Utah Climate and Water Report

September 1, 2020

Yuba Reservoir (also known as Sevier Bridge Reservoir)

Currently holding 42,400 acre-feet of water, which is only 18% of capacity

Photo by Jordan Clayton

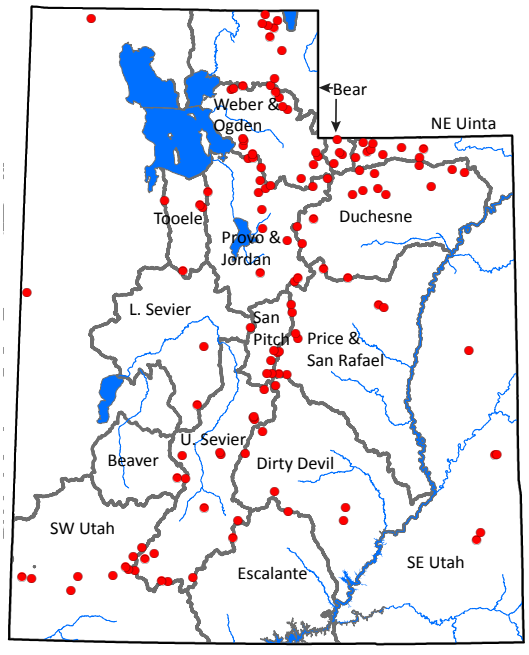
Report Contents

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.

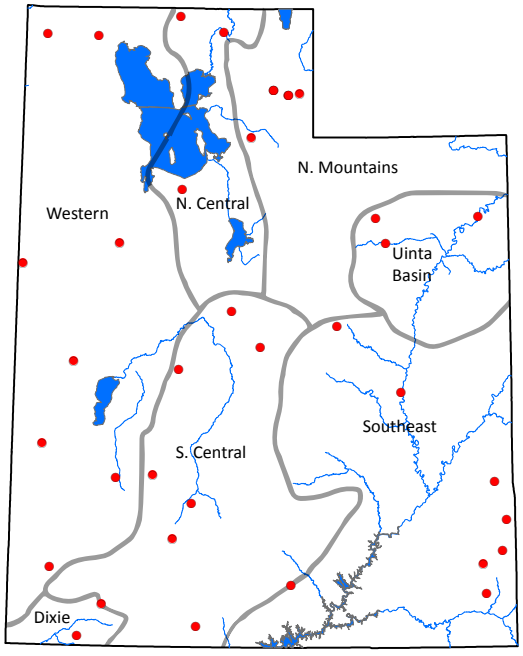
SNOTEL

- 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
September 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.*

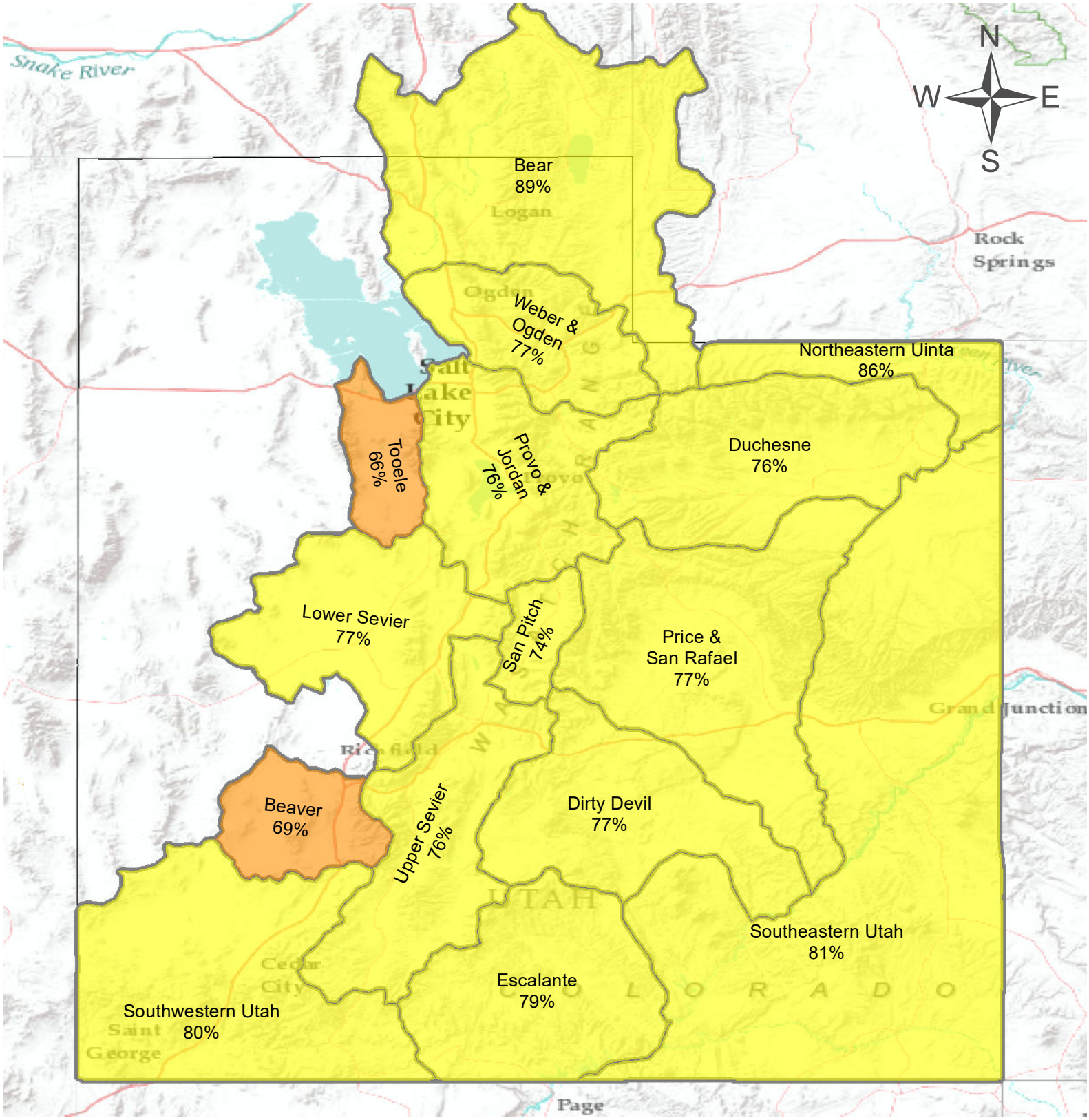
Current Valley Conditions (SCAN)

Ditto last month, unfortunately. August was another very dry month in Utah's valley locations, where a scant 0.2 inches of precipitation accumulated. The water year total for Utah's lower elevations incremented up to just 7.5 inches, which is well below average. Soil moisture conditions are now significantly below normal in most parts of the state, and a couple regions, such as Western and Dixie and South Central Utah, are experiencing record dry soil moisture levels for this time of year. Not surprisingly, drought conditions continued to deteriorate in August. The percentage of Utah under any drought condition (D0-D4) has increased to about 99% of the state, which is up from roughly 91% a few months ago. As of late August, almost 30% of Utah is classified as experiencing D3 (extreme) drought (no D3 existed in Utah a few months ago). We're ready for the precipitation to resume!

Current Mountain Conditions (SNOTEL)

As of September 1st, the water-year-to-date (October through August) precipitation at Utah's mountain locations was 79% of average. August precipitation, where it existed, was only 18% of normal. The statewide mountain soil moisture is at 24 percent of saturation, which is even drier than last year at this time and is well below normal, with some basins (e.g. Lower Bear) close to 90%, and others (SE Utah, Upper Green watersheds) closer to 50%. Utah's reservoirs are suffering from the dry conditions-particularly in the Sevier watershed and several other locations. Statewide reservoir storage is currently at 67% of capacity. Water Availability Index values, which combine current reservoir storage with streamflow for major Utah watersheds, are generally around average or slightly below, except for the Eastern Uintas, Moab area, San Pitch, Blacks Fork, and Lower Sevier watersheds which are all at the 25th percentile or below.

So… looking for some positive news? The Utah Snow Survey installed a new SNOTEL site at Wolf Creek Pass (in between Woodland and Hanna) in late August. The site is called "Wolf Creek Peak" and sits at 9800 ft elevation. This site fills a gap in our SNOTEL network at the headwaters of the Duchesne and Provo watersheds, and reconnaissance from a couple trips last winter showed that it accumulated and retained more snow water equivalent than the Trial Lake site! It's a standard SNOTEL site configuration, with publicly-available hourly data on snow water equivalent, snow depth, precipitation, air temperature, soil moisture and soil temperature. Data from this new site can be obtained from our website, or from: https://wcc.sc.egov.usda.gov/nwcc/site?sitenum=1164&state=ut.



Statewide Precipitation

As of September 1, 2020:

79% of Normal Precipitation

18% 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%

September 1, 2020

Water Availability Index

Basin or Region	Aug EOM* Storage	August Flow	Storage + Flow	Percentile	WAI#	Years with similiar WAI
	*KAF^*	*KAF^*	*KAF^*	*%*		
Bear River	**855**	**4.0**	**859**	**66**	**1.3**	**12, 81, 18, 87**
Woodruff Narrows	**29.7**	**4.0**	**33.8**	**51**	**0.1**	**87, 91, 93, 05**
Little Bear	**6.3**	**1.1**	**7.4**	**55**	**0.4**	**15, 10, 95, 05**
Ogden	**61.8**	**2.4**	**64.2**	**39**	**-0.9**	**18, 81, 94, 89**
Weber	**115.6**	**5.0**	**120.6**	**48**	**-0.1**	**07, 04, 91, 06**
Provo River	**361.2**	**3.4**	**364.5**	**54**	**0.3**	**01, 00, 09, 06**
Western Uinta	**150.3**	**3.2**	**153.5**	**44**	**-0.5**	**00, 91, 10, 01**
Eastern Uinta	**20.8**	**3.5**	**24.3**	**17**	**-2.7**	**89, 94, 12, 90**
Blacks Fork	**6.3**	**1.9**	**8.2**	**24**	**-2.2**	**12, 92, 13, 07**
Price	**39.2**	**0.3**	**39.5**	**63**	**1.1**	**06, 93, 87, 95**
Smiths Creek	**5.2**	**1.1**	**6.2**	**35**	**-1.2**	**18, 88, 01, 85**
Joes Valley	**45.1**	**1.4**	**46.5**	**41**	**-0.7**	**81, 14, 00, 01**
Moab	**0.6**	**0.2**	**0.8**	**26**	**-2.0**	**96, 94, 09, 00**
Upper Sevier River	**36.8**	**0.4**	**37.2**	**49**	**-0.1**	**17, 00, 14, 81**
San Pitch	**0.0**	**0.6**	**0.6**	**17**	**-2.7**	**02, 16, 04, 94**
Lower Sevier	**42.5**	**1.6**	**44.0**	**22**	**-2.3**	**02, 15, 10, 09**
Beaver	**4.5**	**1.1**	**5.6**	**46**	**-0.3**	**09, 14, 96, 17**
Virgin River	**33.4**	**4.0**	**37.4**	**46**	**-0.4**	**07, 15, 08, 17**

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

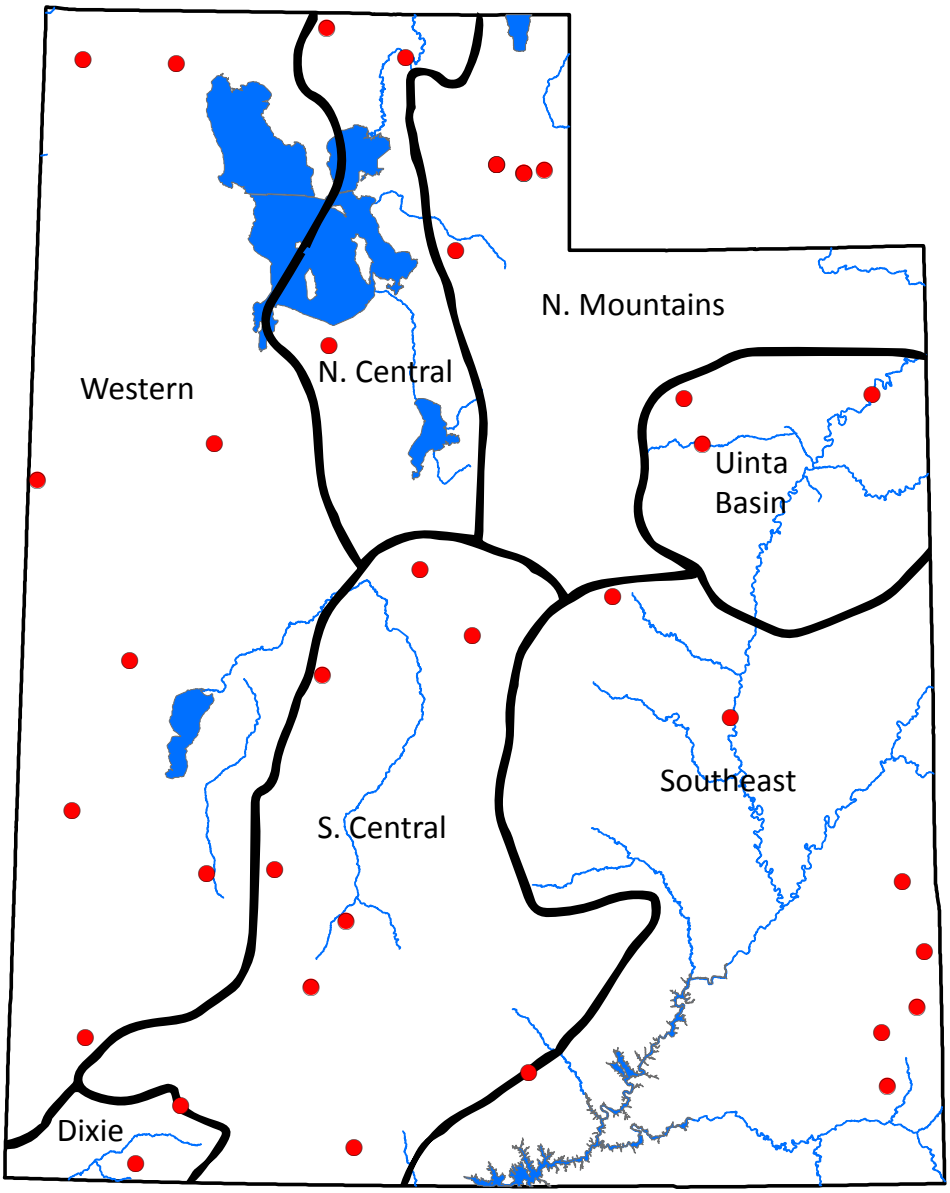
What is a Water Availability Index?

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.

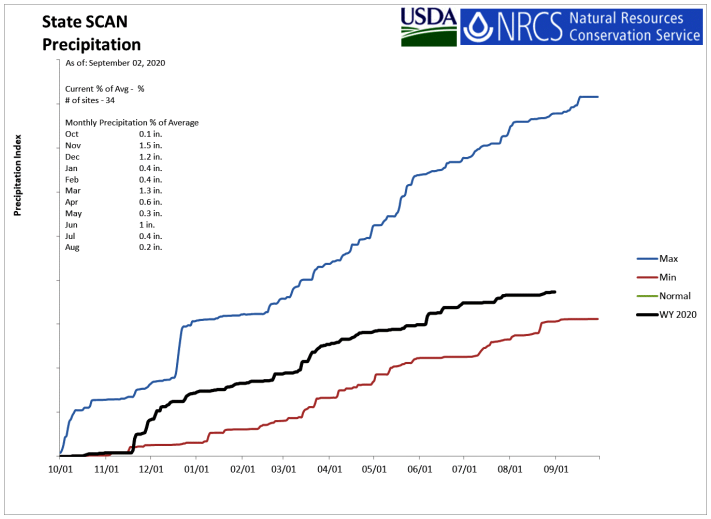
SCAN portion of report

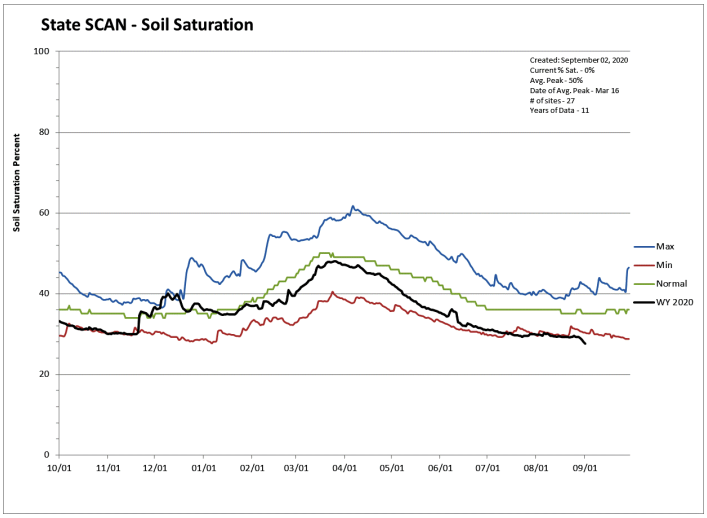


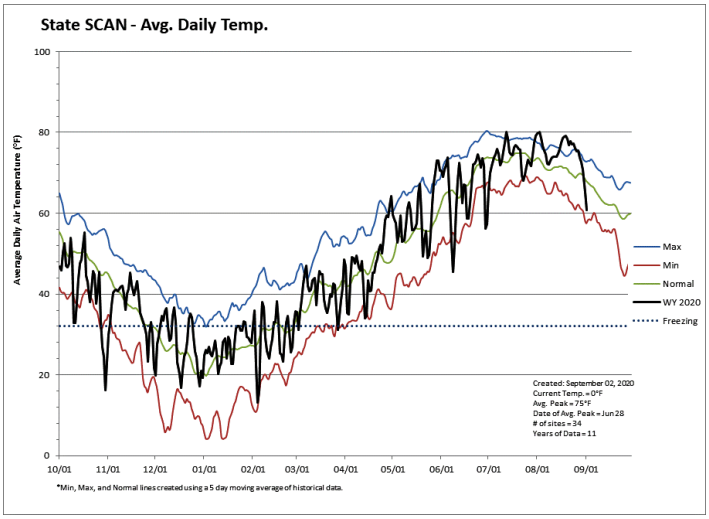
Statewide SCAN

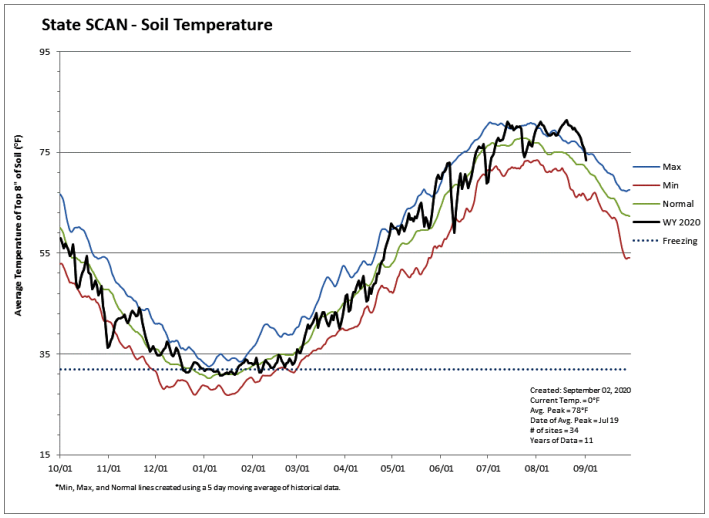
September 1, 2020

The average precipitation at SCAN sites within Utah was 0.2 inches in August, which brings the seasonal accumulation (Oct-Aug) to 7.5 inches. Soil moisture is at 28% compared to 32% last year.





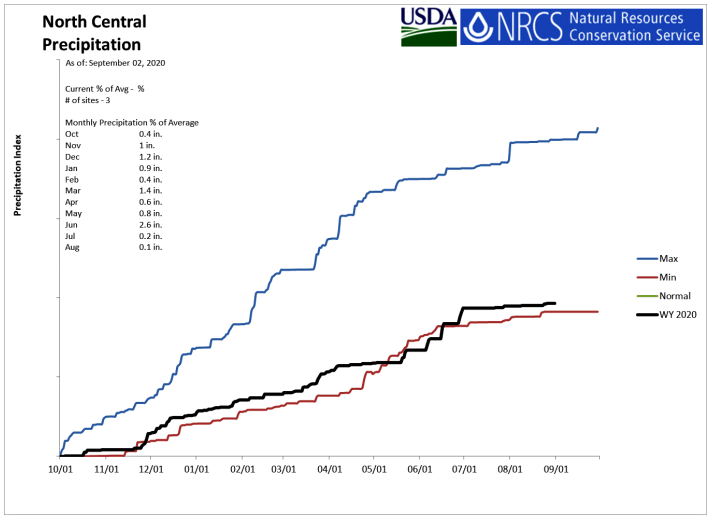


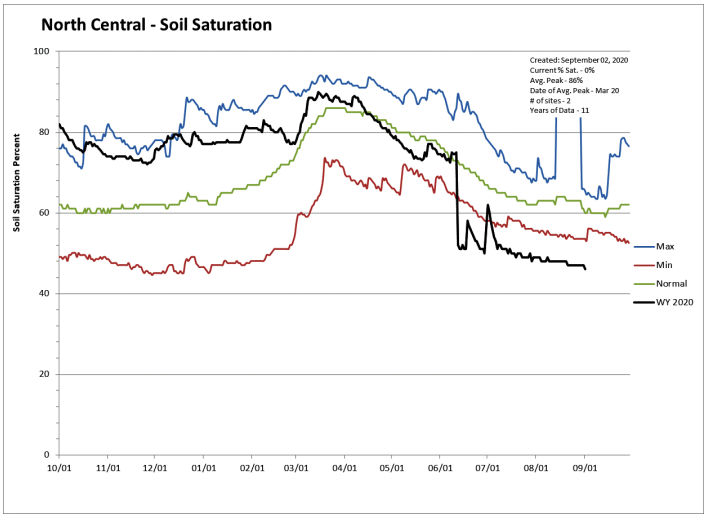


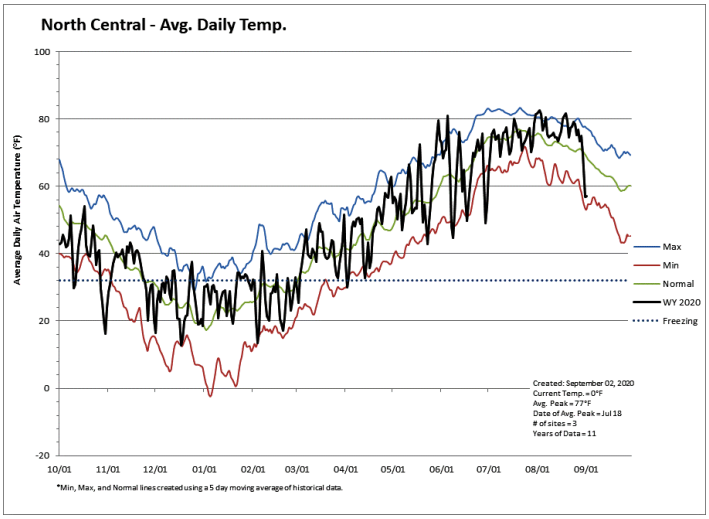
North Central

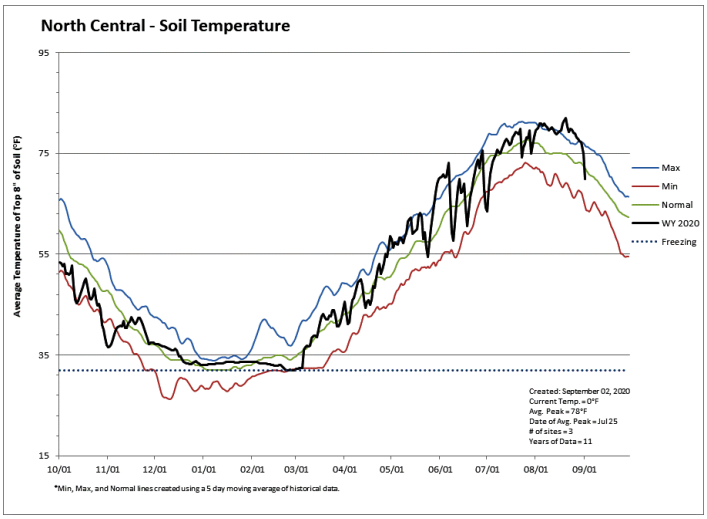
September 1, 2020

The average precipitation in August at SCAN sites within the basin was 0.1 inches, which brings the seasonal accumulation (Oct-Aug) to 9.6 inches. Soil moisture is at 46% compared to 66% last year.





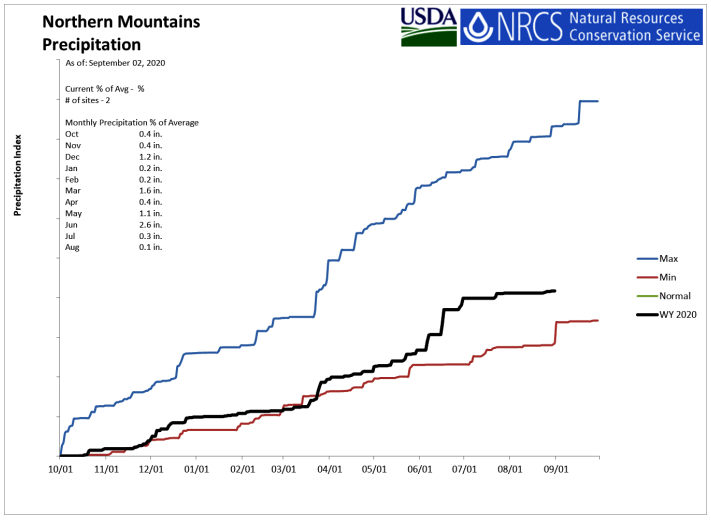


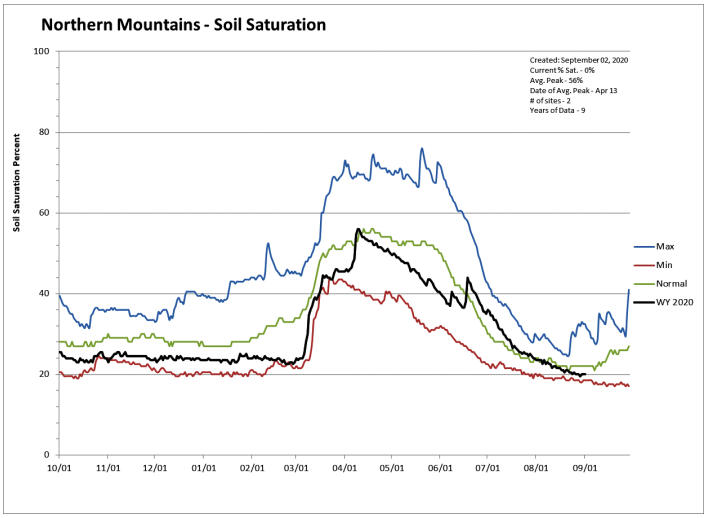


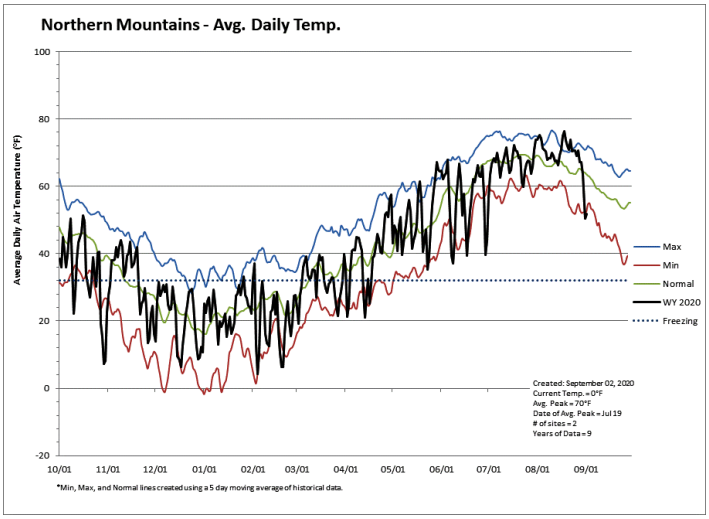
Northern Mountains

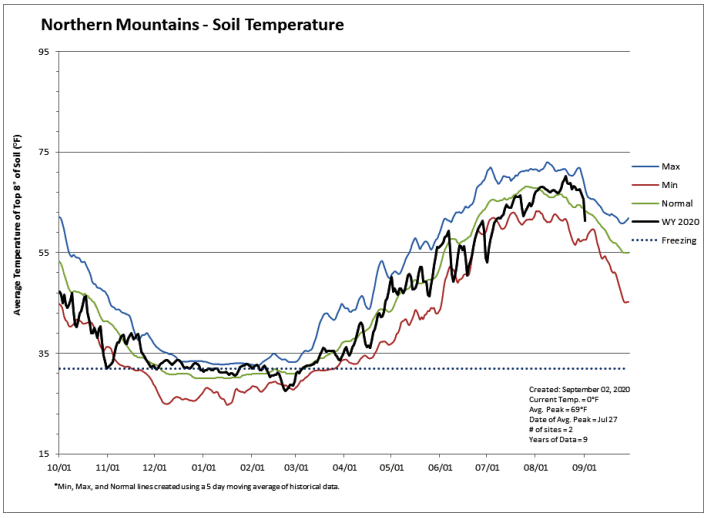
September 1, 2020

The average precipitation in August at SCAN sites within the basin was 0.1 inches, which brings the seasonal accumulation (Oct-Aug) to 8.4 inches. Soil moisture is at 20% compared to 21% last year.





