111%	126%
# of reservoirs	42.0	42.0	42.0	42.0	42	42	42	42	42
# of reservoirs	42	42	42	42	42	42	42	42	42



Issued by

Matt Lohr
Chief
Natural Resources Conservation Service
U.S. Department of Agriculture

Released by

Emily Fife
State Conservationist
Natural Resources Conservation Service
Salt Lake City, Utah

Prepared by
Snow Survey Staff:
Jordan Clayton, Data Collection Officer
Troy Brosten, Assistant Supervisor
Kent Sutcliffe, Soil Scientist
Dave Eiriksson, Hydrologist
Doug Neff, Electronic Technician

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Snow Survey, NRCS, USDA
245 North Jimmy Doolittle Road
Salt Lake City, UT 84116
(385) 285-3118

Utah Climate and Water Report

Natural Resources Conservation Service
Salt Lake City, UT