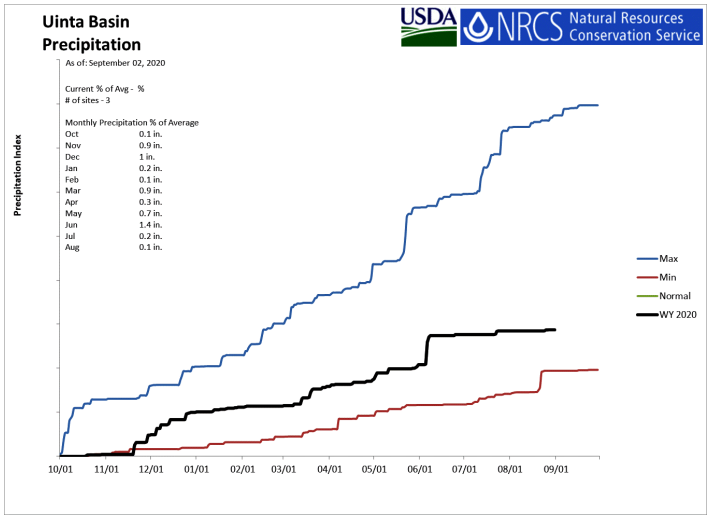


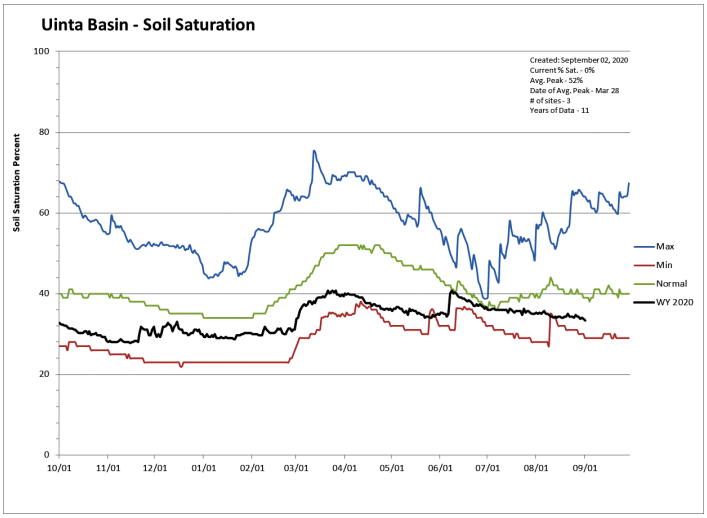


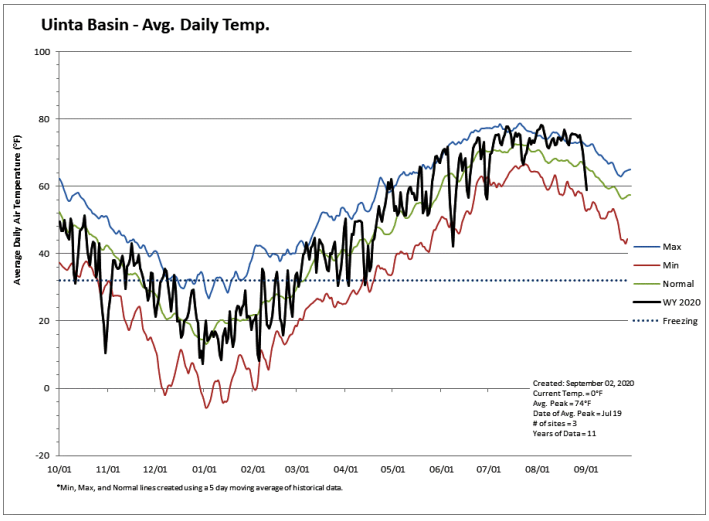
Uinta Basin

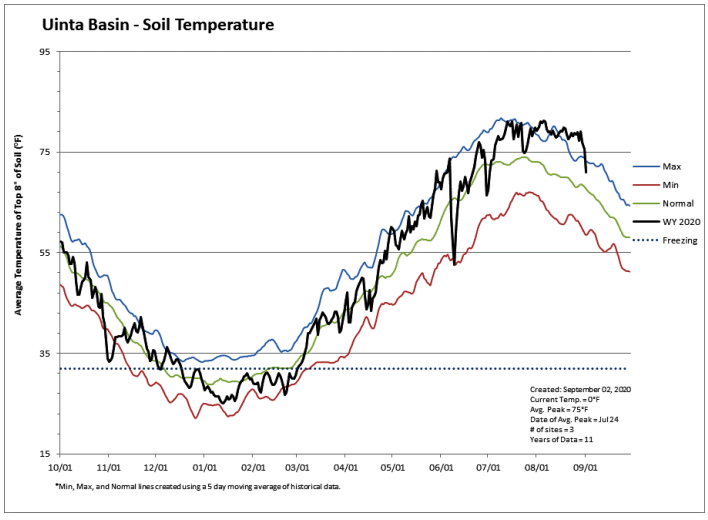
September 1, 2020

The average precipitation in August at SCAN sites within the basin was 0.1 inches, which brings the seasonal accumulation (Oct-Aug) to 5.8 inches. Soil moisture is at 33% compared to 34% last year.





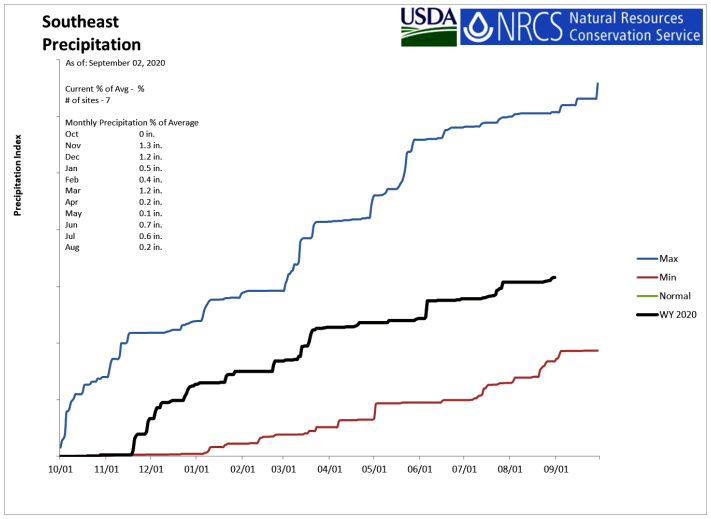


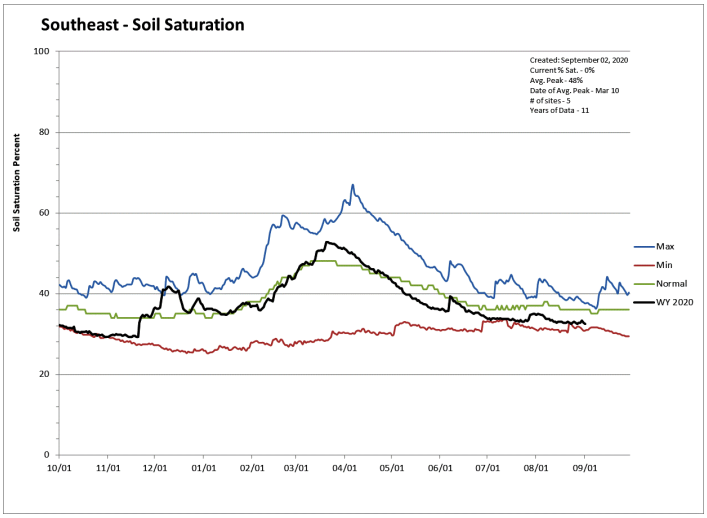


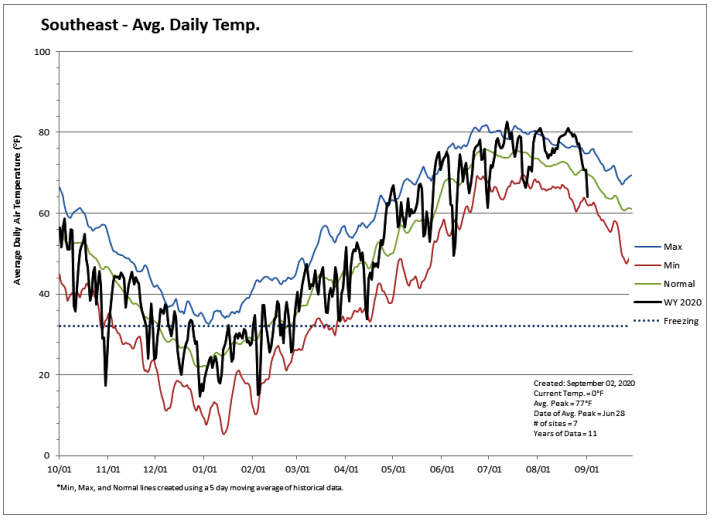
Southeast

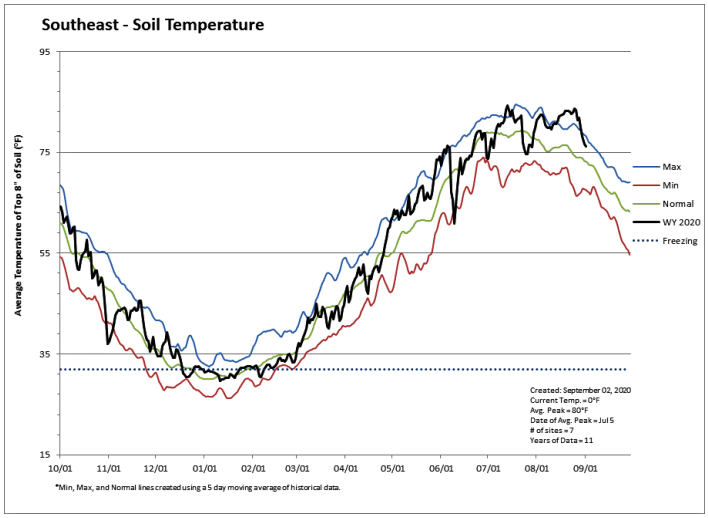
September 1, 2020

The average precipitation in August at SCAN sites within the basin was 0.2 inches, which brings the seasonal accumulation (Oct-Aug) to 6.3 inches. Soil moisture is at 33% compared to 34% last year.





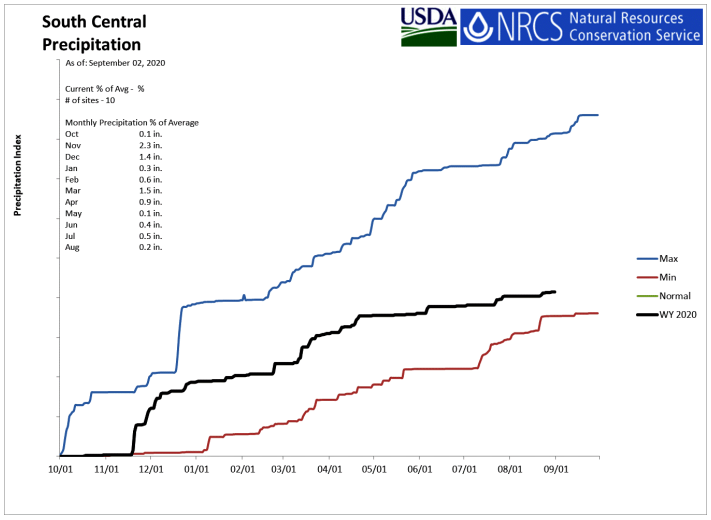


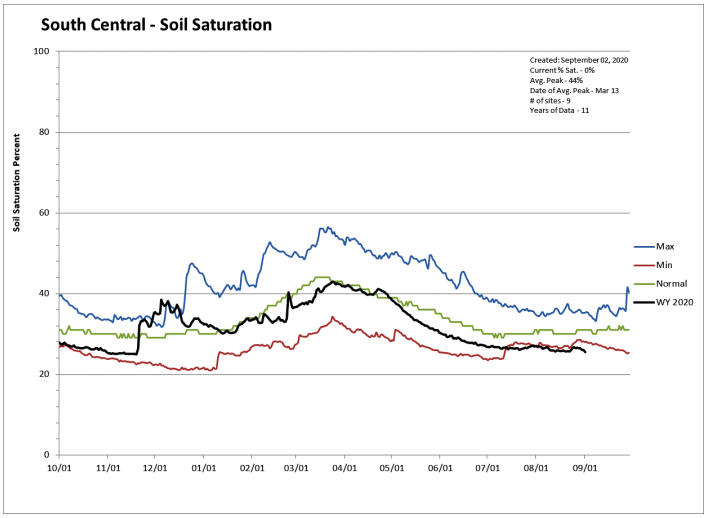


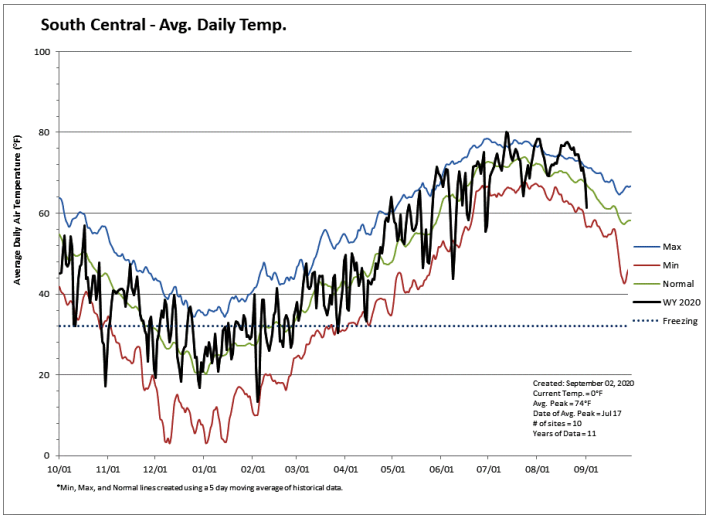
South Central

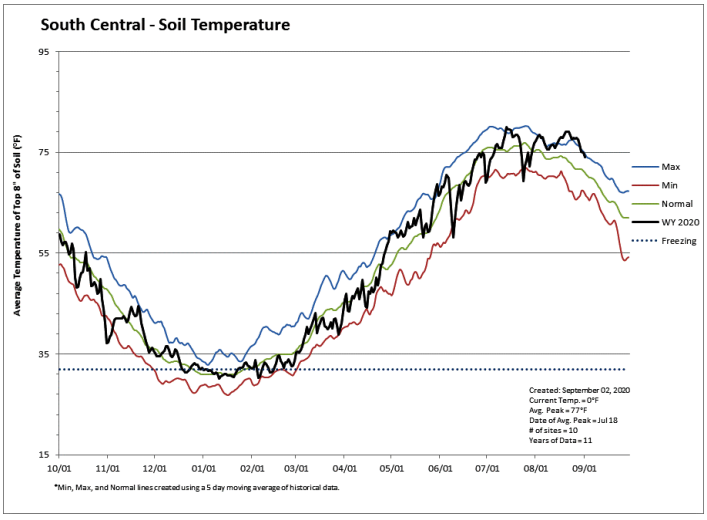
September 1, 2020

The average precipitation in August at SCAN sites within the basin was 0.2 inches, which brings the seasonal accumulation (Oct-Aug) to 8.3 inches. Soil moisture is at 26% compared to 28% last year.





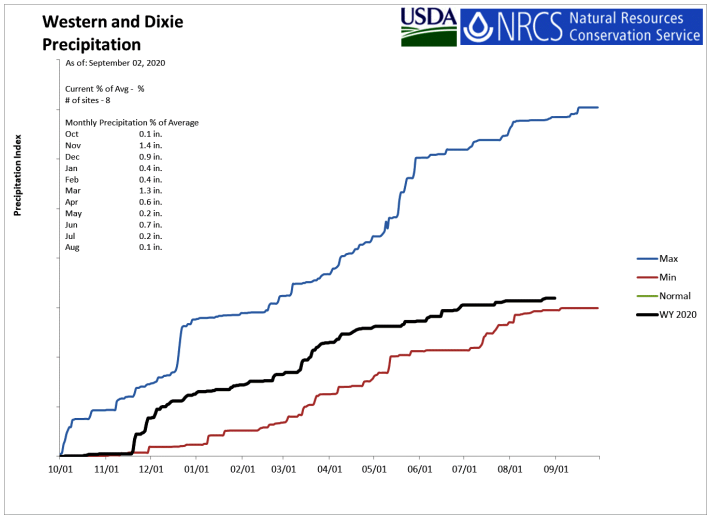


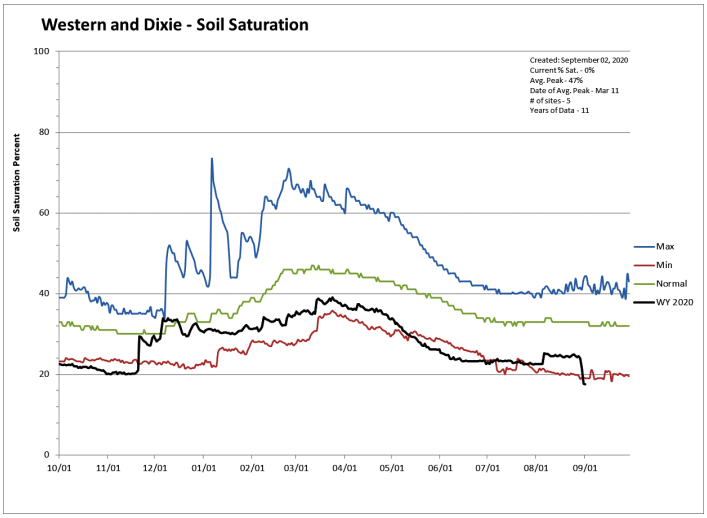


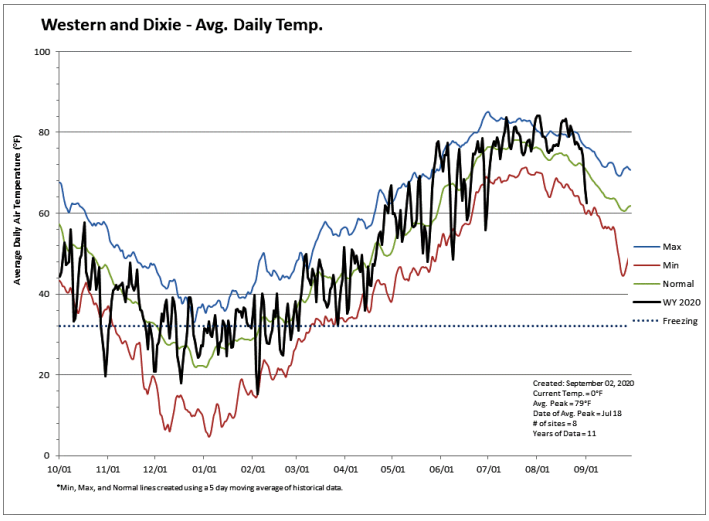
Western and Dixie

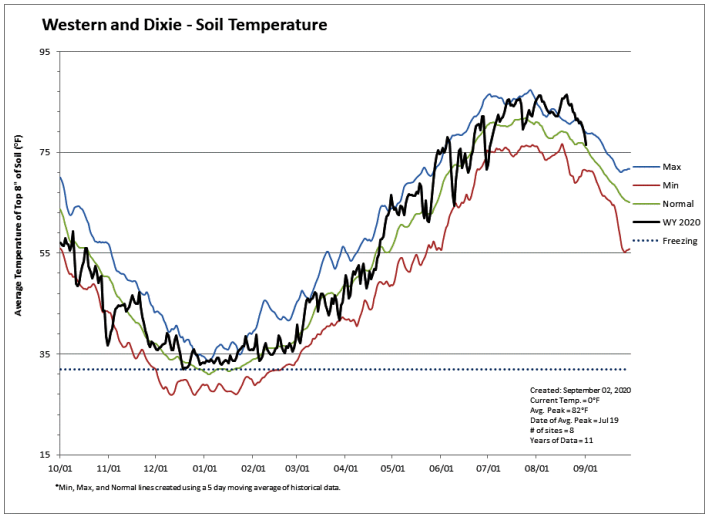
September 1, 2020

The average precipitation in August at SCAN sites within the basin was 0.1 inches, which brings the seasonal accumulation (Oct-Aug) to 6.4 inches. Soil moisture is at 18% compared to 22% last year.

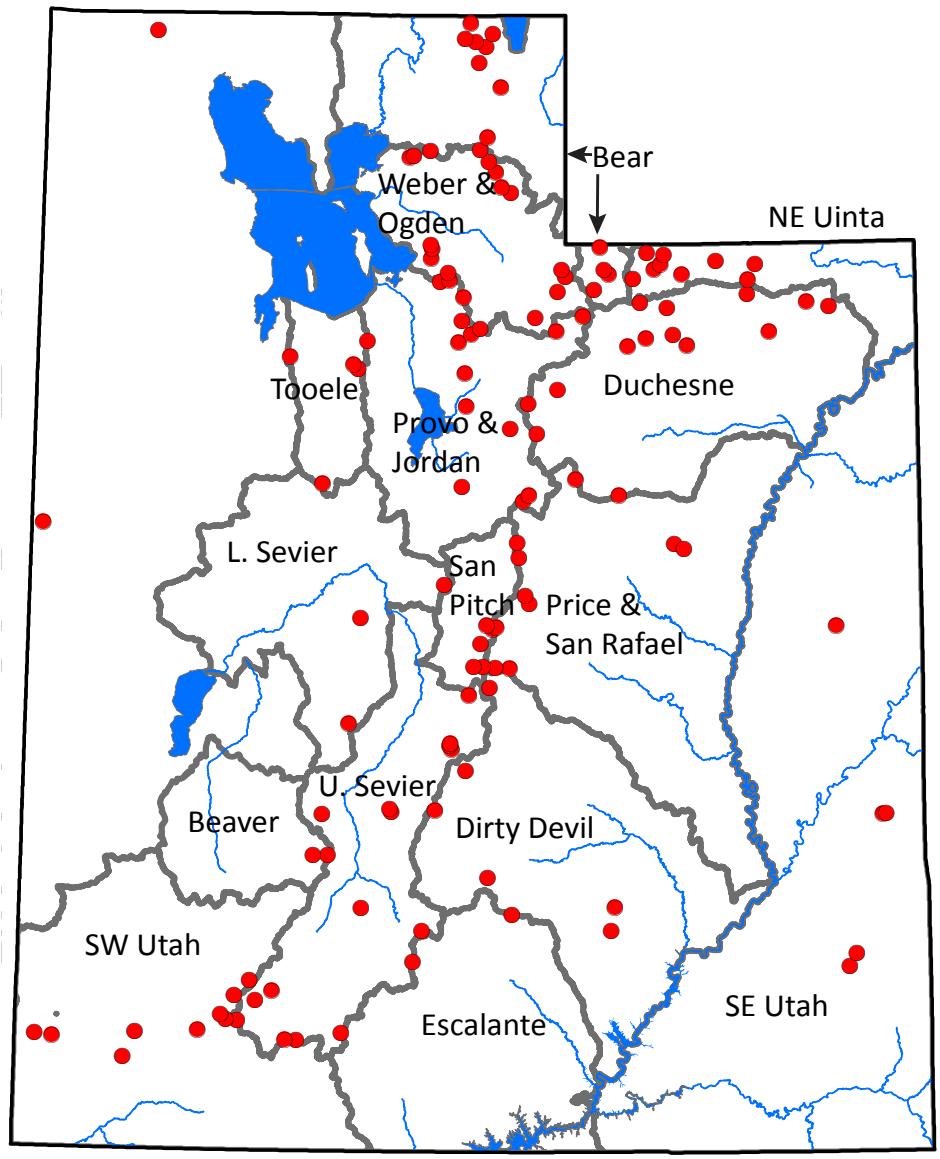








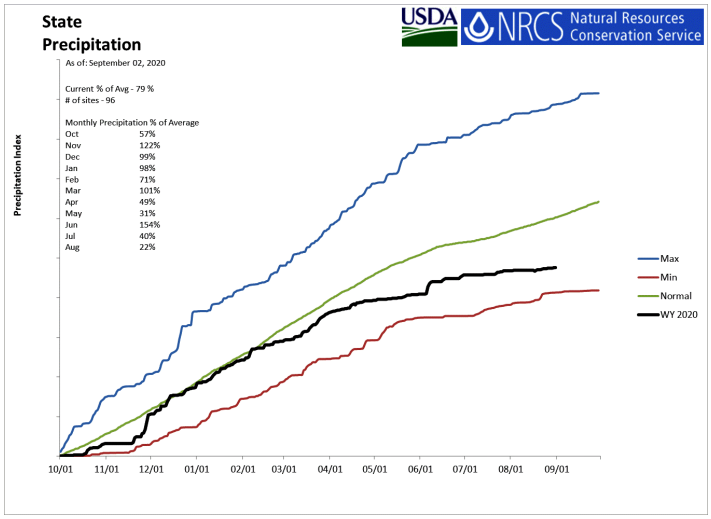
SNOTEL portion of report

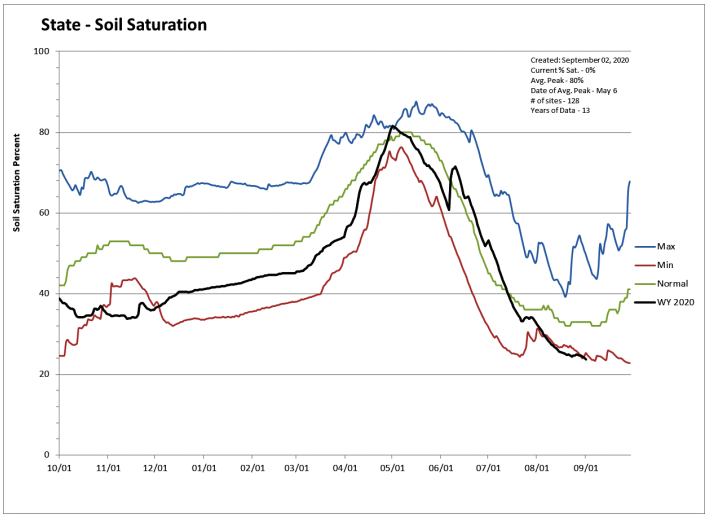


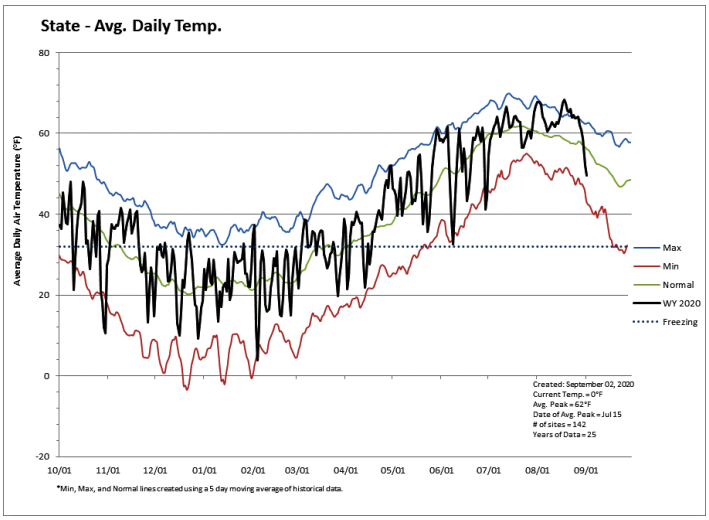
Statewide SNOTEL

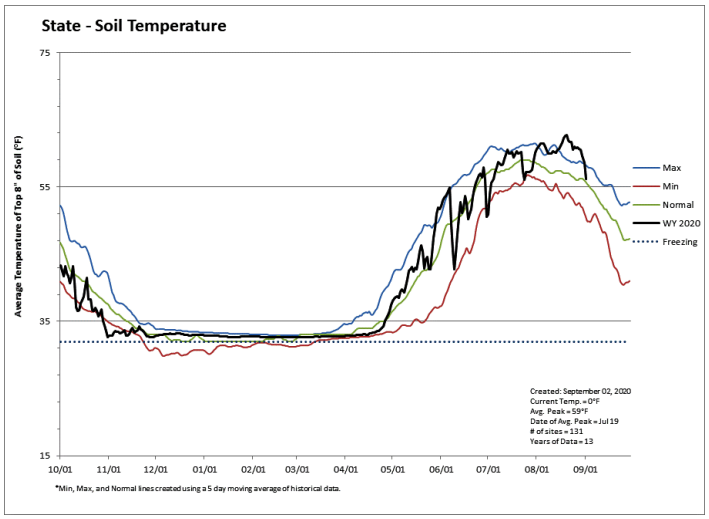
September 1, 2020

Precipitation at SNOTEL sites during August was much below average at 18%, which brings the seasonal accumulation (Oct-Aug) to 79% of average. Soil moisture is at 24% compared to 29% last year. Reservoir storage is at 67% of capacity, compared to 78% last year.





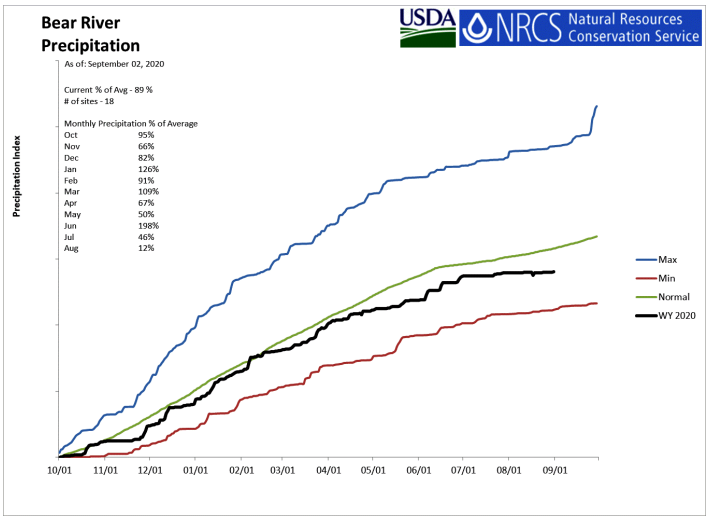


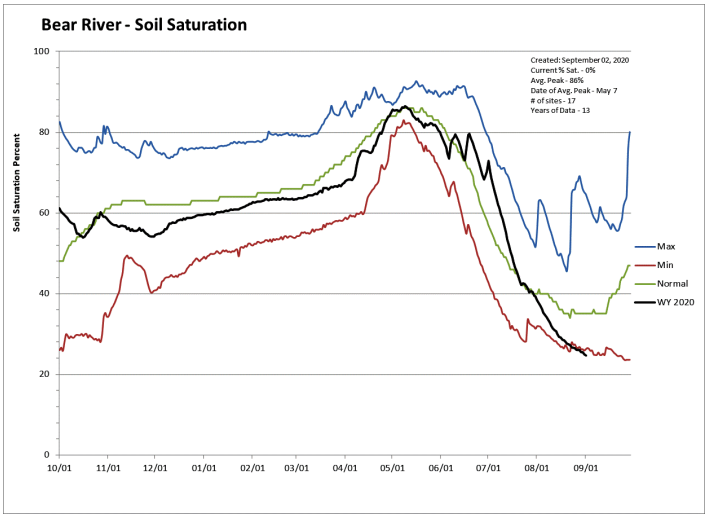


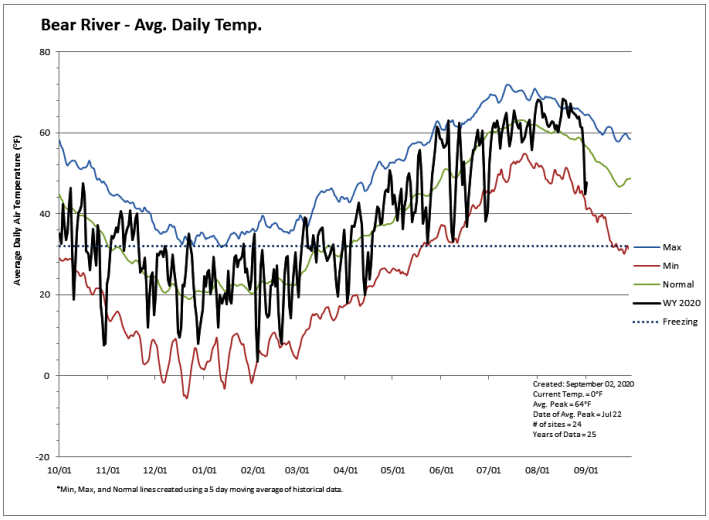
Bear River Basin

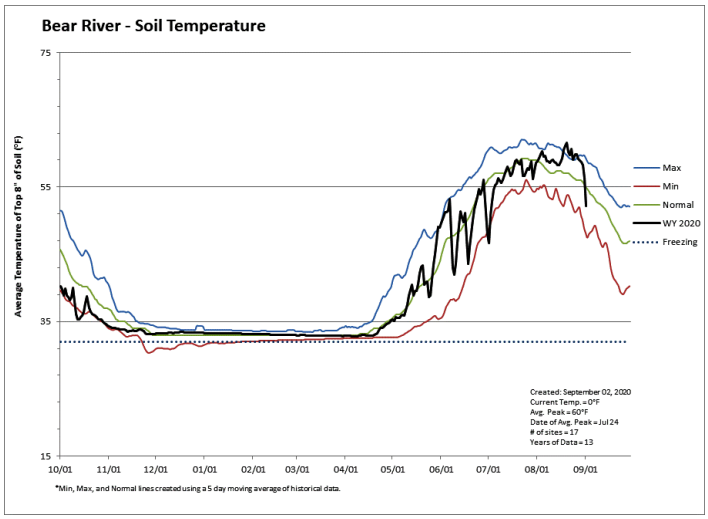
September 1, 2020

Precipitation in August was much below average at 12%, which brings the seasonal accumulation (Oct-Aug) to 89% of average. Soil moisture is at 25% compared to 30% last year. Reservoir storage is at 65% of capacity, compared to 71% last year. The water availability index for the Bear River is 66%, 51% for Woodruff Narrows and 55% for the Little Bear.







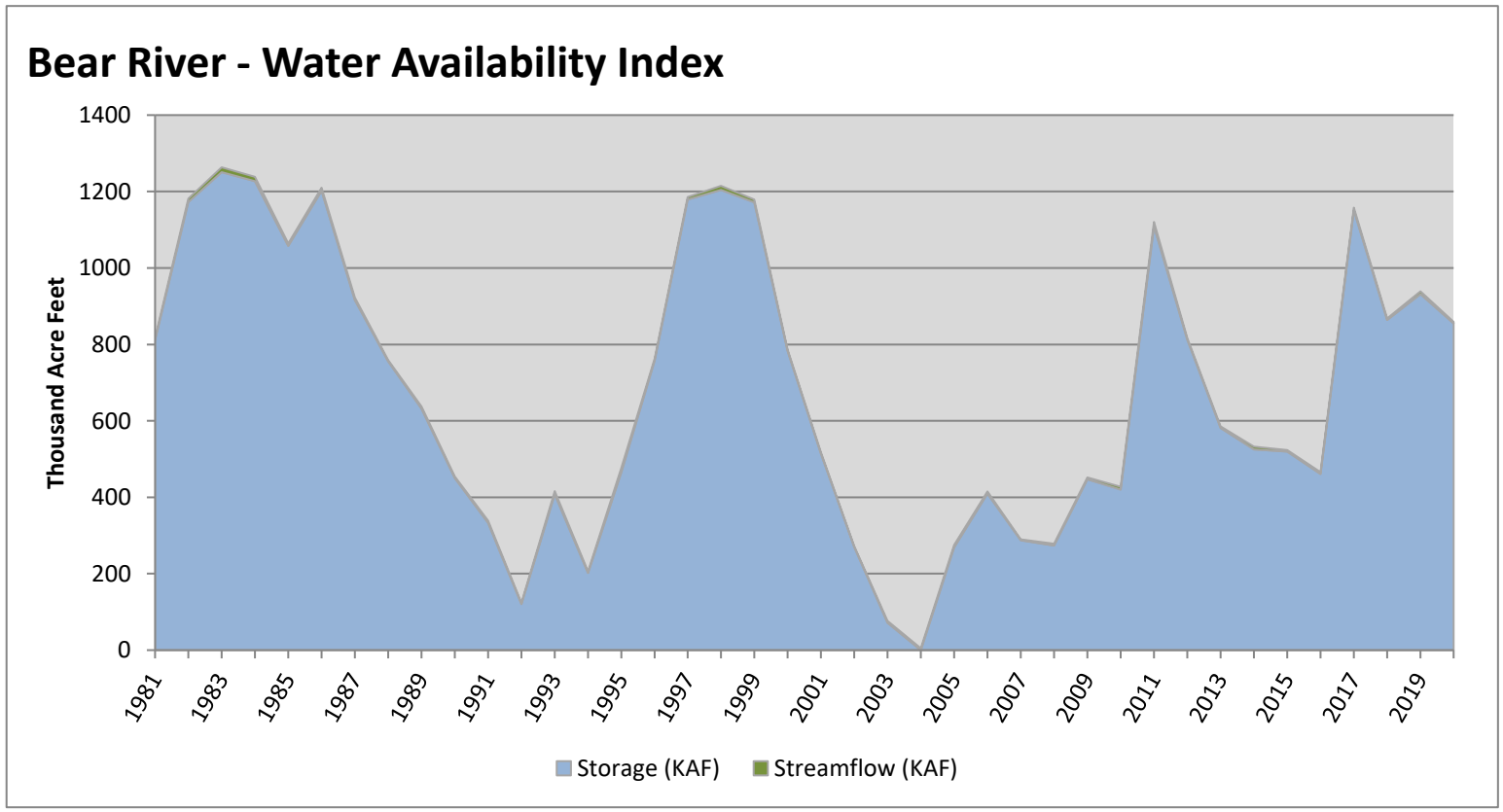


September 1, 2020

Water Availability Index

Basin or Region	Aug EOM* Storage	August Flow	Storage + Flow	Percentile	WAI#	Years with similiar WAI
	KAF^	KAF^	KAF^	%		
Bear River	**855.06**	**4.03**	**859.09**	**66**	**1.32**	**12, 81, 18, 87**

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

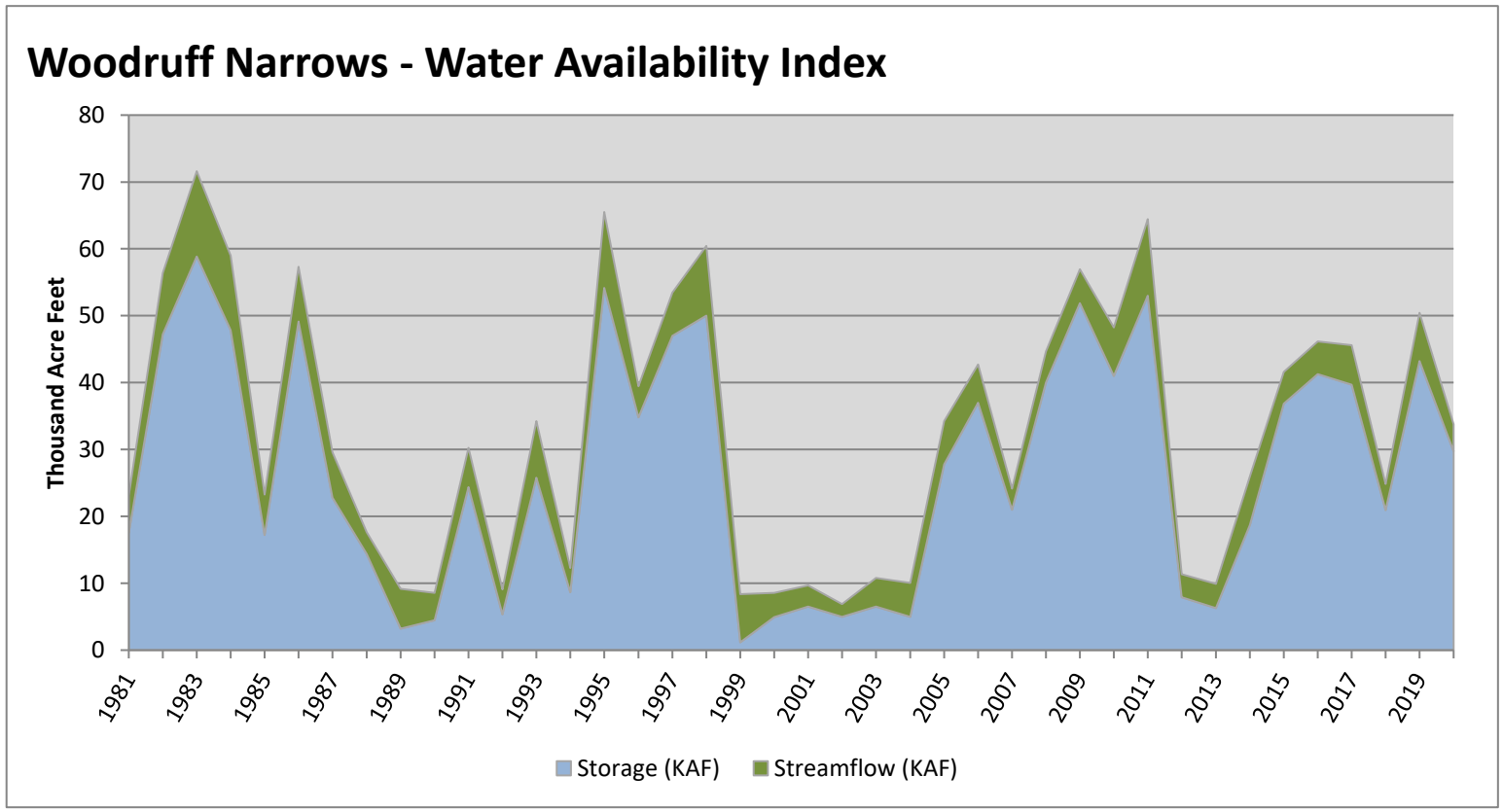


September 1, 2020

Water Availability Index

Basin or Region	Aug EOM* Storage	August Flow	Storage + Flow	Percentile	WAI#	Years with similiar WAI
	KAF^	KAF^	KAF^	%		
Woodruff Narrows	**29.74**	**4.03**	**33.77**	**51**	**0.1**	**87, 91, 93, 05**

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

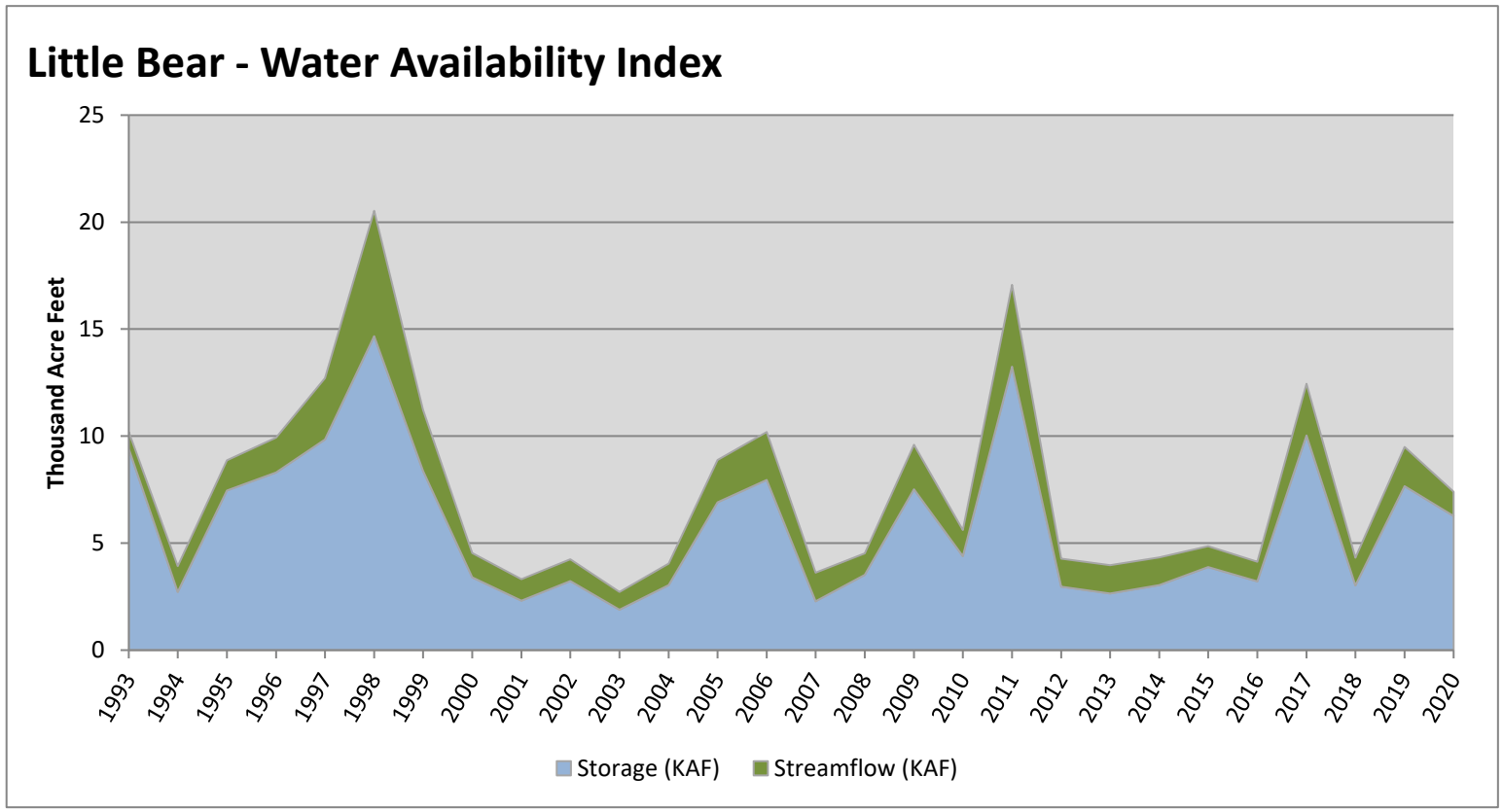


September 1, 2020

Water Availability Index

Basin or Region	Aug EOM* Storage	August Flow	Storage + Flow	Percentile	WAI#	Years with similiar WAI
	KAF^	KAF^	KAF^	%		
Little Bear	**6.27**	**1.13**	**7.40**	**55**	**0.43**	**15, 10, 95, 05**

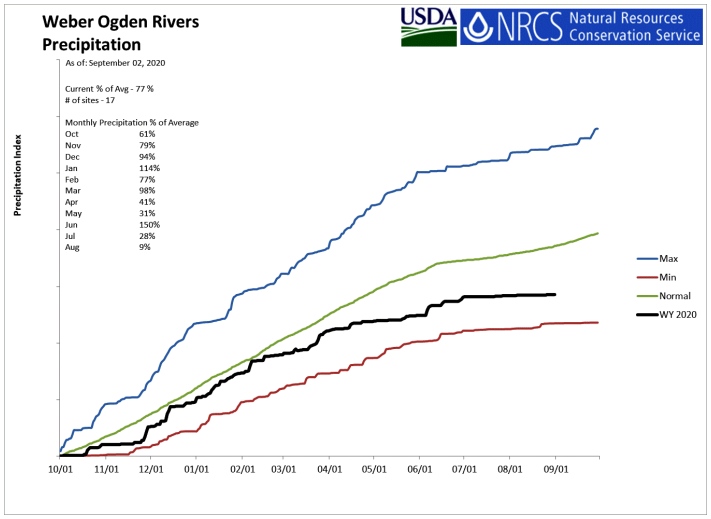
*EOM, end of month; #WAI, Water Availability Index; ^KAF, thousand acre-feet.

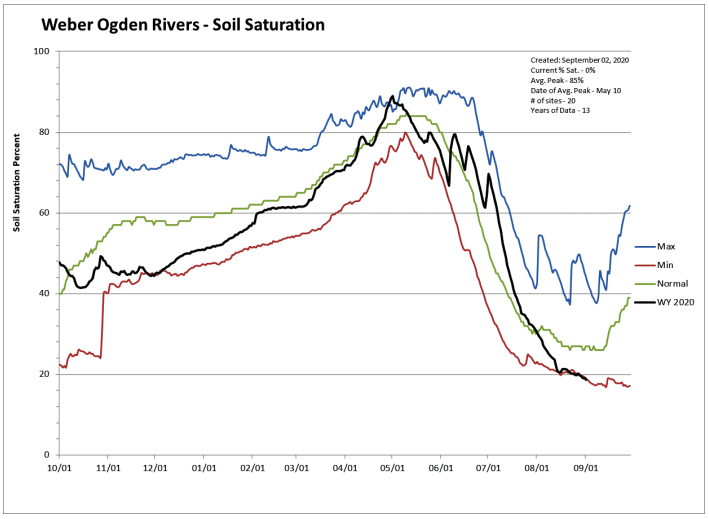


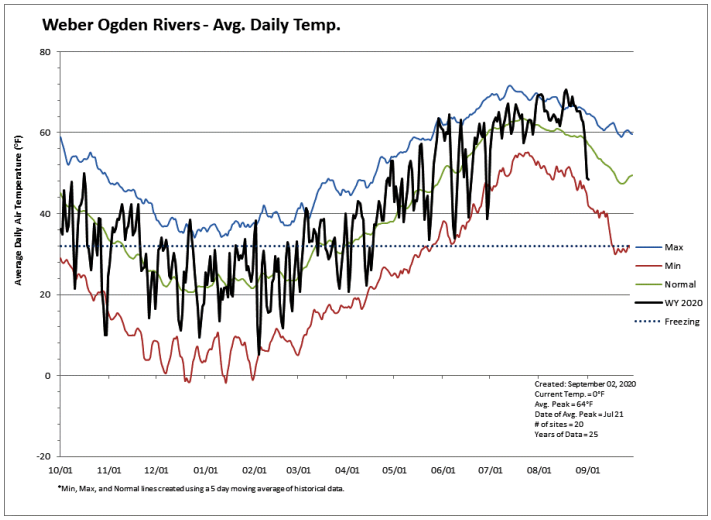
Weber & Ogden River Basins

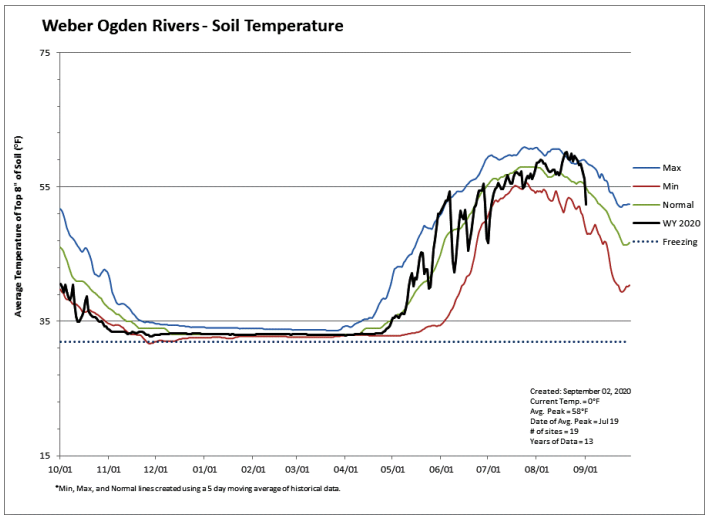
September 1, 2020

Precipitation in August was much below average at 9%, which brings the seasonal accumulation (Oct-Aug) to 77% of average. Soil moisture is at 19% compared to 24% last year. Reservoir storage is at 60% of capacity, compared to 77% last year. The water availability index for the Ogden River is 39% and 48% for the Weber River.







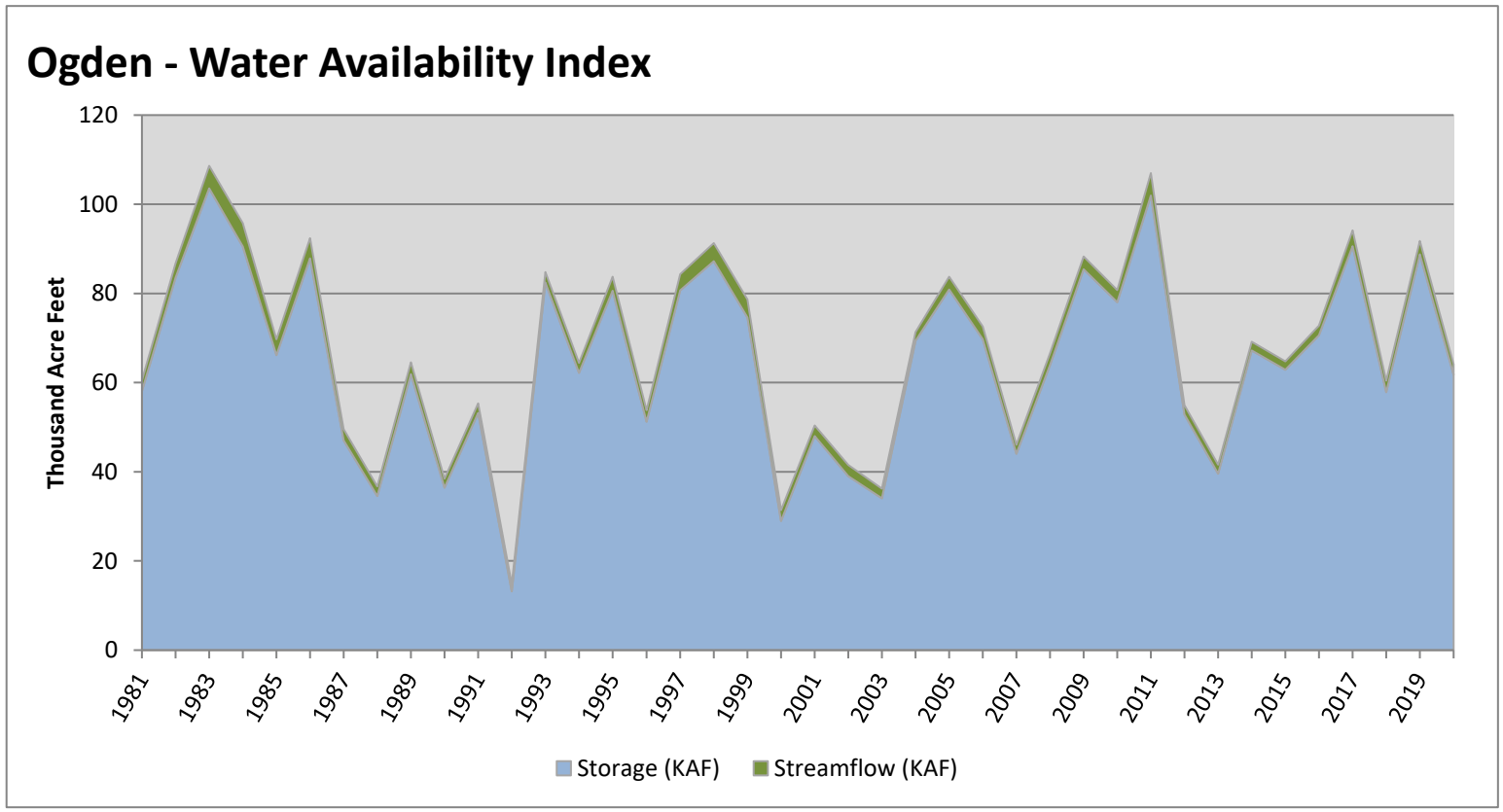


September 1, 2020

Water Availability Index

Basin or Region	Aug EOM* Storage	August Flow	Storage + Flow	Percentile	WAI#	Years with similiar WAI
	KAF^	KAF^	KAF^	%		
Ogden	**61.78**	**2.37**	**64.15**	**39**	**-0.91**	**18, 81, 94, 89**

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

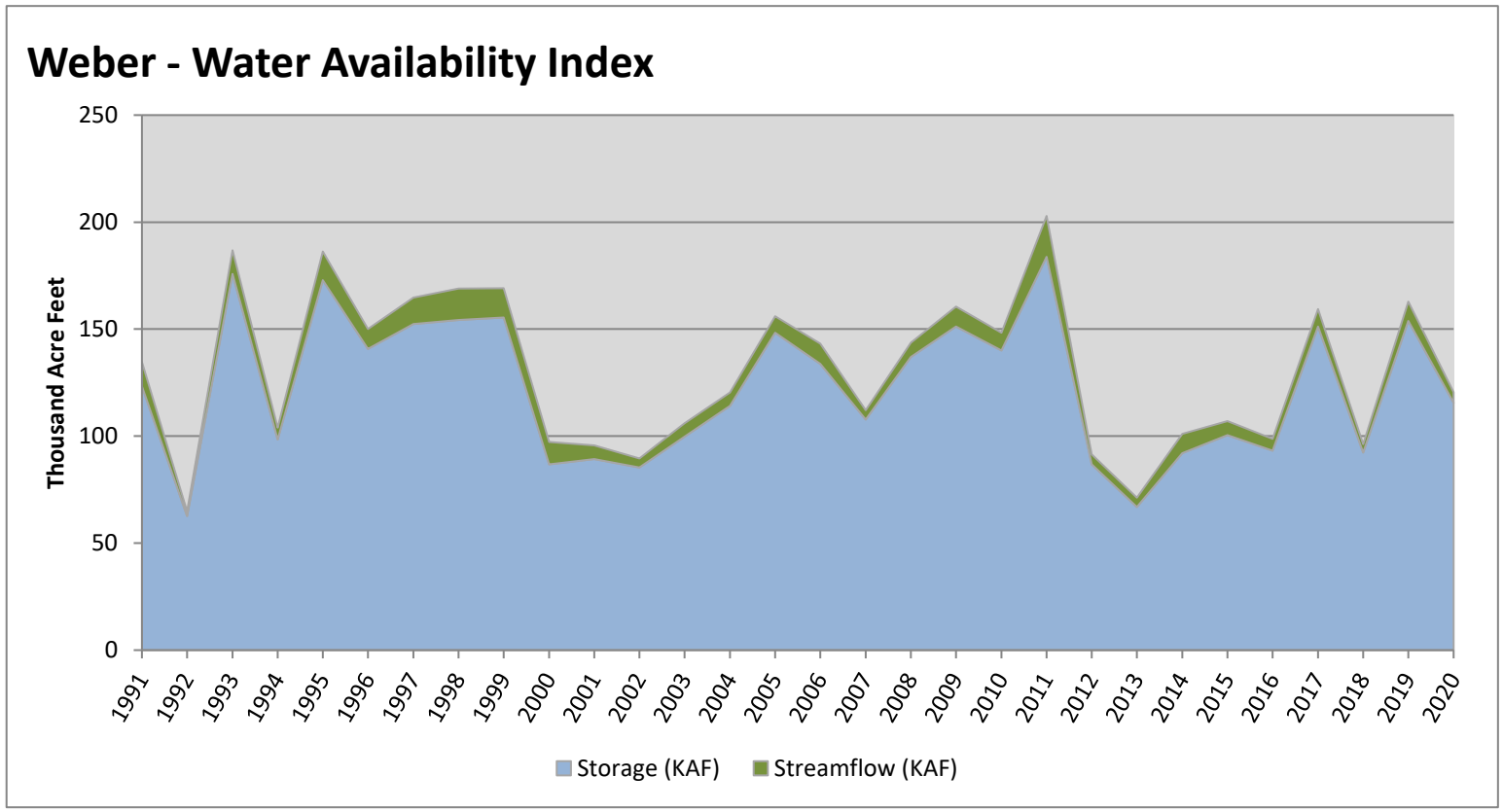


September 1, 2020

Water Availability Index

Basin or Region	Aug EOM* Storage	August Flow	Storage + Flow	Percentile	WAI#	Years with similiar WAI
	KAF^	KAF^	KAF^	%		
Weber	**115.58**	**5.02**	**120.60**	**48**	**-0.13**	**07, 04, 91, 06**

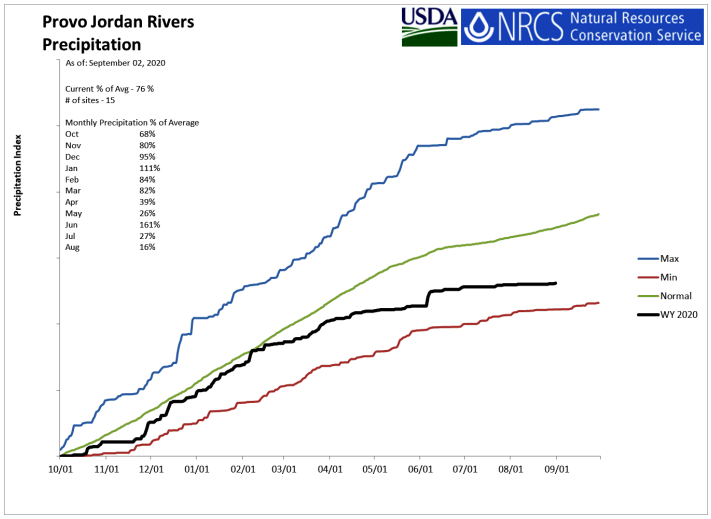
*EOM, end of month; #WAI, Water Availability Index; ^KAF, thousand acre-feet.

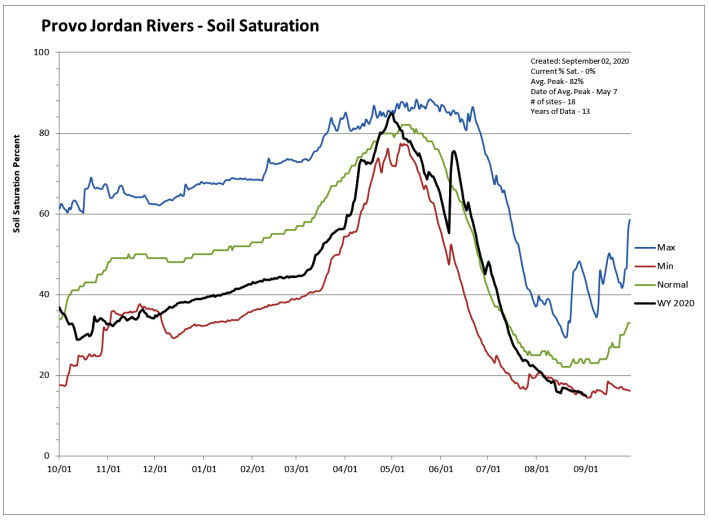


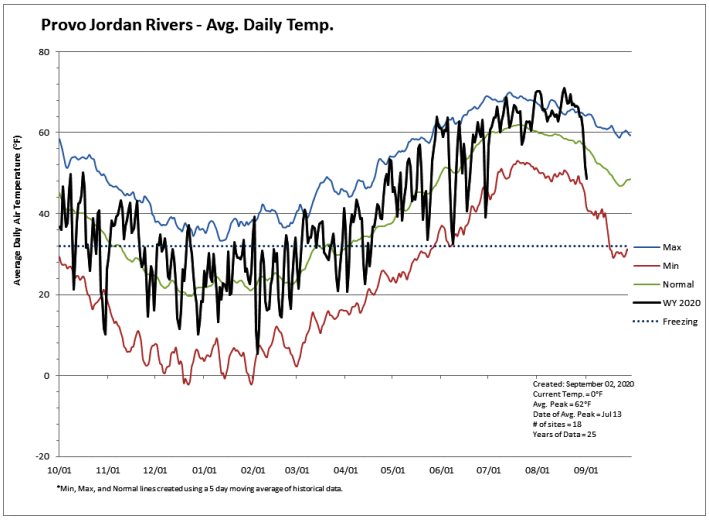
Provo & Jordan River Basins

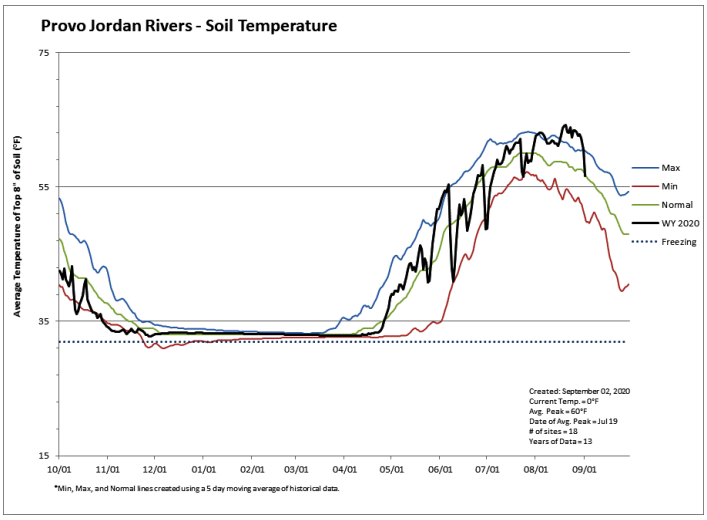
September 1, 2020

Precipitation in August was much below average at 16%, which brings the seasonal accumulation (Oct-Aug) to 76% of average. Soil moisture is at 15% compared to 21% last year. Reservoir storage is at 79% of capacity, compared to 88% last year. The water availability index for the Provo River is 54%.









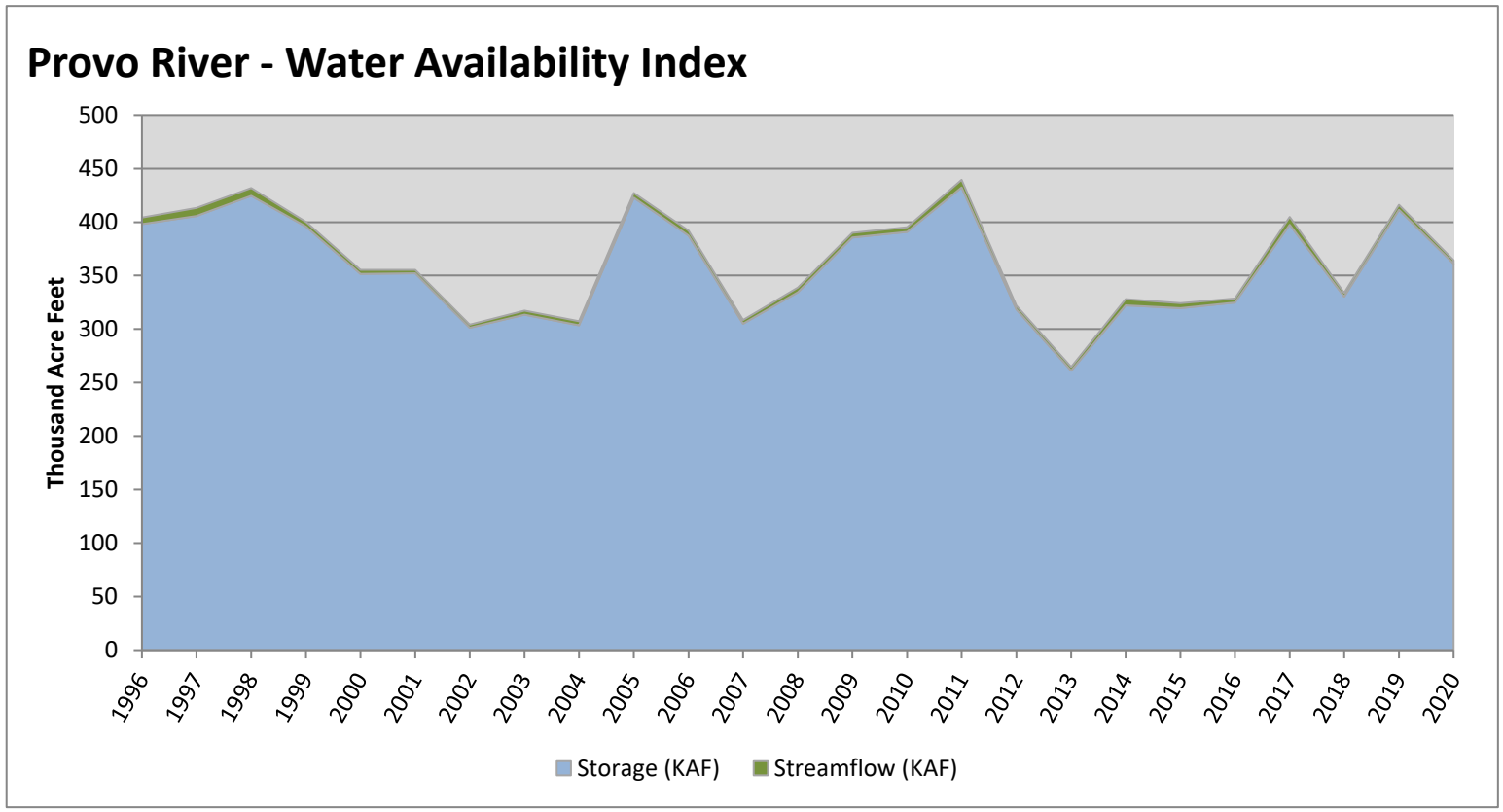
SNOTEL Data

September 1, 2020

Water Availability Index

Basin or Region	Aug EOM* Storage	August Flow	Storage + Flow	Percentile	WAI#	Years with similiar WAI
	KAF^	KAF^	KAF^	%		
Provo River	**361.15**	**3.35**	**364.50**	**54**	**0.32**	**01, 00, 09, 06**

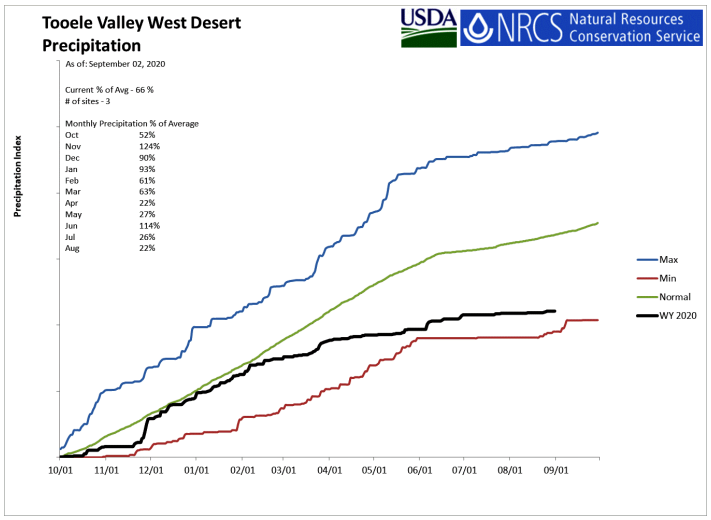
*EOM, end of month; #WAI, Water Availability Index; ^KAF, thousand acre-feet.

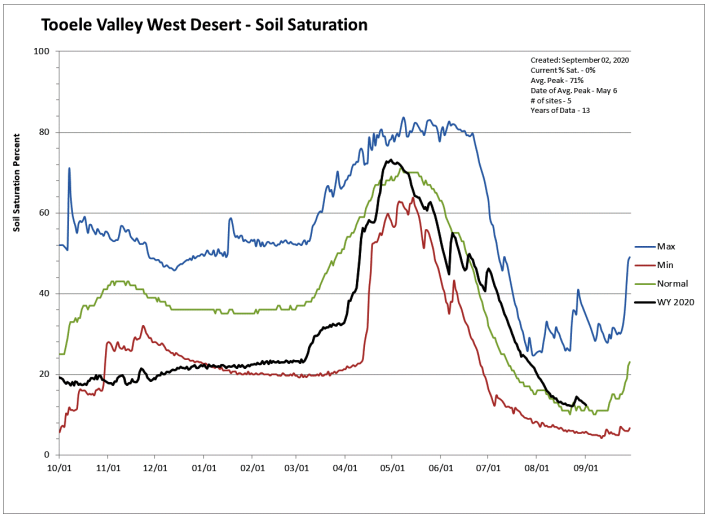


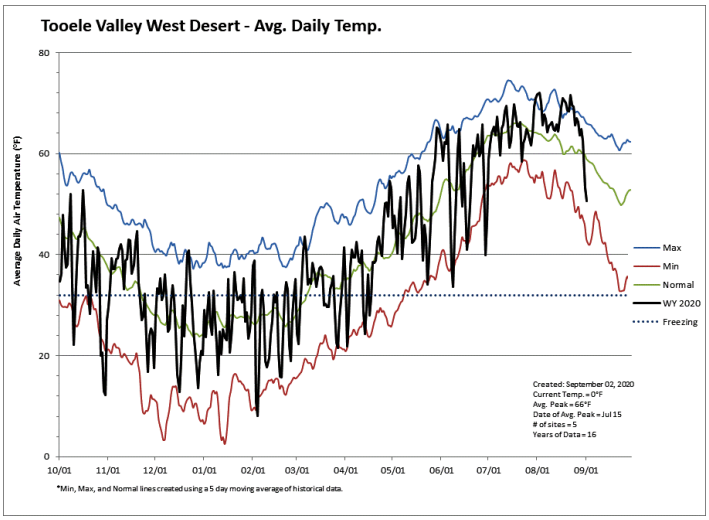
Tooele Valley & West Desert Basins

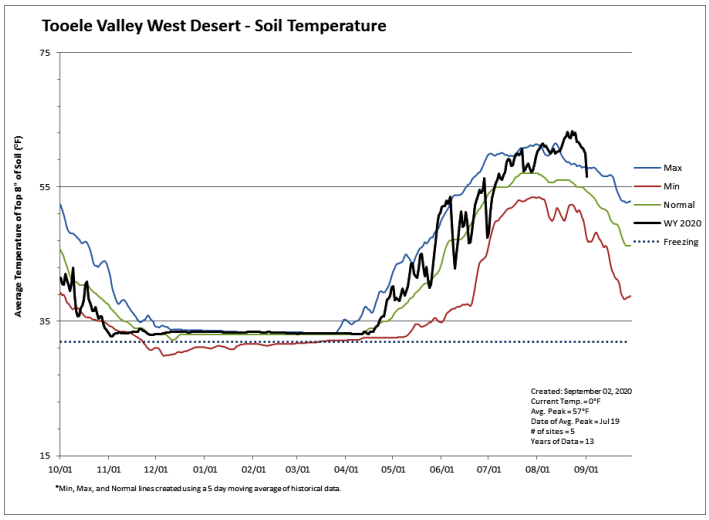
September 1, 2020

Precipitation in August was much below average at 22%, which brings the seasonal accumulation (Oct-Aug) to 66% of average. Soil moisture is at 12% compared to 13% last year. Reservoir storage is at 29% of capacity, compared to 48% last year.







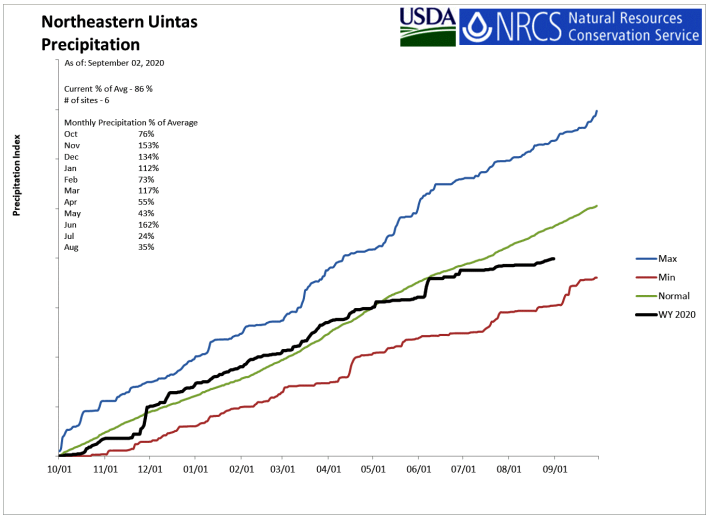


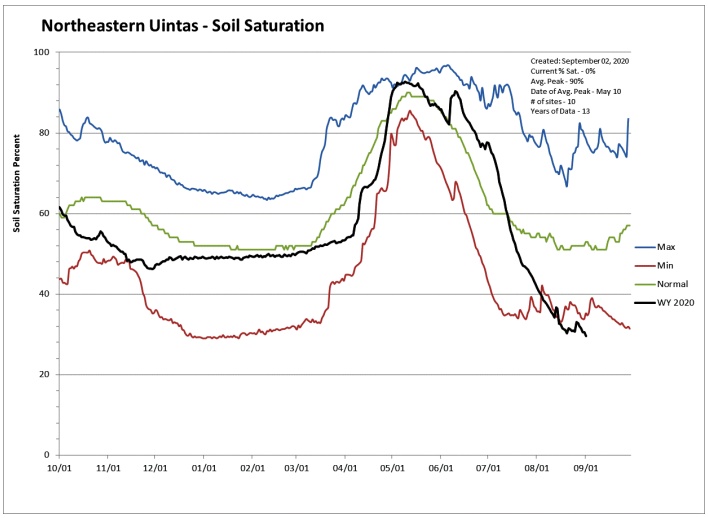
SNOTEL Data

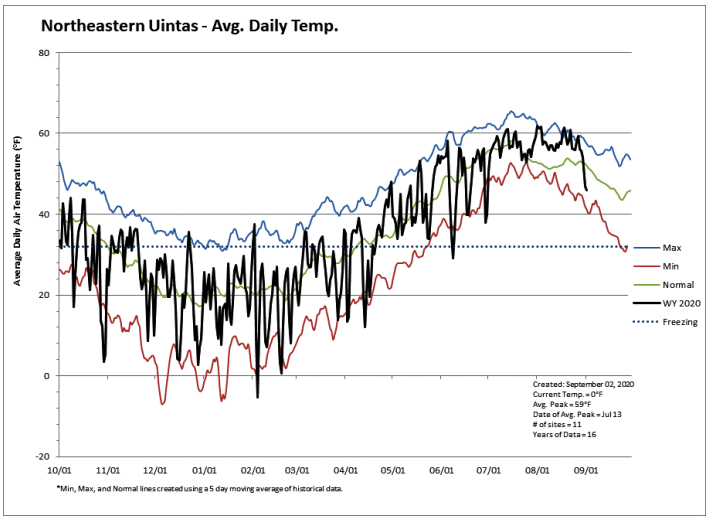
Northeastern Uinta Basin

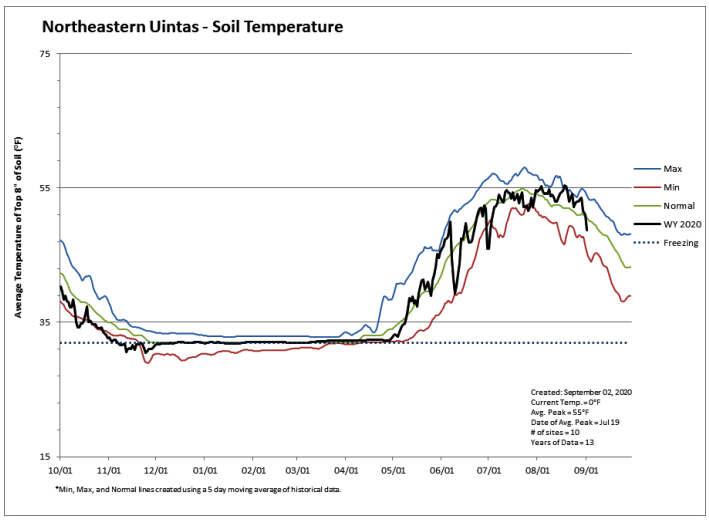
September 1, 2020

Precipitation in August was much below average at 35%, which brings the seasonal accumulation (Oct-Aug) to 86% of average. Soil moisture is at 30% compared to 42% last year. Reservoir storage is at 86% of capacity, compared to 92% last year. The water availability index for Blacks Fork is 24% and 35% for Smiths Creek.







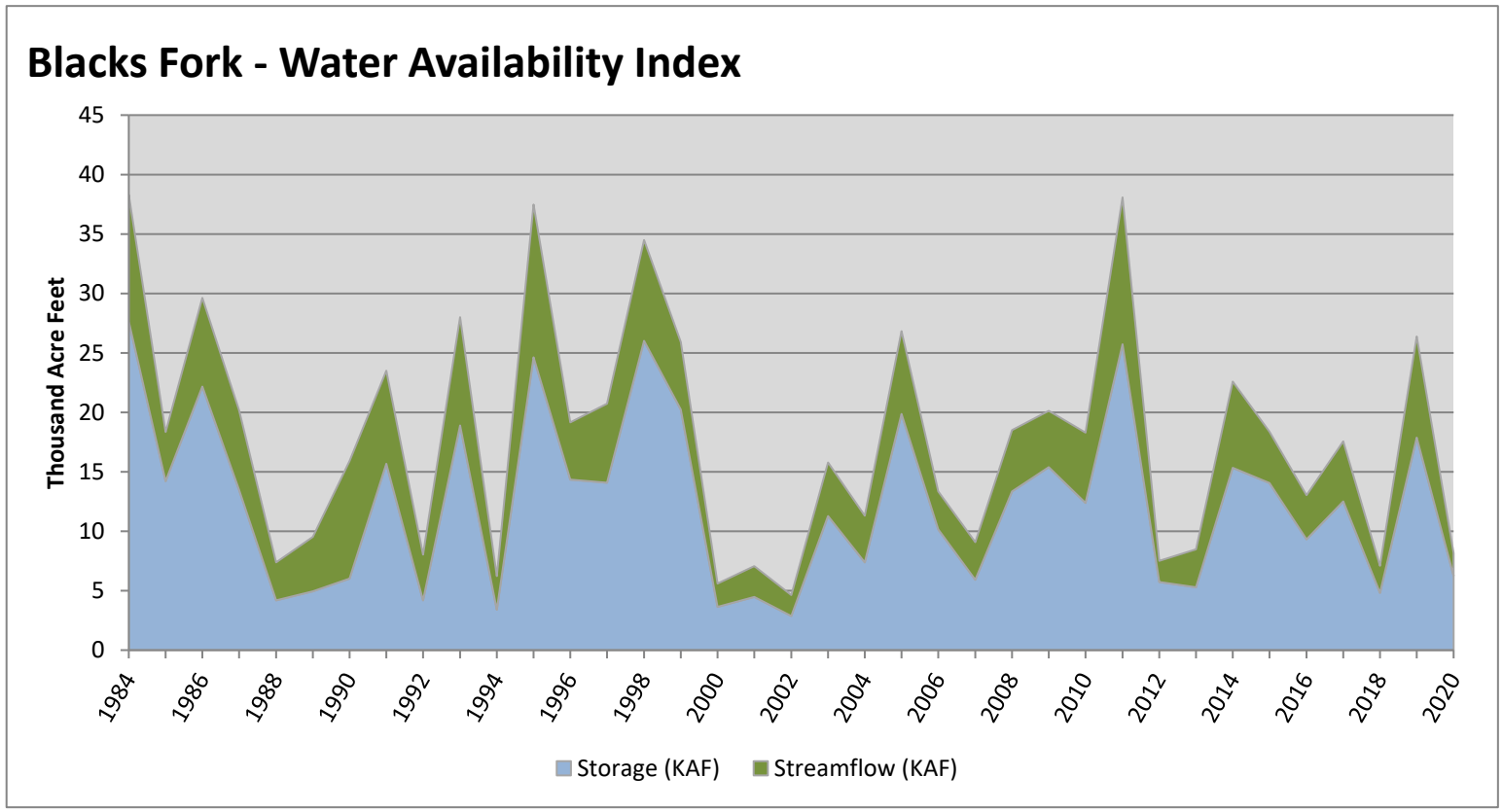


September 1, 2020

Water Availability Index

Basin or Region	Aug EOM* Storage	August Flow	Storage + Flow	Percentile	WAI#	Years with similiar WAI
	KAF^	KAF^	KAF^	%		
Blacks Fork	**6.26**	**1.90**	**8.16**	**24**	**-2.19**	**12, 92, 13, 07**

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

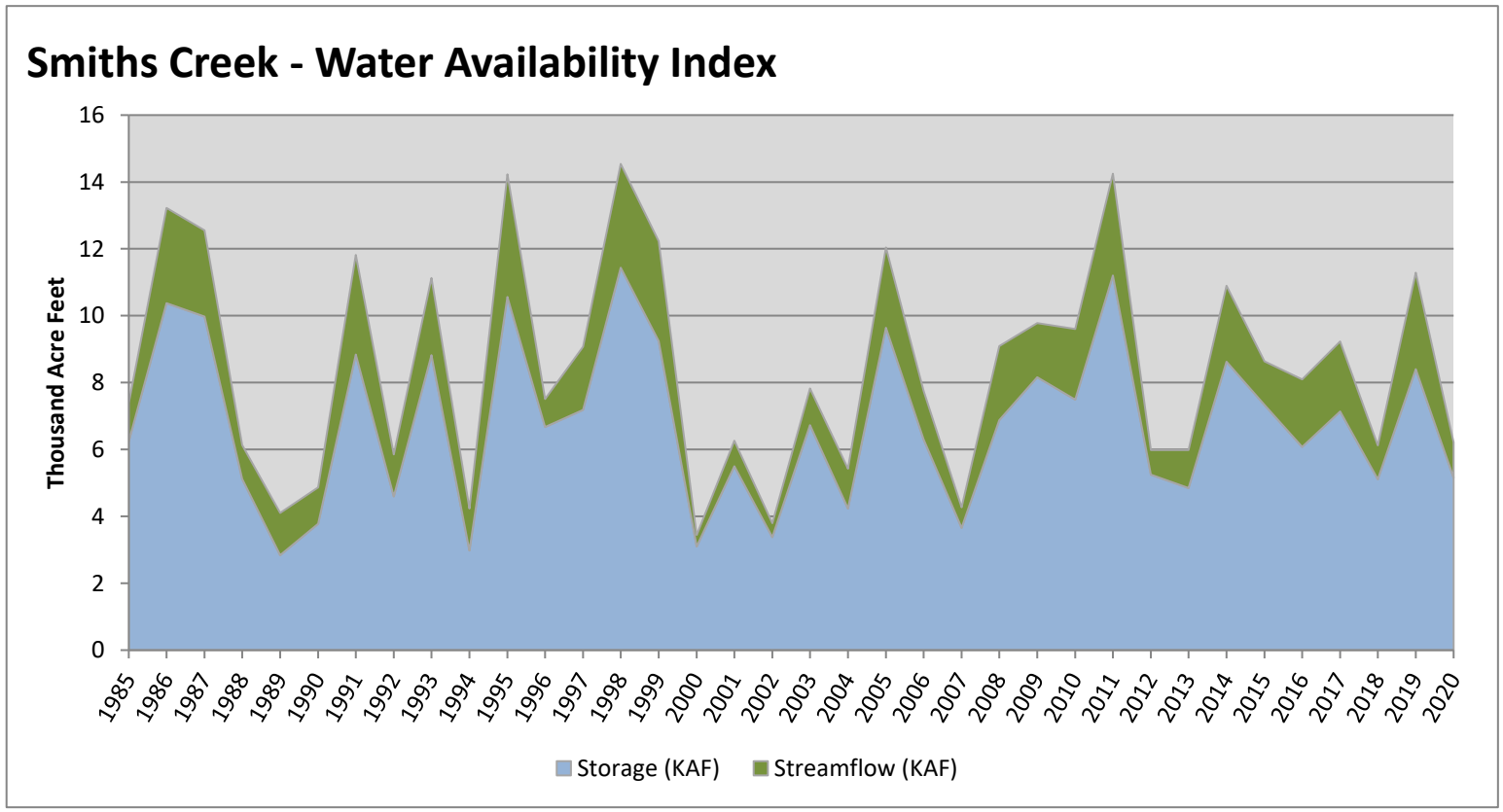


September 1, 2020

Water Availability Index

Basin or Region	Aug EOM* Storage	August Flow	Storage + Flow	Percentile	WAI#	Years with similiar WAI
	KAF^	KAF^	KAF^	%		
Smiths Creek	**5.16**	**1.06**	**6.22**	**35**	**-1.24**	**18, 88, 01, 85**

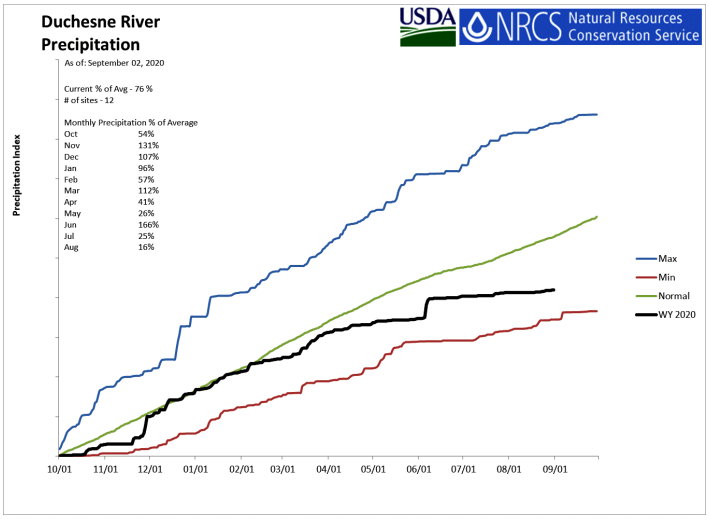
*EOM, end of month; #WAI, Water Availability Index; ^KAF, thousand acre-feet.

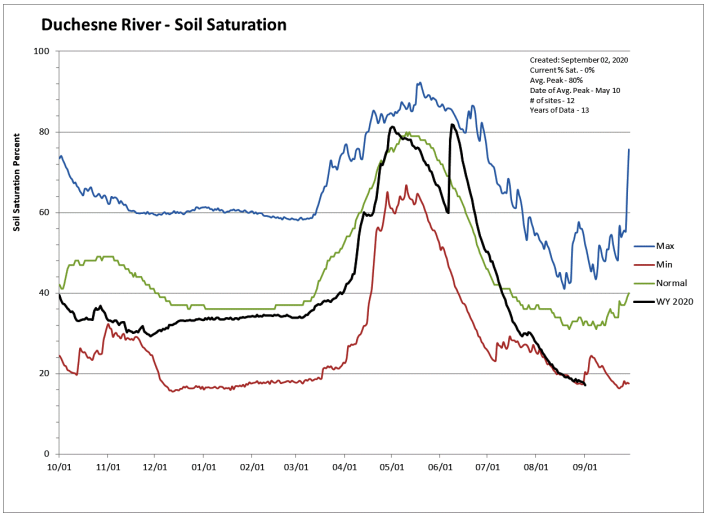


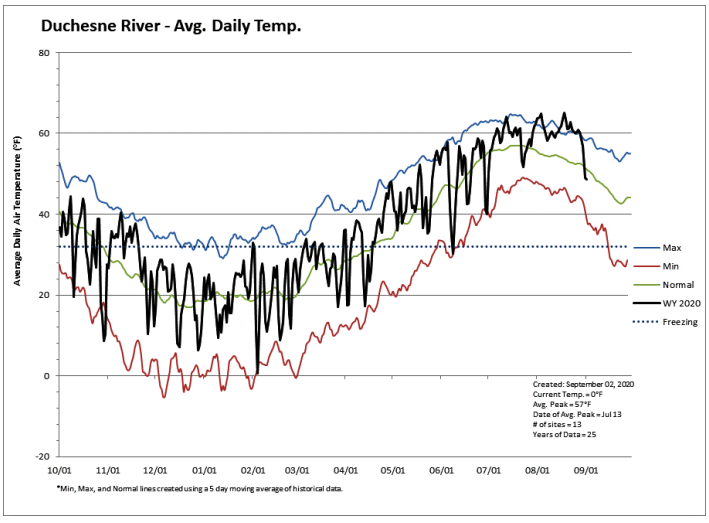
Duchesne River Basin

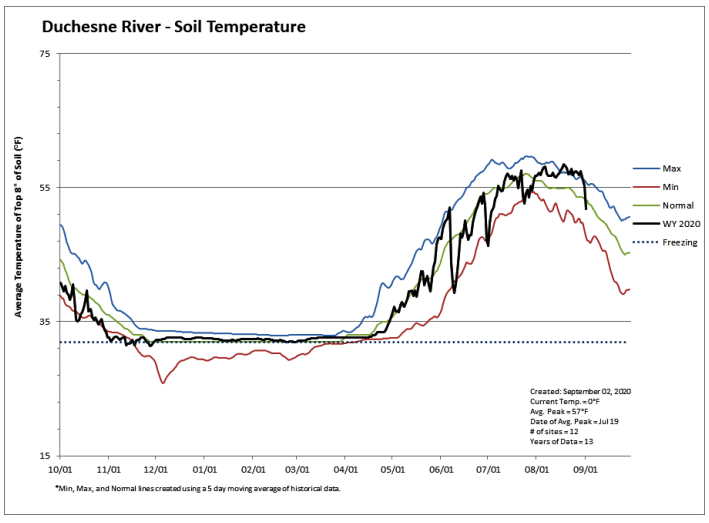
September 1, 2020

Precipitation in August was much below average at 16%, which brings the seasonal accumulation (Oct-Aug) to 76% of average. Soil moisture is at 21% compared to 30% last year. Reservoir storage is at 80% of capacity, compared to 87% last year. The water availability index for the Western Uintas is 44% and 17% for the Eastern Uintas.









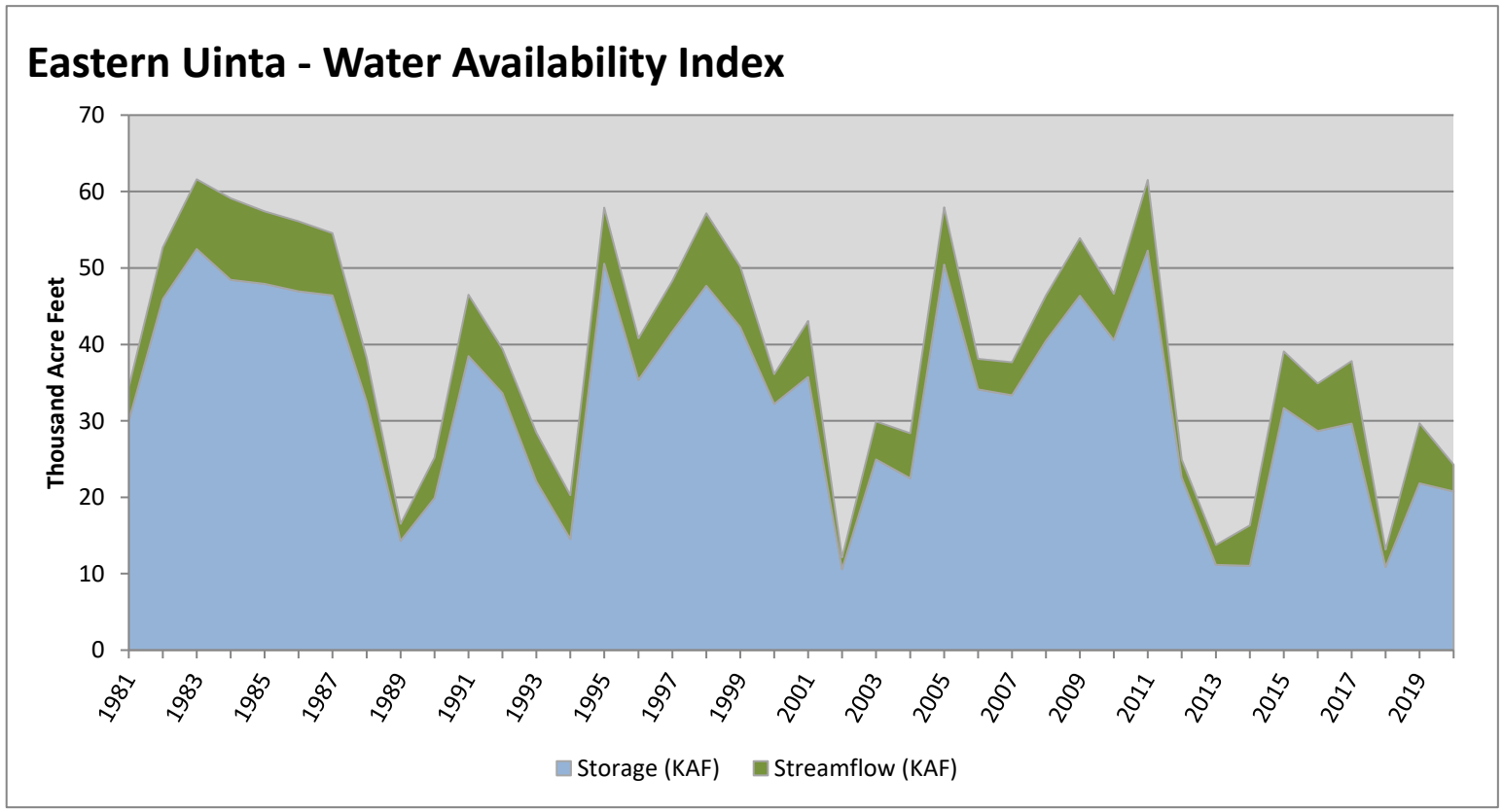
SNOTEL Data

September 1, 2020

Water Availability Index

Basin or Region	Aug EOM* Storage	August Flow	Storage + Flow	Percentile	WAI#	Years with similiar WAI
	KAF^	KAF^	KAF^	%		
Eastern Uinta	**20.77**	**3.50**	**24.27**	**17**	**-2.74**	**89, 94, 12, 90**

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

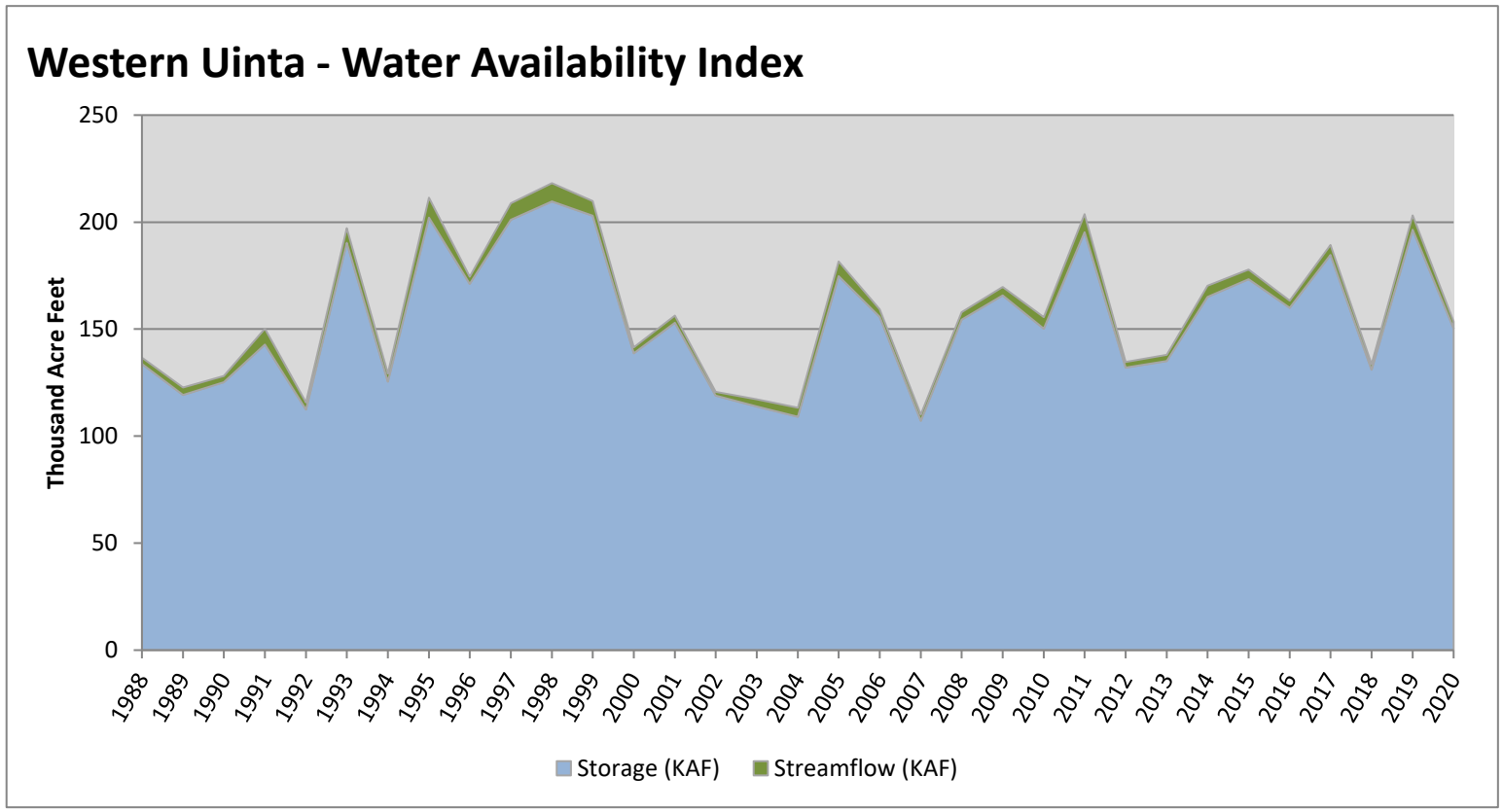


September 1, 2020

Water Availability Index

Basin or Region	Aug EOM* Storage	August Flow	Storage + Flow	Percentile	WAI#	Years with similiar WAI
	KAF^	KAF^	KAF^	%		
Western Uinta	**150.32**	**3.16**	**153.48**	**44**	**-0.49**	**00, 91, 10, 01**

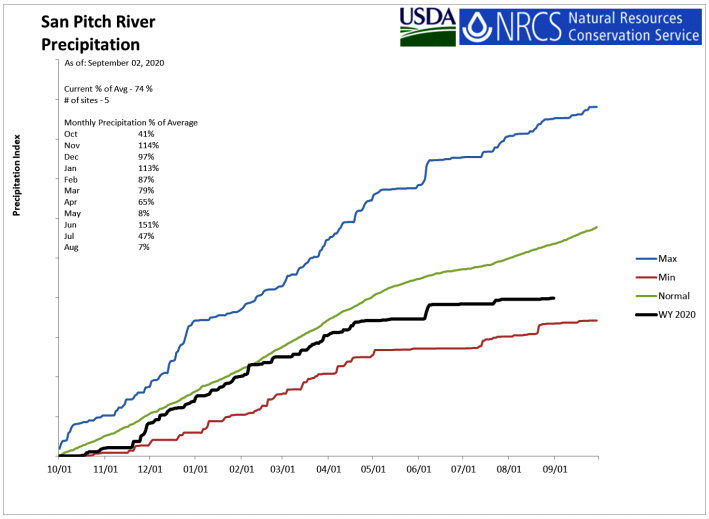
*EOM, end of month; #WAI, Water Availability Index; ^KAF, thousand acre-feet.

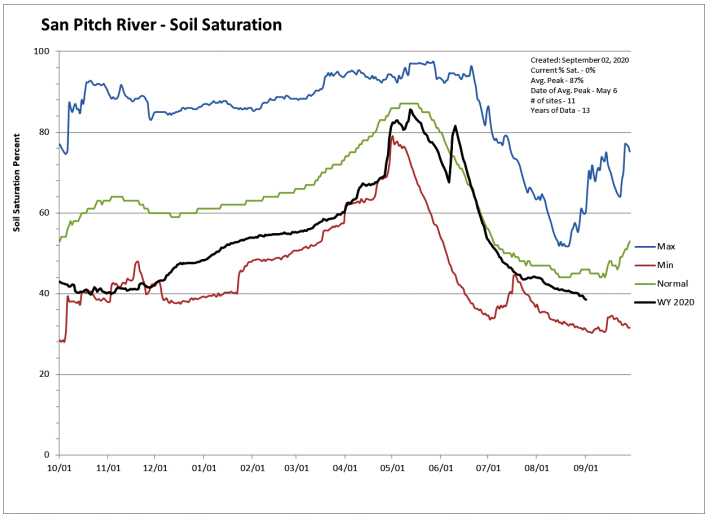


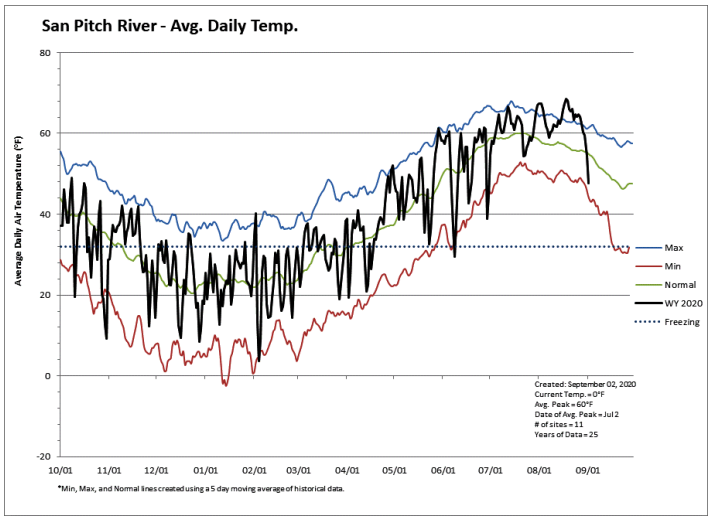
San Pitch River Basin

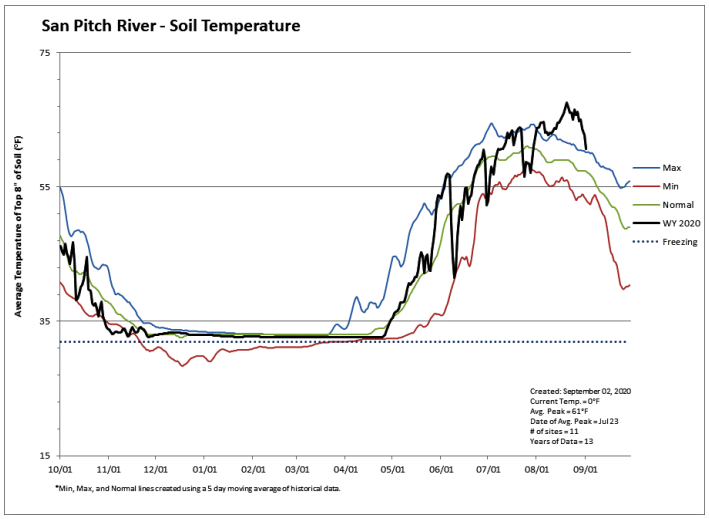
September 1, 2020

Precipitation in August was much below average at 7%, which brings the seasonal accumulation (Oct-Aug) to 74% of average. Soil Moisture is at 39% compared to 45% last year. Reservoir storage is at 0% of capacity, compared to 55% last year.The water availability index for the San Pitch is 17%.







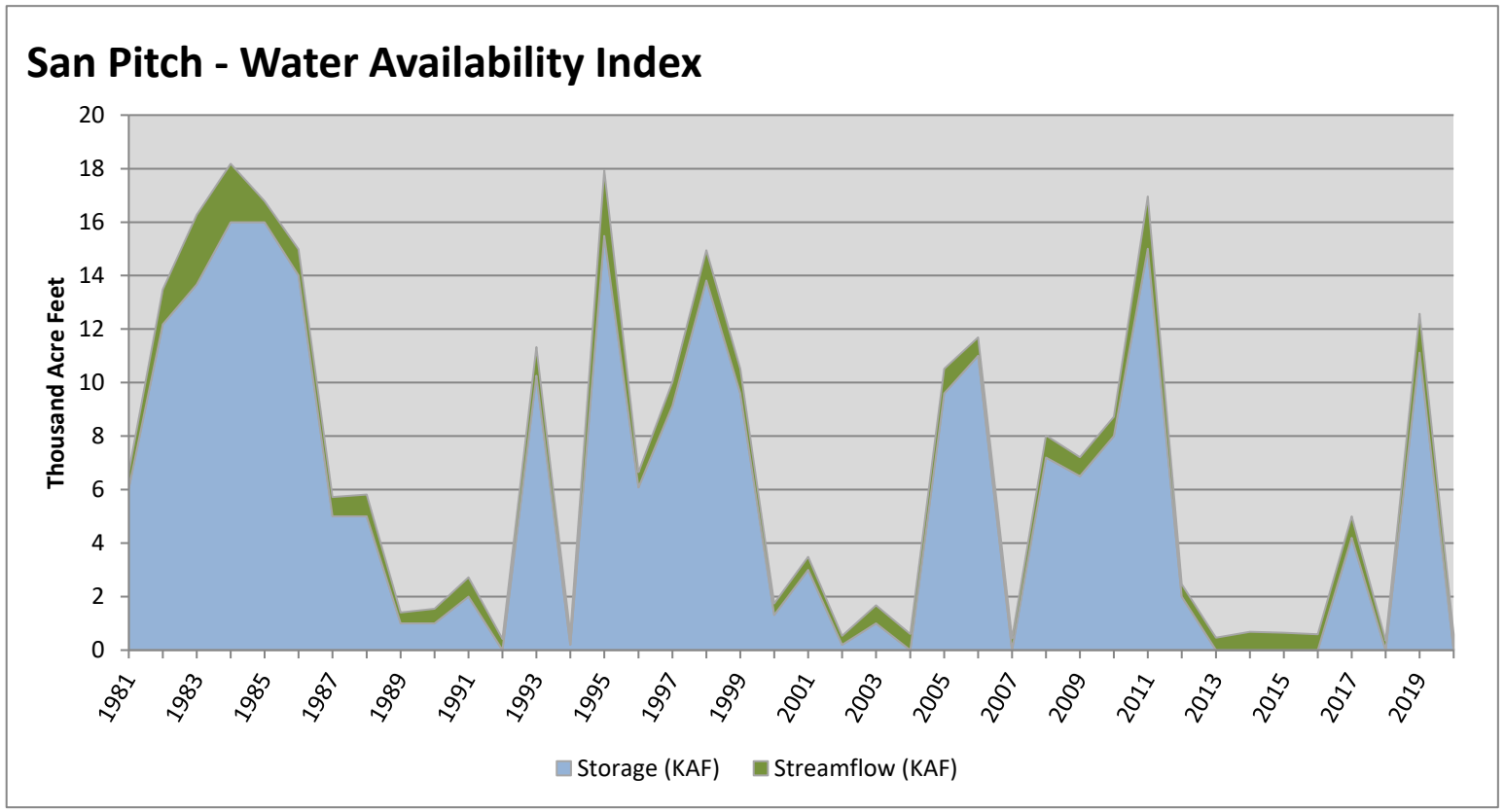


September 1, 2020

Water Availability Index

Basin or Region	Aug EOM* Storage	August Flow	Storage + Flow	Percentile	WAI#	Years with similiar WAI
	KAF^	KAF^	KAF^	%		
San Pitch	**0.00**	**0.59**	**0.59**	**17**	**-2.74**	**02, 16, 04, 94**

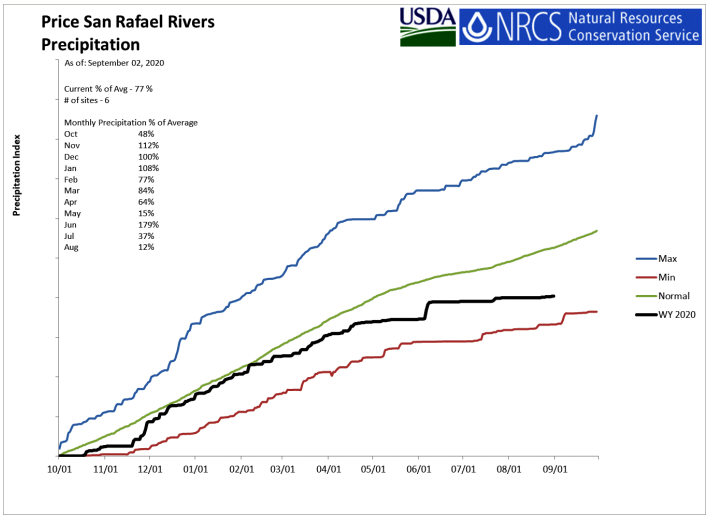
*EOM, end of month; #WAI, Water Availability Index; ^KAF, thousand acre-feet.

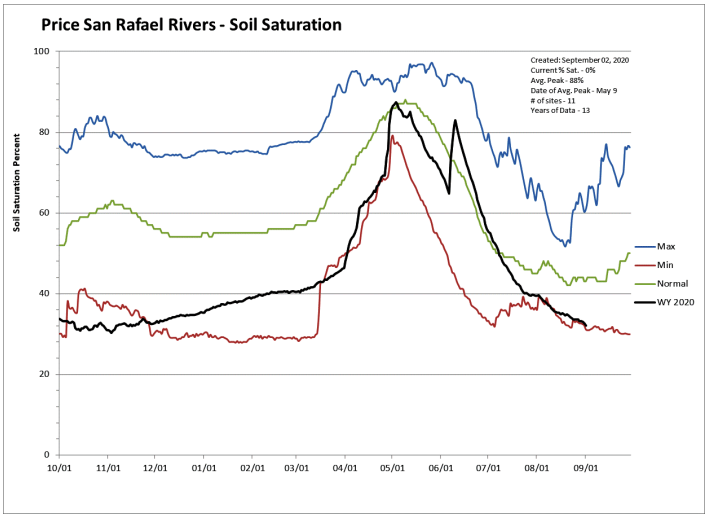


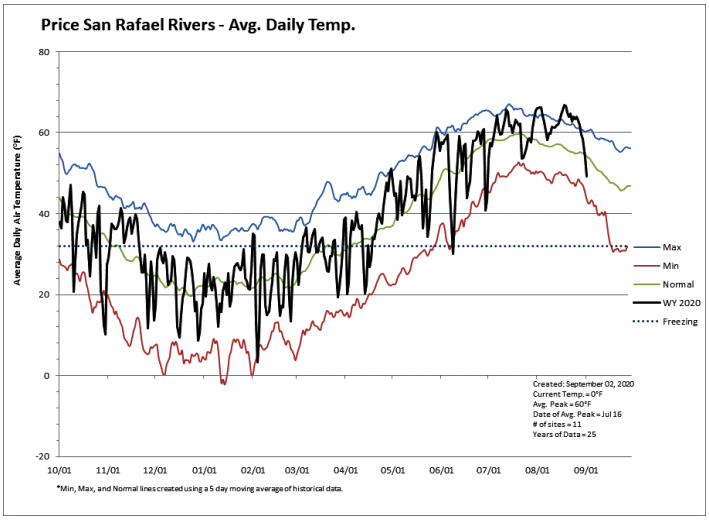
Price & San Rafael Basins

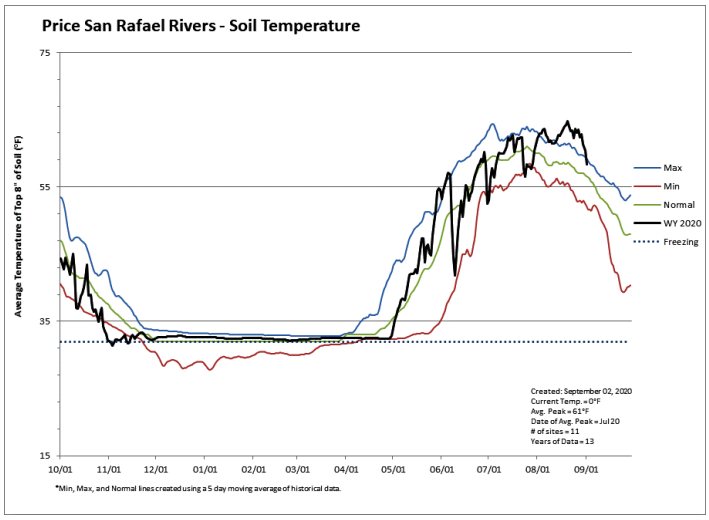
September 1, 2020

Precipitation in August was much below average at 12%, which brings the seasonal accumulation (Oct-Aug) to 77% of average. Soil moisture is at 32% compared to 37% last year. Reservoir storage is at 62% of capacity, compared to 82% last year. The water availability index for the Price River is 63%, and 41% for Joe's Valley.









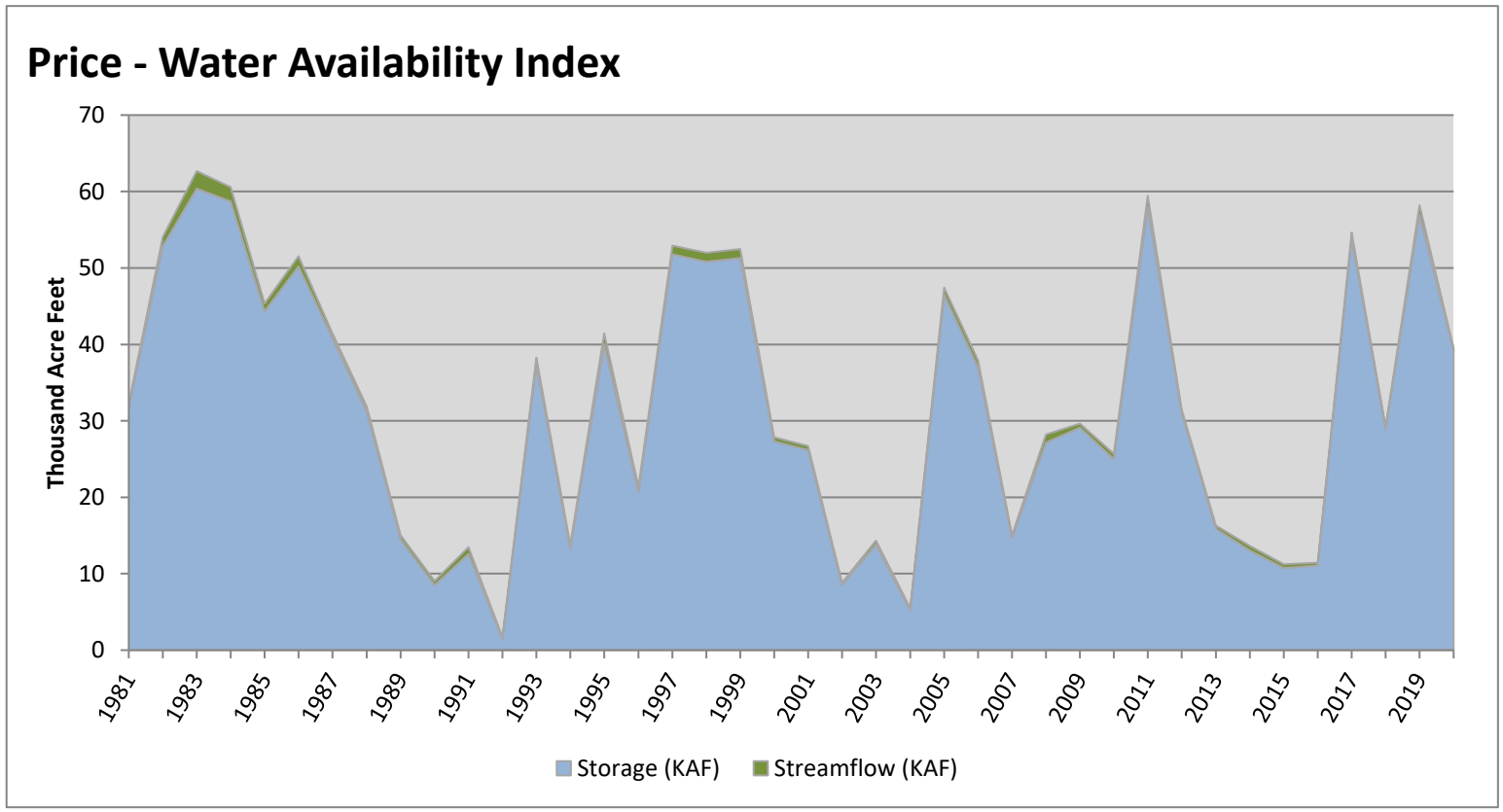
SNOTEL Data

September 1, 2020

Water Availability Index

Basin or Region	Aug EOM* Storage	August Flow	Storage + Flow	Percentile	WAI#	Years with similiar WAI
	KAF^	KAF^	KAF^	%		
Price	**39.22**	**0.30**	**39.52**	**63**	**1.12**	**06, 93, 87, 95**

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

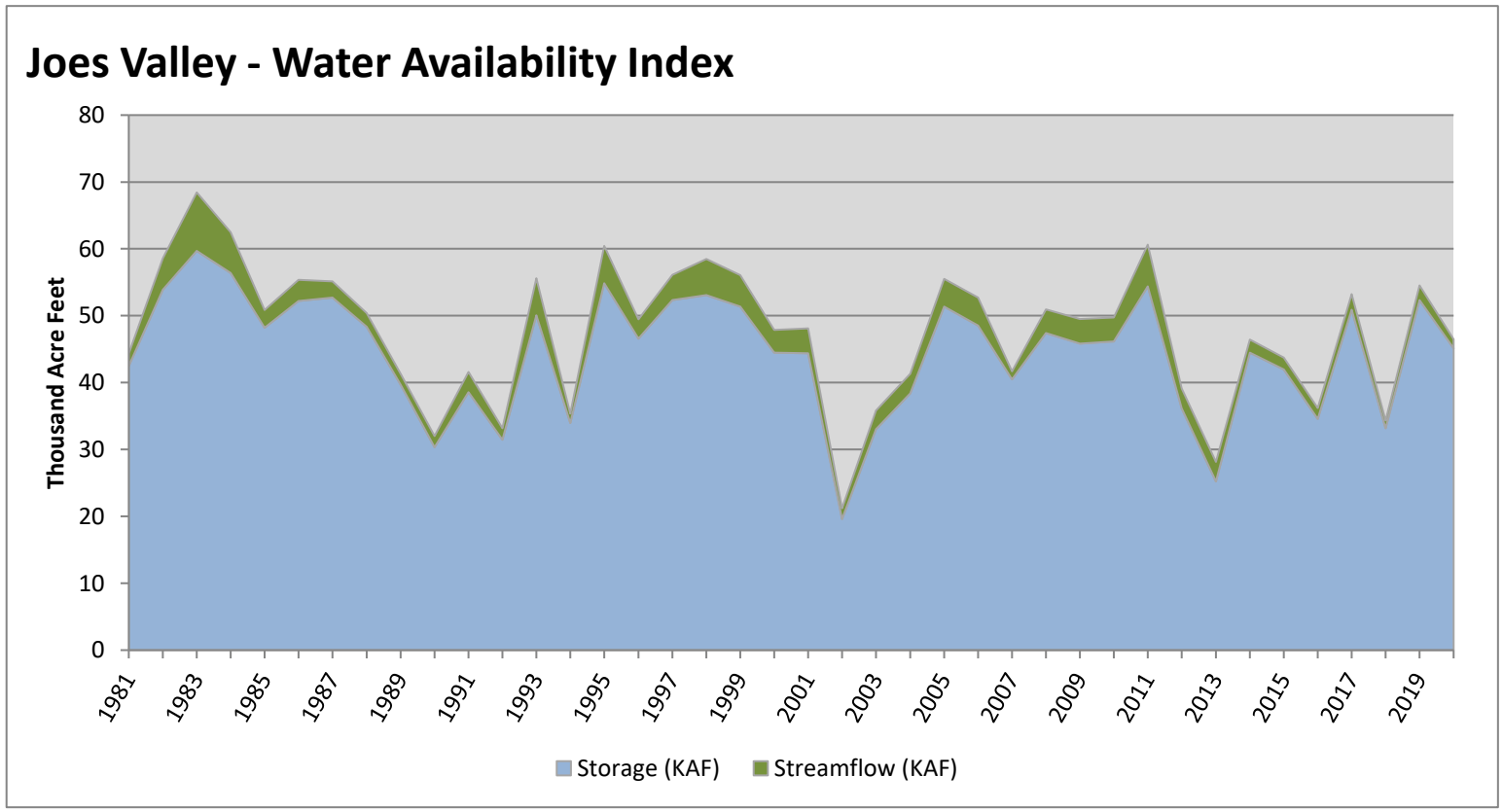


September 1, 2020

Water Availability Index

Basin or Region	Aug EOM* Storage	August Flow	Storage + Flow	Percentile	WAI#	Years with similiar WAI
	KAF^	KAF^	KAF^	%		
Joes Valley	**45.14**	**1.36**	**46.50**	**41**	**-0.71**	**81, 14, 00, 01**

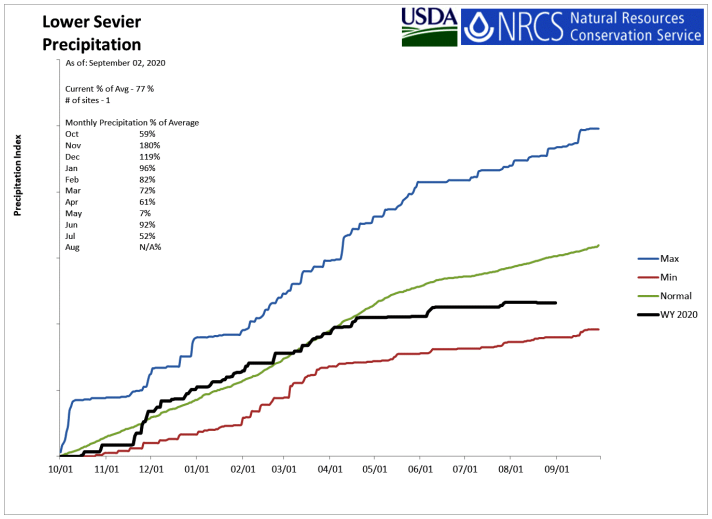
*EOM, end of month; #WAI, Water Availability Index; ^KAF, thousand acre-feet.

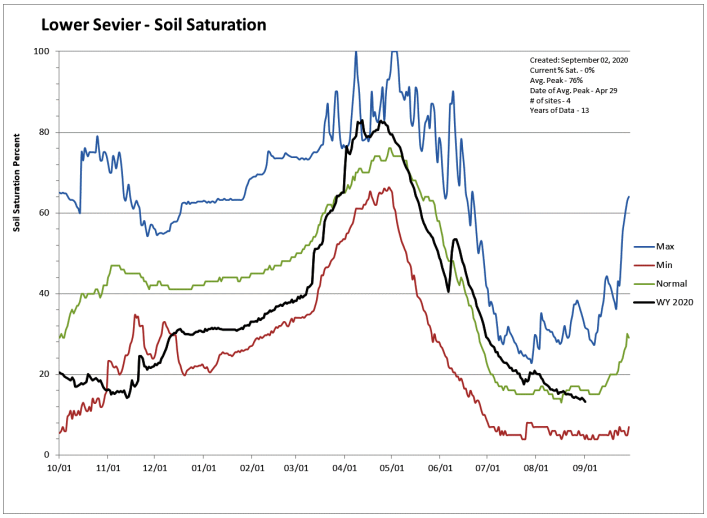


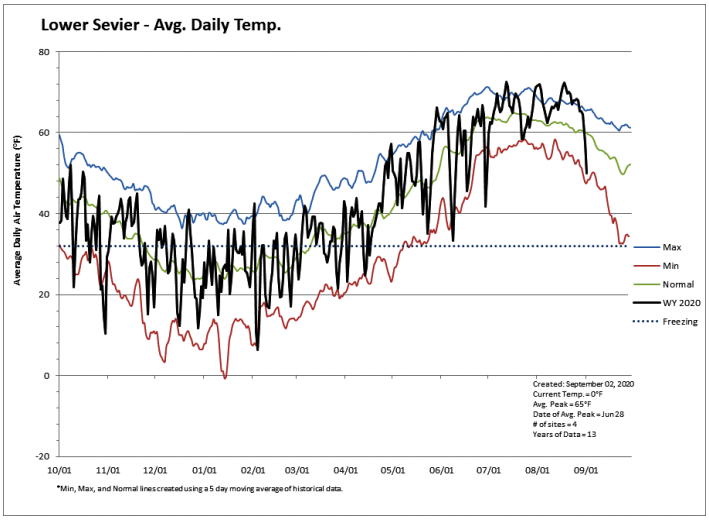
Lower Sevier Basin

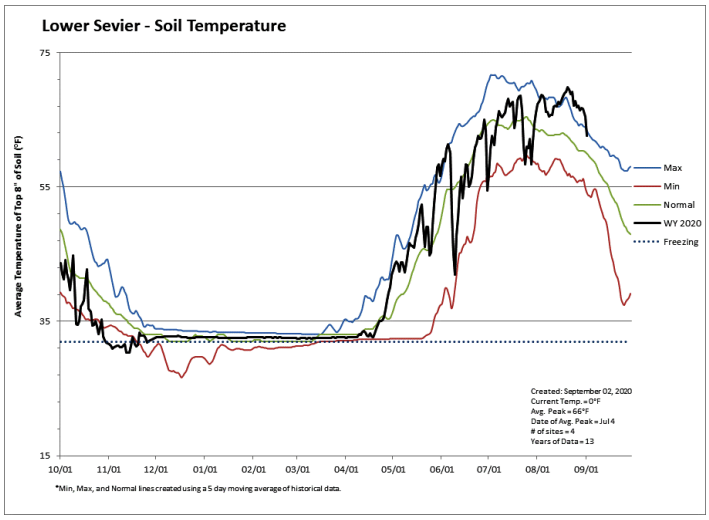
September 1, 2020

Precipitation in August was much below average at -6%, which brings the seasonal accumulation (Oct-Aug) to 77% of average. Soil moisture is at 13% compared to 20% last year. Reservoir storage is at 18% of capacity, compared to 35% last year. The water availability index for the Lower Sevier is 22%.







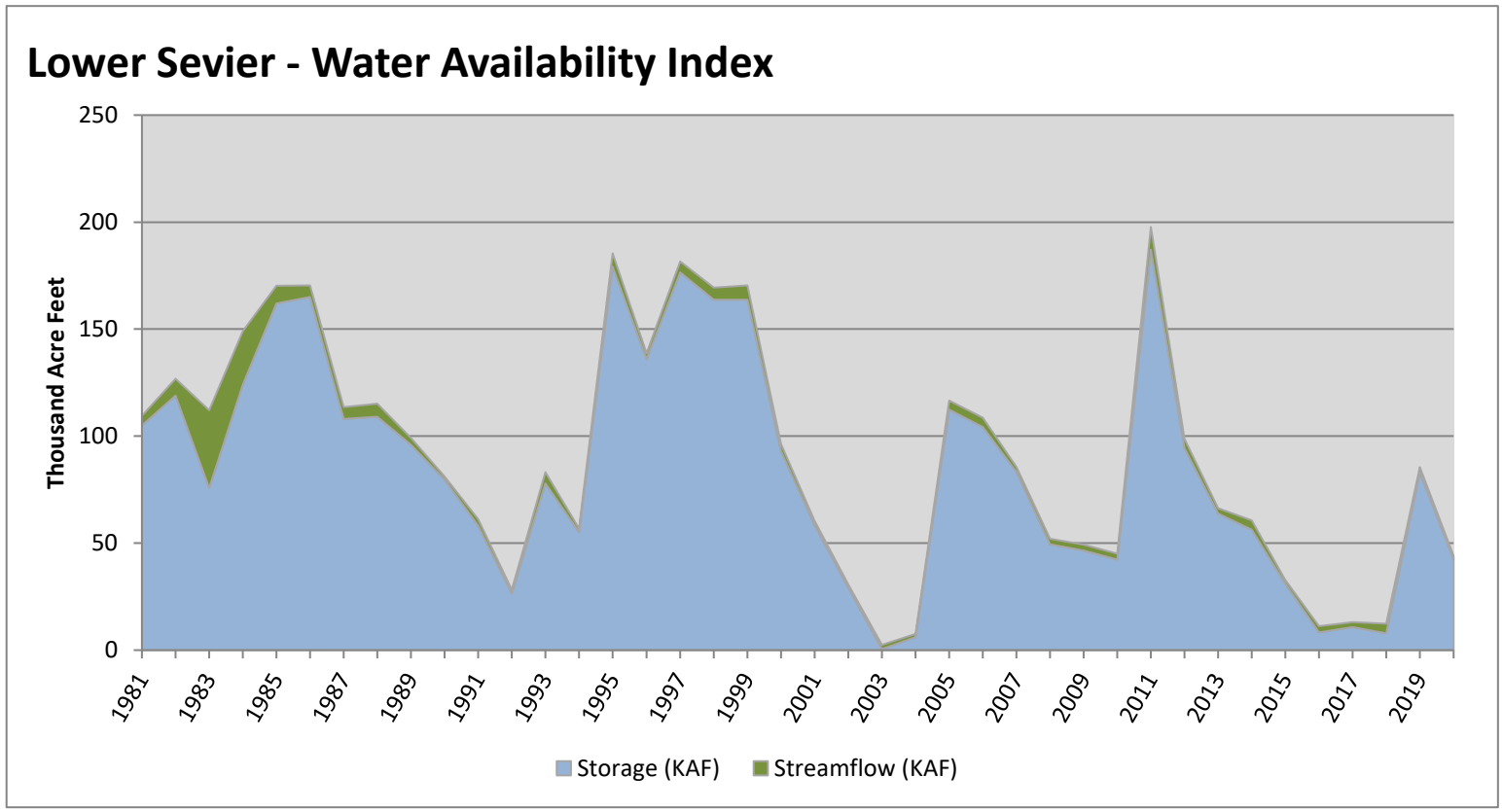


September 1, 2020

Water Availability Index

Basin or Region	Aug EOM* Storage	August Flow	Storage + Flow	Percentile	WAI#	Years with similiar WAI
	KAF^	KAF^	KAF^	%		
Lower Sevier	**42.45**	**1.56**	**44.01**	**22**	**-2.34**	**02, 15, 10, 09**

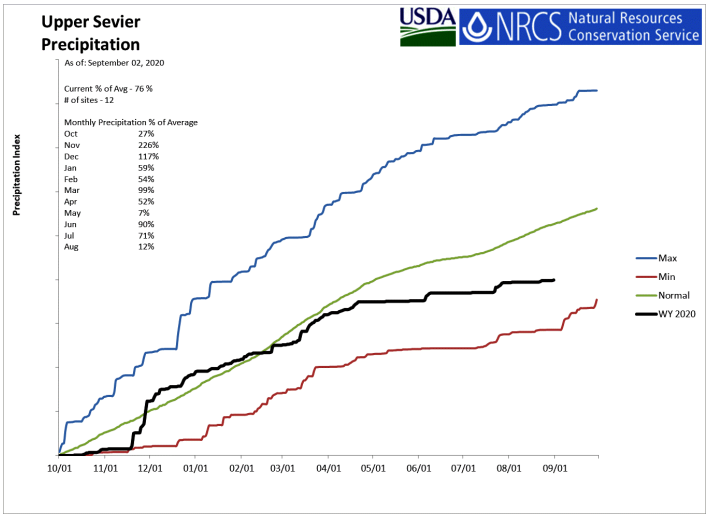
*EOM, end of month; #WAI, Water Availability Index; ^KAF, thousand acre-feet.

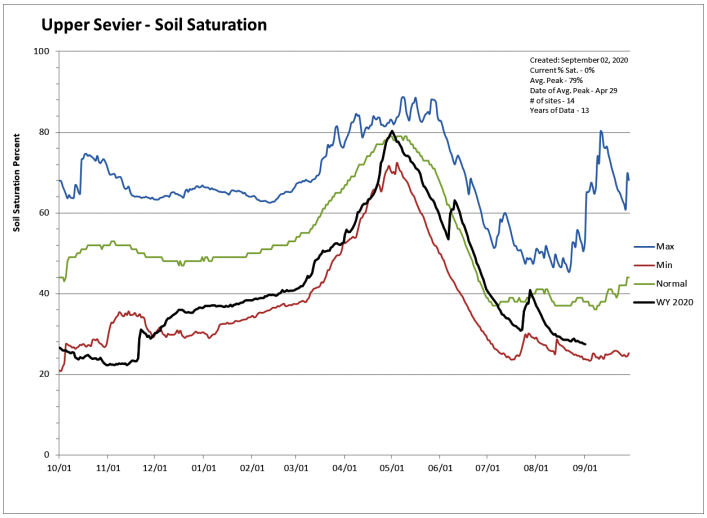


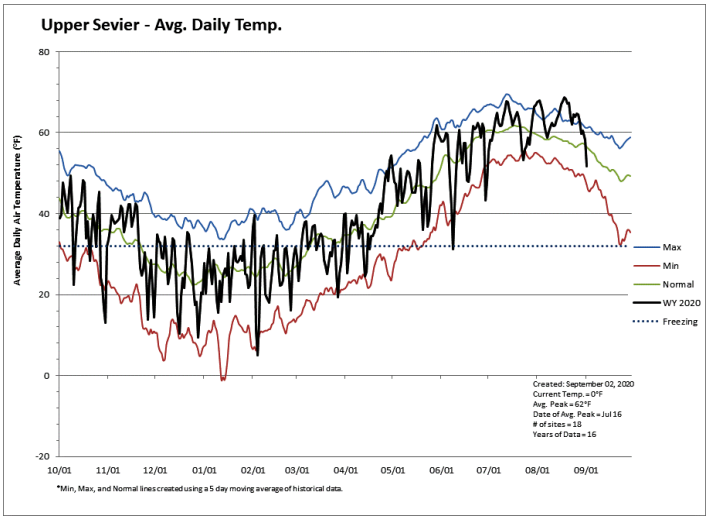
Upper Sevier Basin

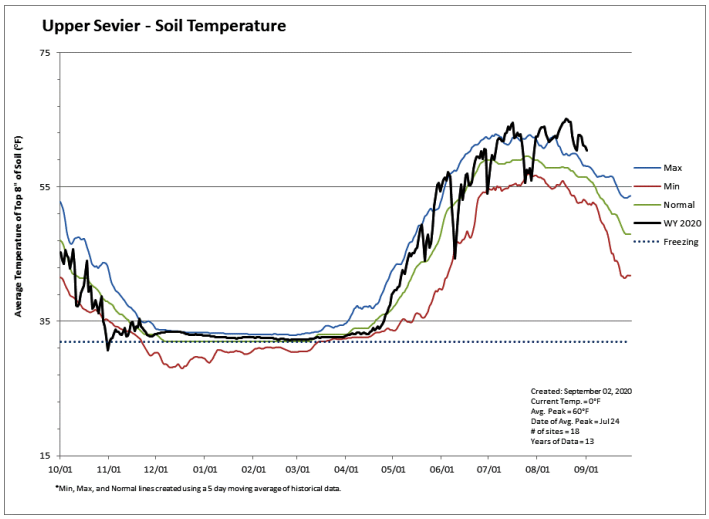
September 1, 2020

Precipitation in August was much below average at 11%, which brings the seasonal accumulation (Oct-Aug) to 76% of average. Soil moisture is at 27% compared to 31% last year. Reservoir storage is at 36% of capacity, compared to 64% last year. The water availability index for the Upper Sevier is 49%.







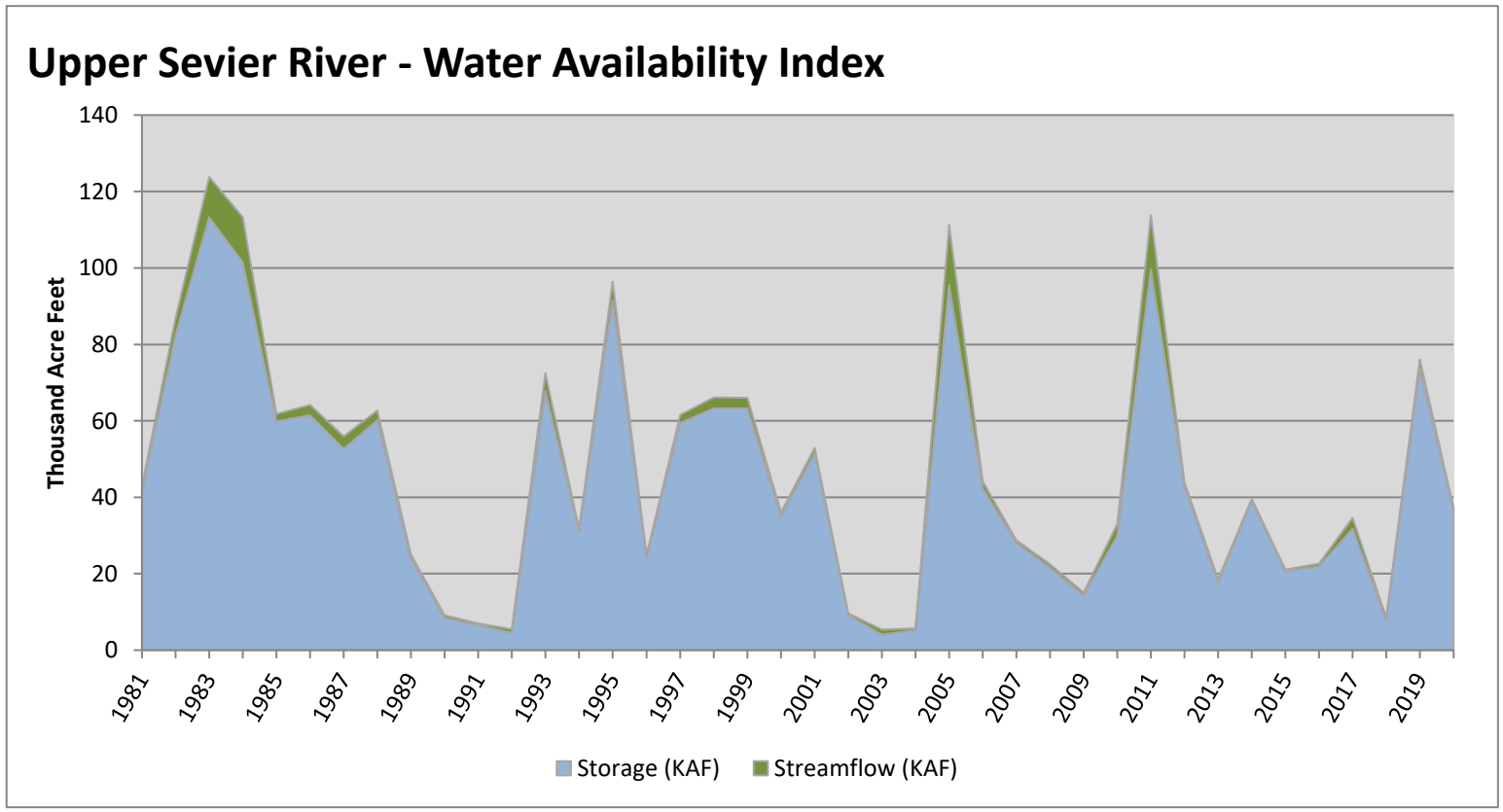


September 1, 2020

Water Availability Index

Basin or Region	Aug EOM* Storage	August Flow	Storage + Flow	Percentile	WAI#	Years with similiar WAI
	KAF^	KAF^	KAF^	%		
Upper Sevier River	**36.75**	**0.44**	**37.19**	**49**	**-0.1**	**17, 00, 14, 81**

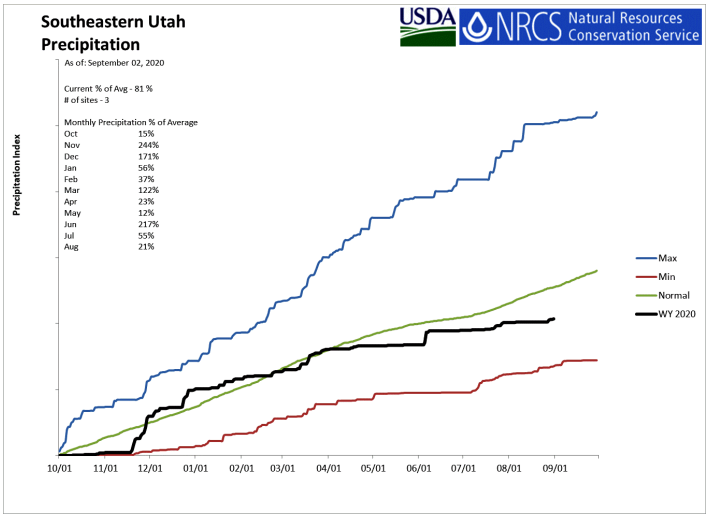
*EOM, end of month; #WAI, Water Availability Index; ^KAF, thousand acre-feet.

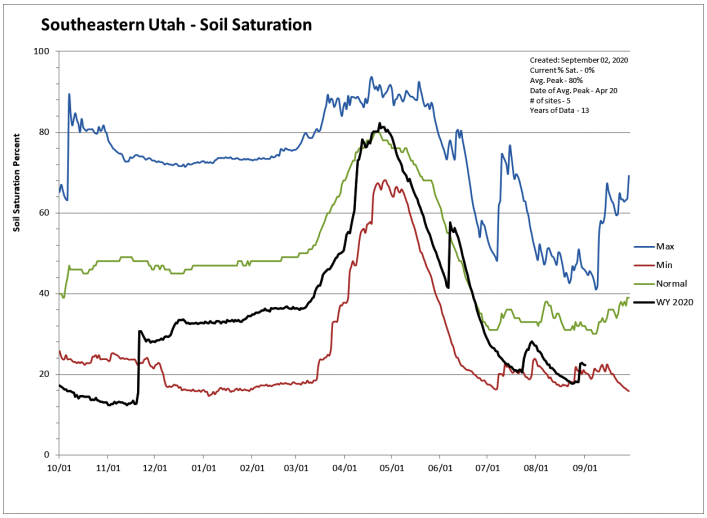


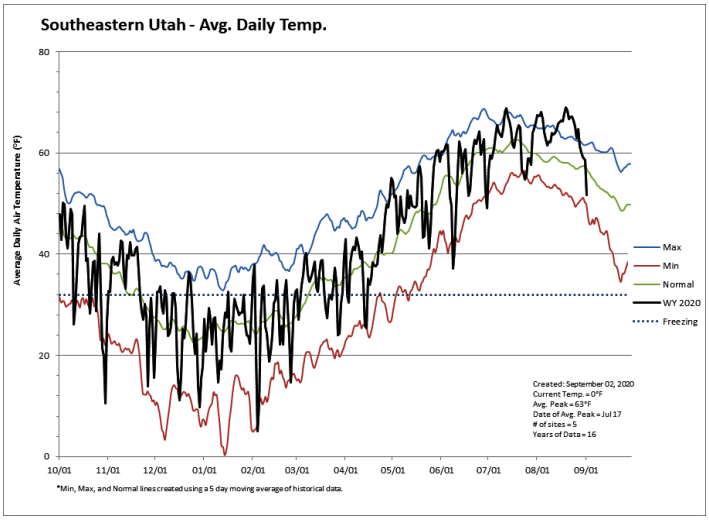
Southeastern Utah

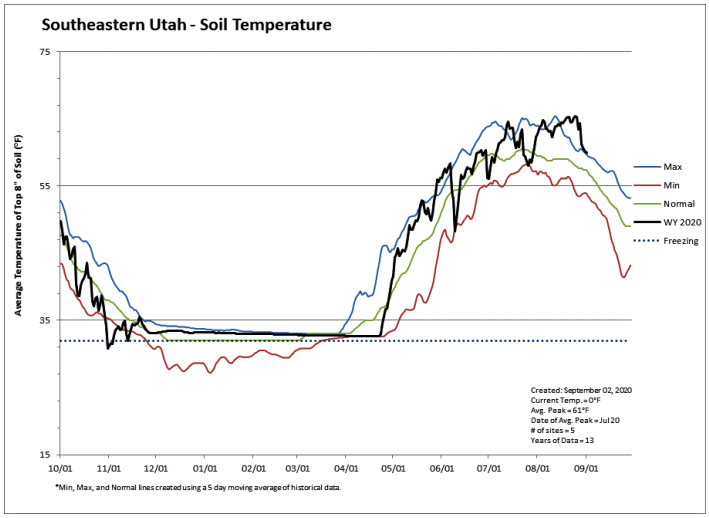
September 1, 2020

Precipitation in August was much below average at 21%, which brings the seasonal accumulation (Oct-Aug) to 81% of average. Soil moisture is at 22% compared to 21% last year. Reservoir storage is at 25% of capacity, compared to 96% last year. The water availability index for Moab is 26%.







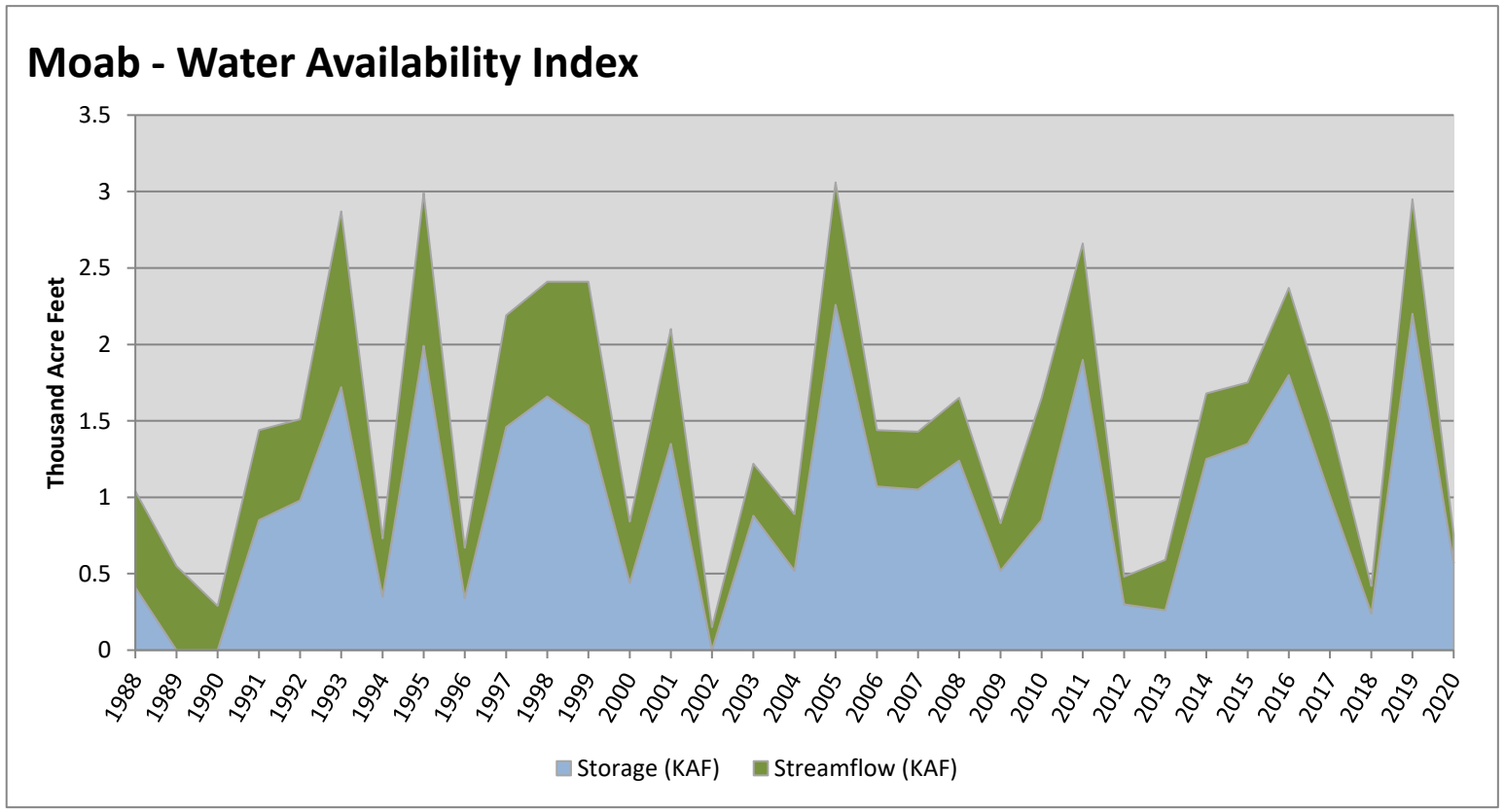


September 1, 2020

Water Availability Index

Basin or Region	Aug EOM* Storage	August Flow	Storage + Flow	Percentile	WAI#	Years with similiar WAI
	KAF^	KAF^	KAF^	%		
Moab	**0.57**	**0.19**	**0.76**	**26**	**-1.96**	**96, 94, 09, 00**

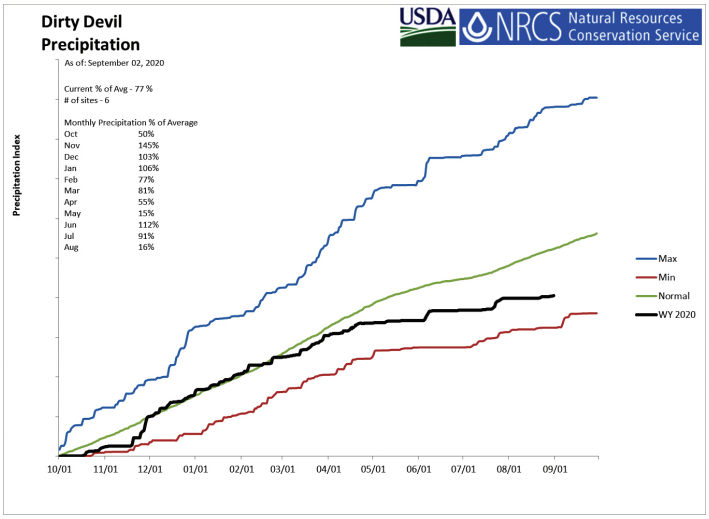
*EOM, end of month; #WAI, Water Availability Index; ^KAF, thousand acre-feet.

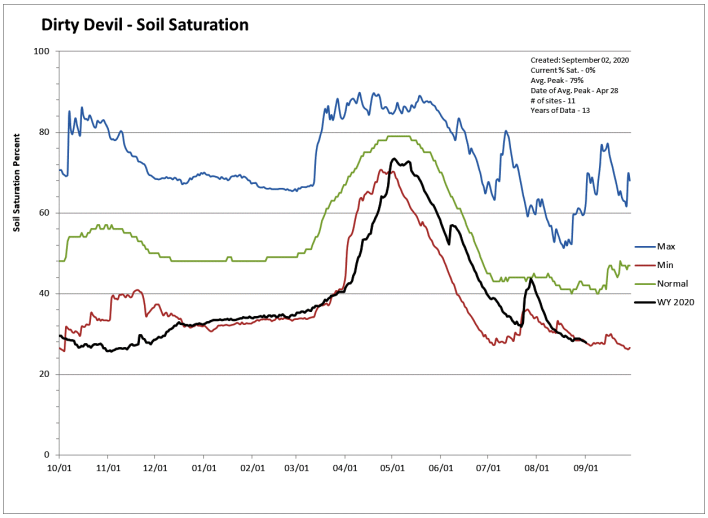


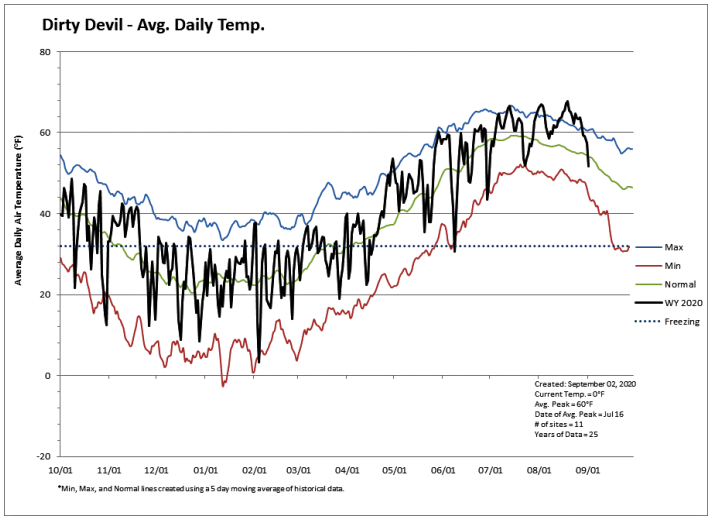
Dirty Devil Basin

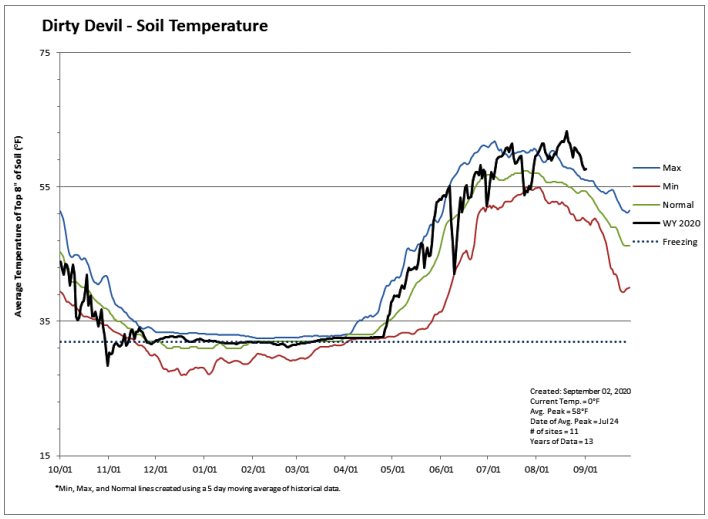
September 1, 2020

Precipitation in August was much below average at 15%, which brings the seasonal accumulation (Oct-Aug) to 77% of average. Soil moisture is at 28% compared to 34% last year.





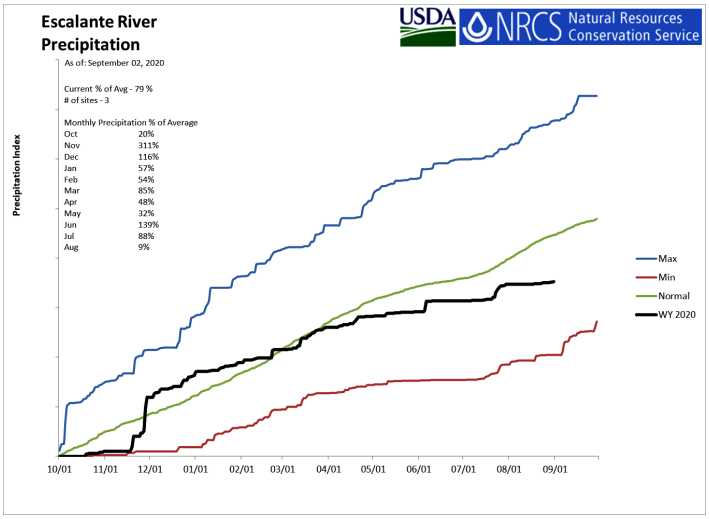


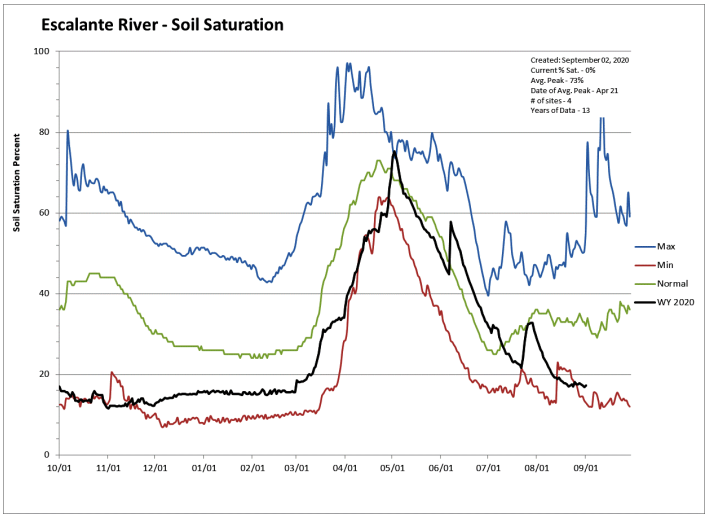


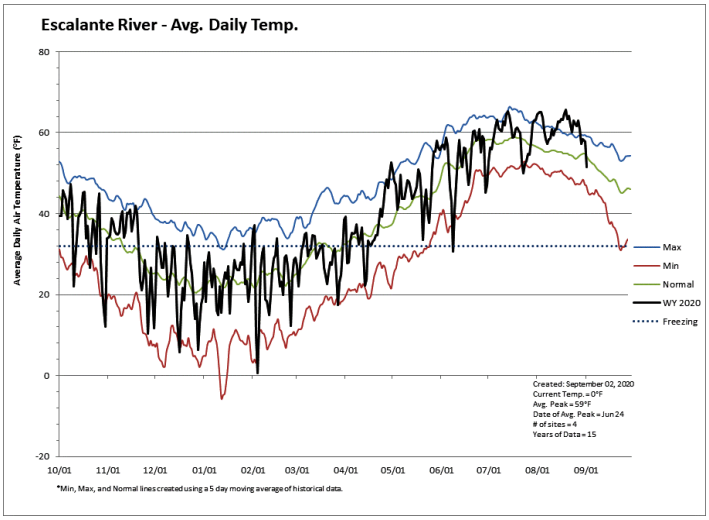
Escalante River Basin

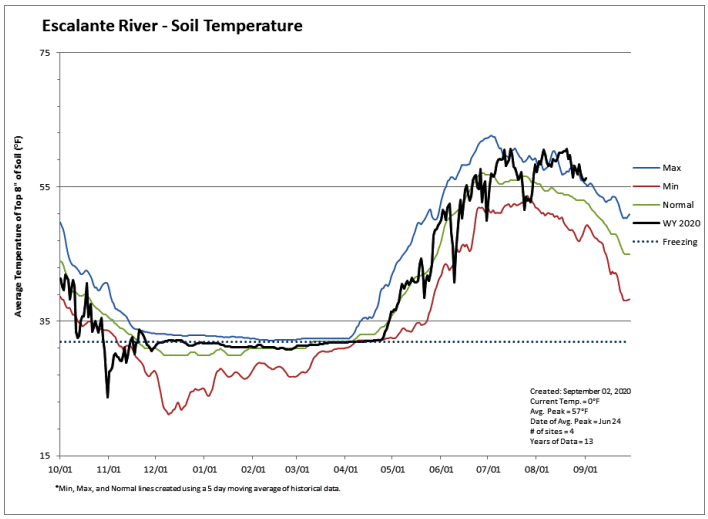
September 1, 2020

Precipitation in August was much below average at 9%, which brings the seasonal accumulation (Oct-Aug) to 79% of average. Soil moisture is at 17% compared to 20% last year.







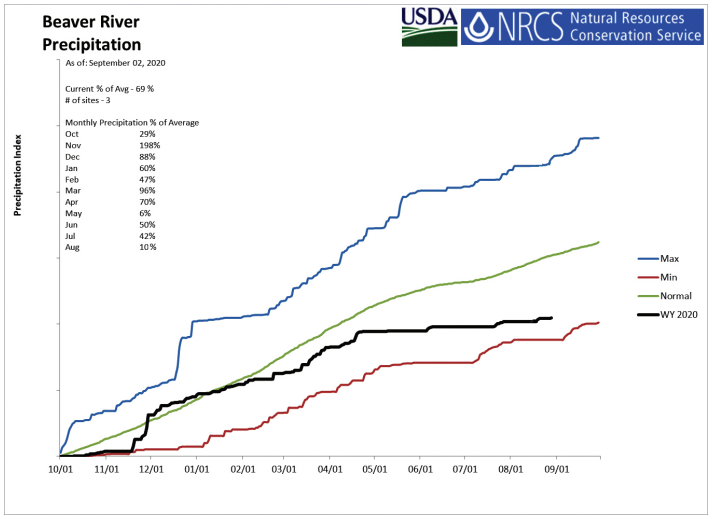


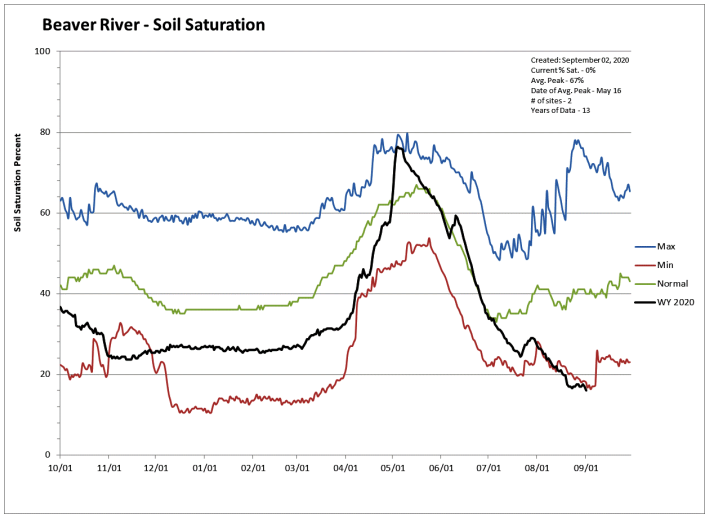
SNOTEL Data

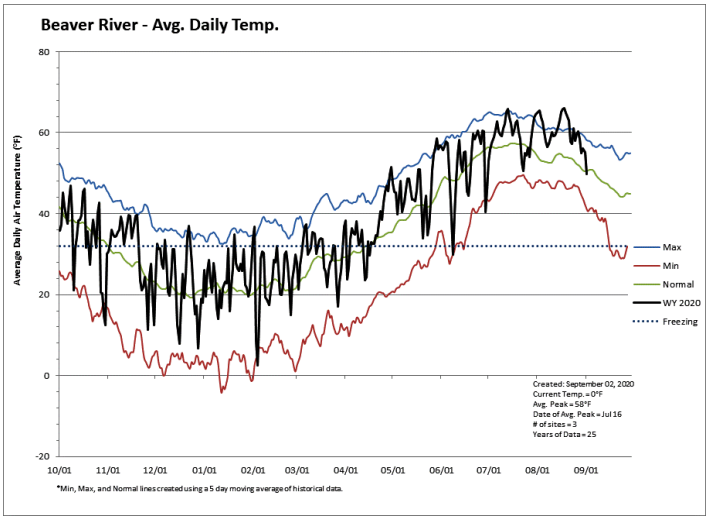
Beaver River Basin

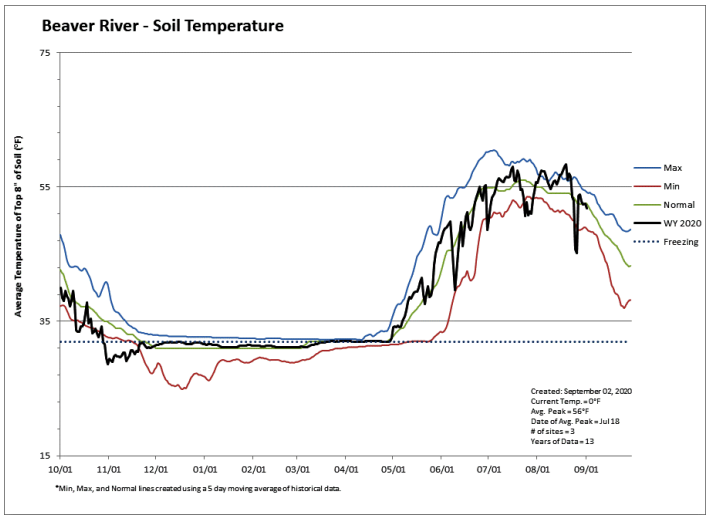
September 1, 2020

Precipitation in August was much below average at 10%, which brings the seasonal accumulation (Oct-Aug) to 69% of average. Soil moisture is at 17% compared to 31% last year. Reservoir storage is at 19% of capacity, compared to 67% last year. The water availability index for the Beaver River is 46%.







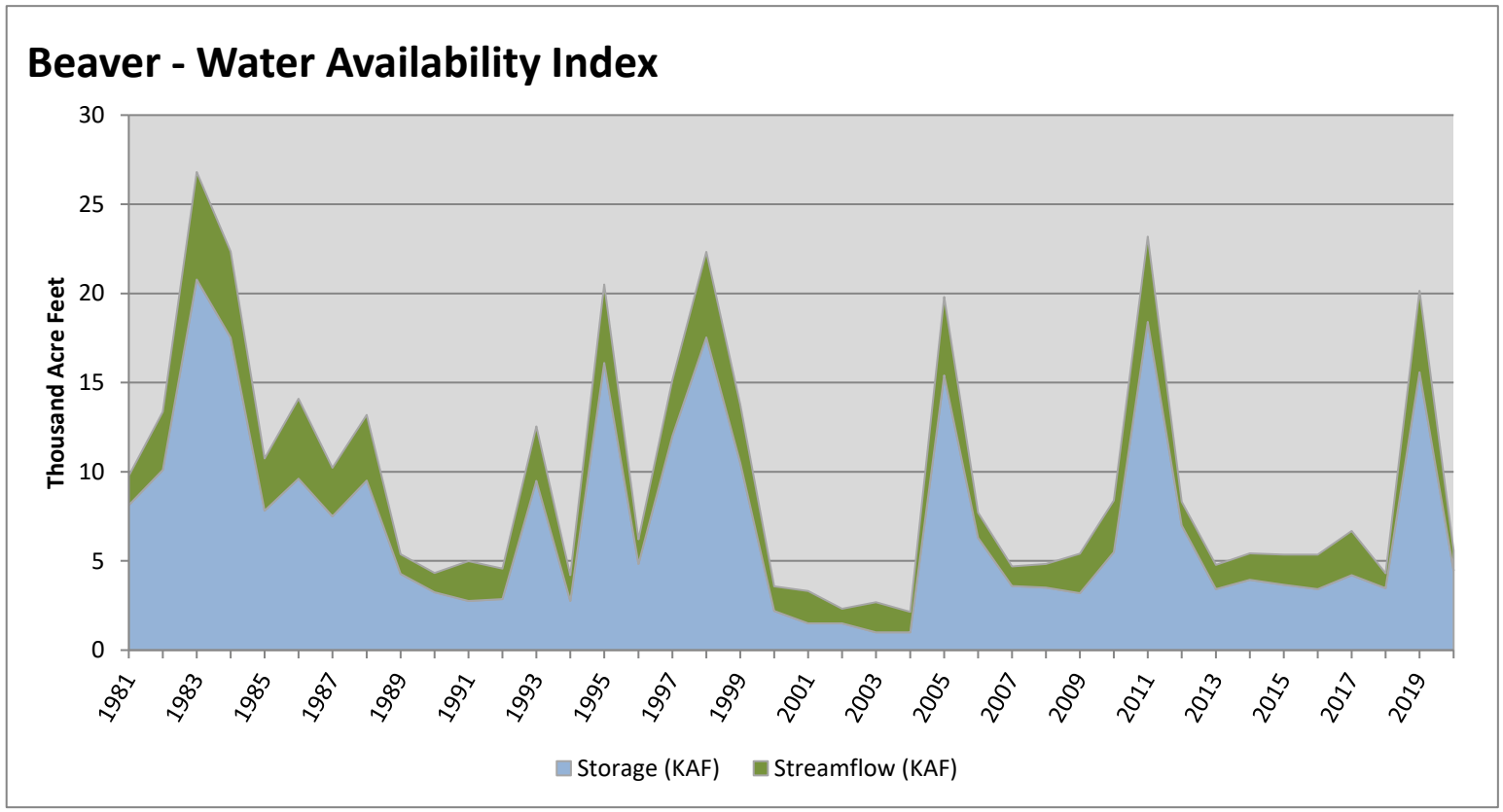


September 1, 2020

Water Availability Index

Basin or Region	Aug EOM* Storage	August Flow	Storage + Flow	Percentile	WAI#	Years with similiar WAI
	KAF^	KAF^	KAF^	%		
Beaver	**4.46**	**1.14**	**5.60**	**46**	**-0.3**	**09, 14, 96, 17**

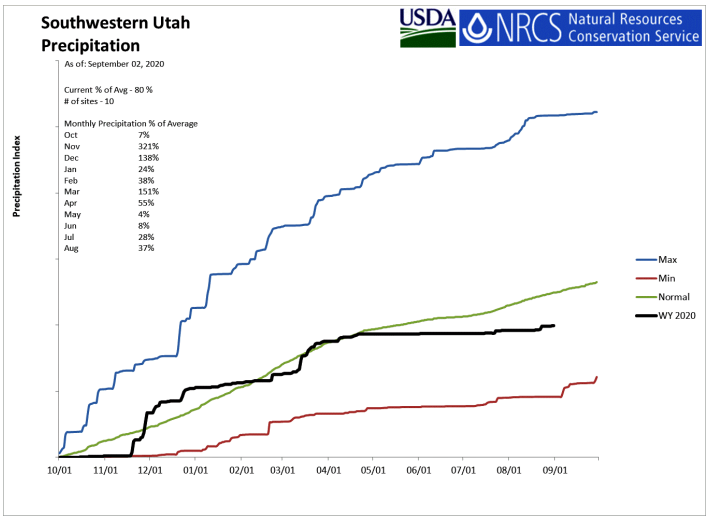
*EOM, end of month; #WAI, Water Availability Index; ^KAF, thousand acre-feet.

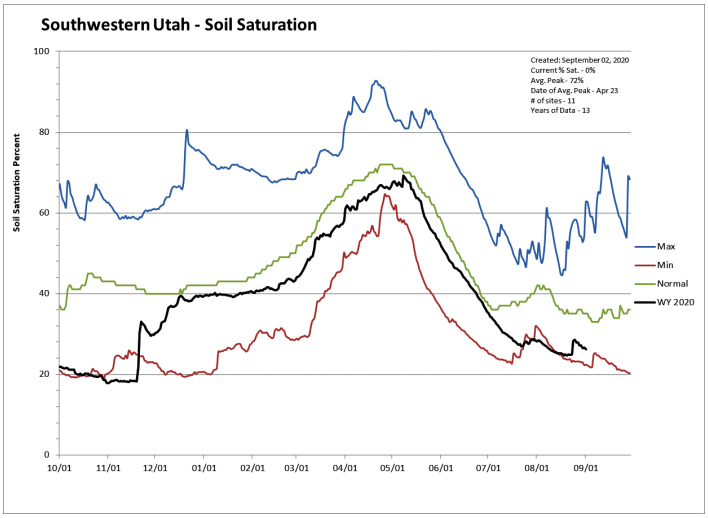


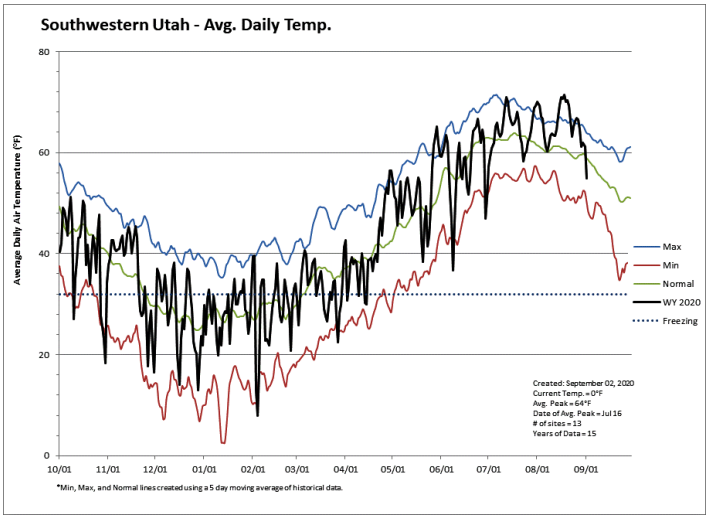
Southwestern Utah

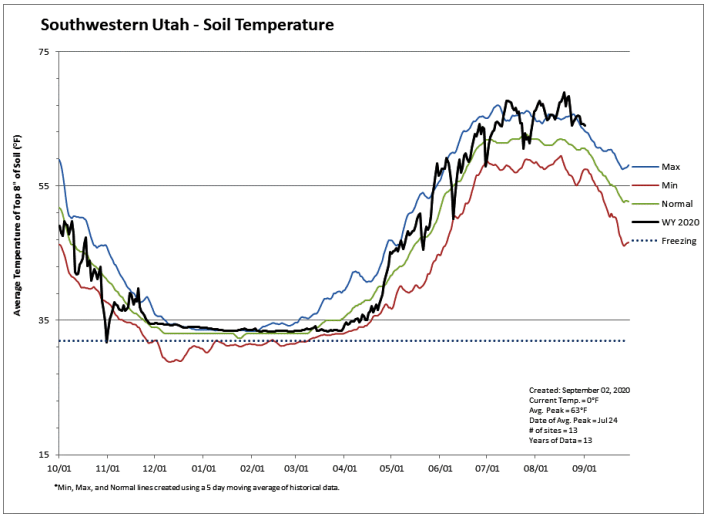
September 1, 2020

Precipitation in August was much below average at 37%, which brings the seasonal accumulation (Oct-Aug) to 80% of average. Soil moisture is at 26% compared to 26% last year. Reservoir storage is at 48% of capacity, compared to 56% last year. The water availability index for the Virgin River is 46%.







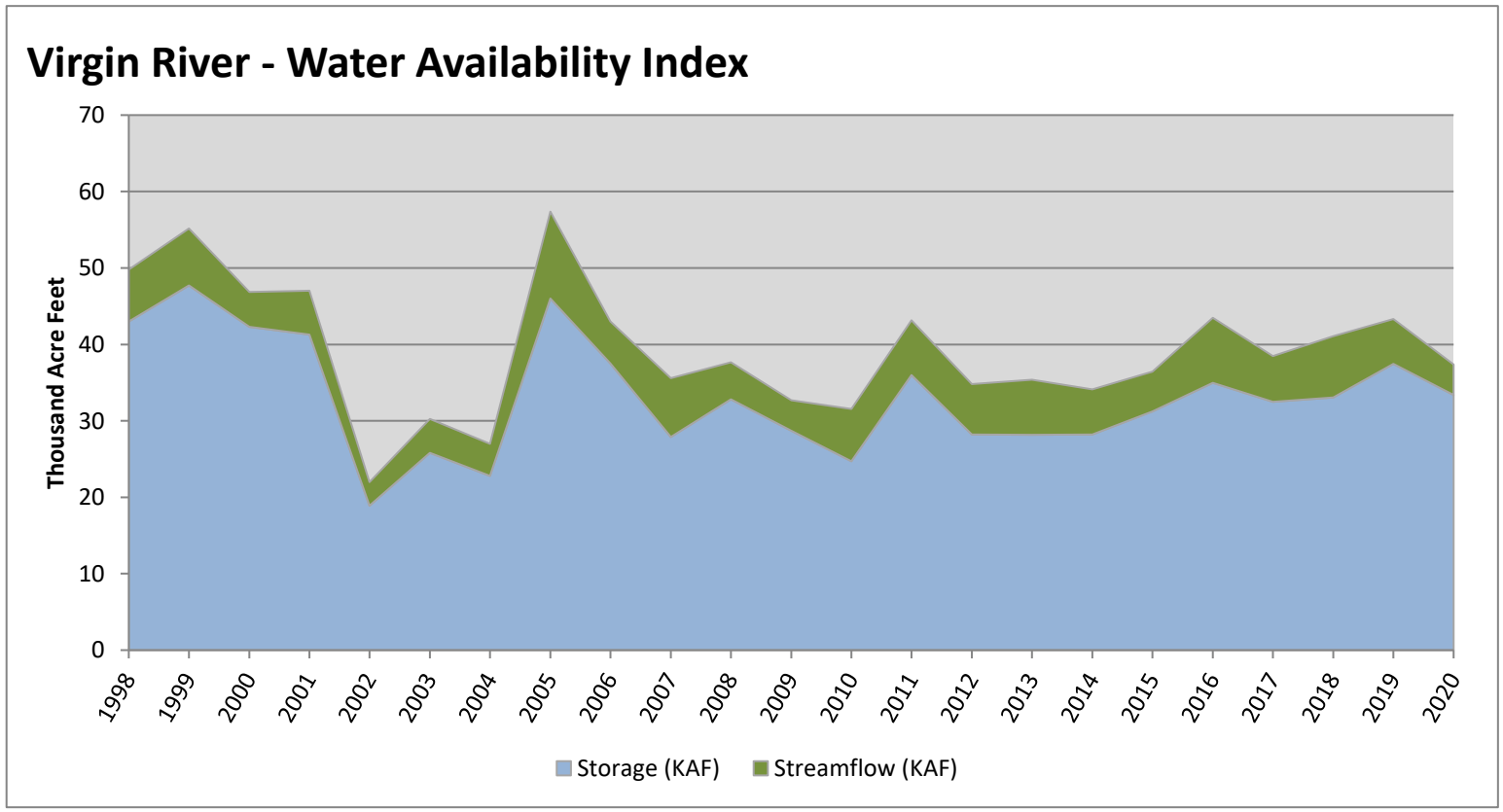


September 1, 2020

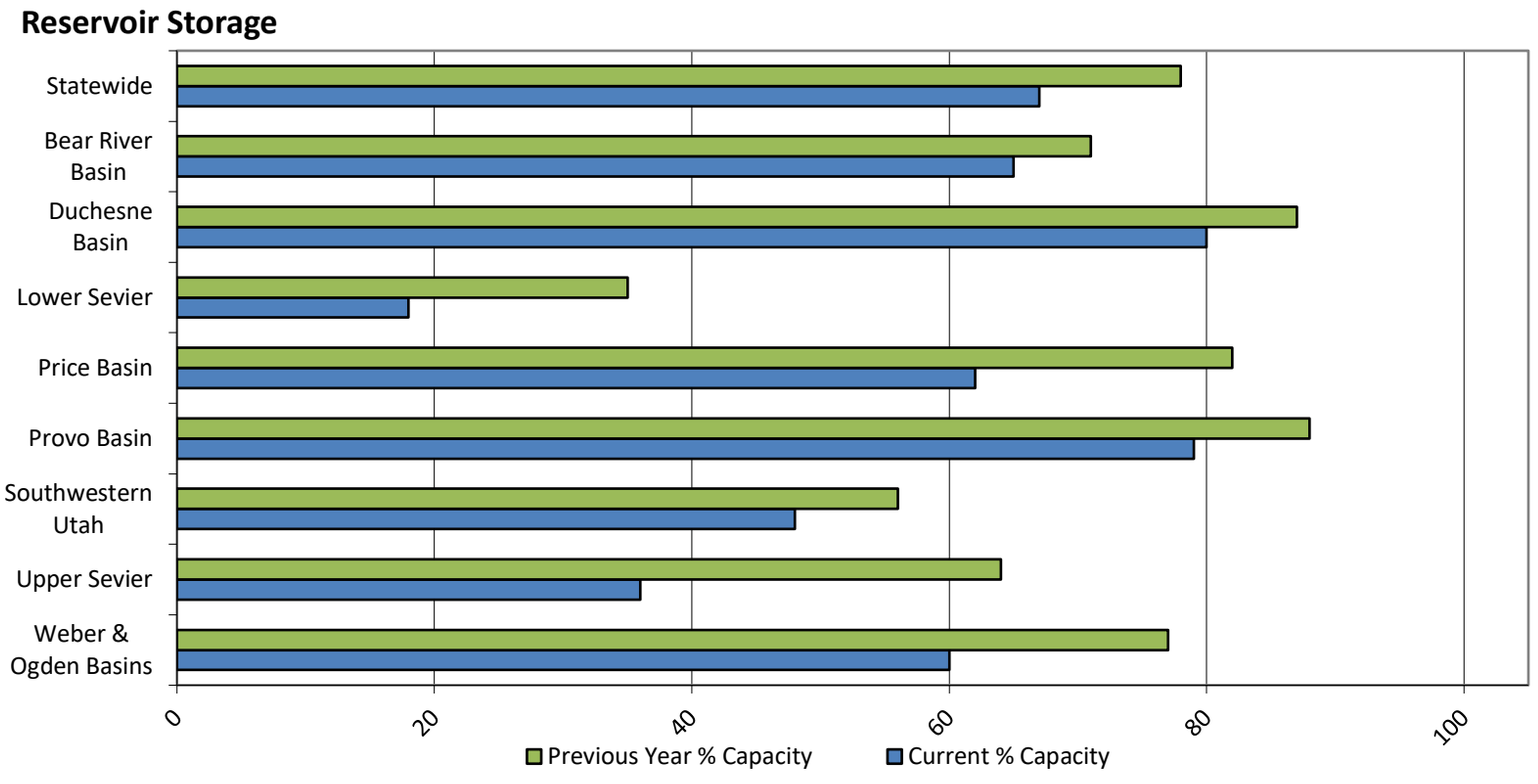
Water Availability Index

Basin or Region	Aug EOM* Storage	August Flow	Storage + Flow	Percentile	WAI#	Years with similiar WAI
	KAF^	KAF^	KAF^	%		
Virgin River	**33.40**	**3.97**	**37.37**	**46**	**-0.35**	**07, 15, 08, 17**

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



Reservoir Storage Summary for the end of August 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	2.5	13.6		25.7	10%	53%			
Causey Reservoir	3.2	5.3	3.4	7.1	45%	75%	48%	95%	156%
Cleveland Lake	2.6	4.8		5.4	47%	88%			
Currant Creek Reservoir	14.8	14.5	15.1	15.5	96%	94%	97%	98%	96%
Deer Creek Reservoir	105.4	132.3	105.7	149.7	70%	88%	71%	100%	125%
East Canyon Reservoir	33.4	40.0	34.8	49.5	67%	81%	70%	96%	115%
Echo Reservoir	24.2	41.5	33.3	73.9	33%	56%	45%	73%	125%
Grantsville Reservoir	1.0	1.6	1.0	3.3	32%	47%	30%	104%	156%
Gunlock	6.5	9.5	5.7	10.4	62%	91%	55%	114%	166%
Gunnison Reservoir	0.0	11.1	7.0	20.3	0%	55%	34%	0%	159%
Huntington North Reservoir	2.3	3.4	1.8	4.2	54%	82%	42%	129%	196%
Hyrum Reservoir	6.3	7.7	6.7	15.3	41%	50%	44%	94%	114%
Joes Valley Reservoir	45.1	52.3	45.1	61.6	73%	85%	73%	100%	116%
Jordanelle Reservoir	255.7	279.2	272.3	314.0	81%	89%	87%	94%	103%
Ken's Lake	0.6	2.2	1.0	2.3	25%	96%	44%	56%	218%
Kolob Reservoir	5.2	5.5		5.6	92%	98%			
Lost Creek Reservoir	15.9	17.7	13.8	22.5	71%	79%	61%	115%	128%
Lower Enterprise	1.6	0.0	0.2	2.6	62%	0%	8%	800%	0%
Miller Flat Reservoir	1.5	1.8		5.2	29%	35%			
Millsite	5.5	8.6	11.8	16.7	33%	51%	71%	46%	73%
Minersville Reservoir	4.5	15.6	7.5	23.3	19%	67%	32%	60%	208%
Moon Lake Reservoir	11.3	26.8	18.7	35.8	31%	75%	52%	60%	143%
Otter Creek Reservoir	25.2	42.8	23.8	52.5	48%	81%	45%	106%	180%
Panguitch Lake	15.8	20.2	13.6	22.3	71%	90%	61%	116%	148%
Pineview Reservoir	58.6	83.5	59.8	110.1	53%	76%	54%	98%	140%
Piute Reservoir	11.6	30.9	21.2	71.8	16%	43%	30%	55%	146%
Porcupine Reservoir	6.0	8.3	5.3	11.3	53%	73%	47%	113%	157%
Quail Creek	26.9	28.0	22.9	40.0	67%	70%	57%	118%	122%
Red Fleet Reservoir	15.9	20.9	19.0	25.7	62%	81%	74%	84%	110%
Rockport Reservoir	38.5	47.8	44.4	60.9	63%	78%	73%	87%	108%
Sand Hollow Reservoir	39.6	46.5		50.0	79%	93%			
Scofield Reservoir	39.2	56.9	32.2	65.8	60%	87%	49%	122%	177%
Settlement Canyon Reservoir	0.2	0.5	0.5	1.0	22%	50%	49%	45%	102%
Sevier Bridge Reservoir	42.4	83.0	93.4	236.0	18%	35%	40%	45%	89%
Smith And Morehouse Reservoir	3.6	6.8	4.8	8.1	44%	84%	59%	74%	143%
Starvation Reservoir	120.7	145.2	130.5	164.1	74%	88%	80%	93%	111%
Stateline Reservoir	5.2	8.4	7.2	12.0	43%	70%	60%	72%	117%
Steinaker Reservoir	4.8	0.9	17.1	33.4	14%	3%	51%	28%	5%
Strawberry Reservoir	946.1	994.7	693.0	1105.9	86%	90%	63%	137%	144%
Upper Enterprise	3.7	6.5	1.7	10.0	37%	65%	17%	213%	374%
Upper Stillwater Reservoir	18.3	24.4	19.6	32.5	56%	75%	60%	94%	124%
Utah Lake	616.6	732.6	690.2	870.9	71%	84%	79%	89%	106%
Willard Bay	153.3	177.9	137.8	215.0	71%	83%	64%	111%	129%
Woodruff Creek	1.3	2.0	0.5	4.0	32%	50%	13%	252%	400%
Woodruff Narrows Reservoir	29.7	43.2	24.4	57.3	52%	75%	43%	122%	177%
Meeks Cabin Reservoir	6.3	17.9	13.2	32.5	19%	55%	41%	47%	135%
Bear Lake	855.1	931.7	635.5	1302.0	66%	72%	49%	135%	147%
Basin-wide Total	3582.3	4184.1	3296.5	5373.1	67%	78%	61%	109%	127%
# 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



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Utah Climate and Water Report

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Salt Lake City, UT