Utah Climate and Water Report

June 1, 2021

View of Tushar Mountains from Pavani Range above Kanosh, Utah

Photo by Jordan Clayton

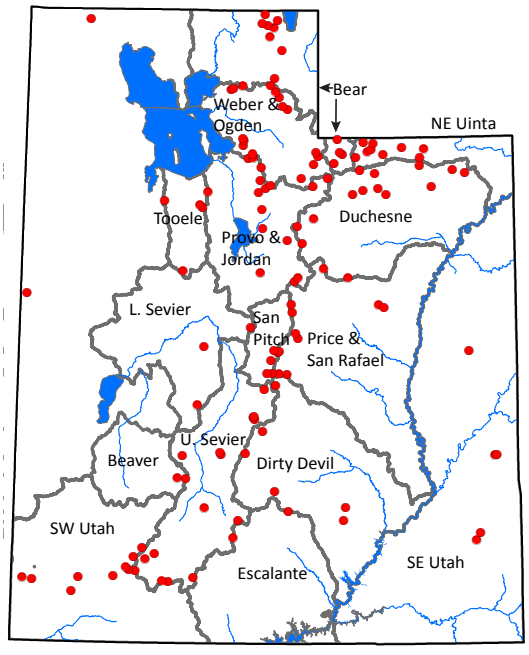
Report Contents

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.

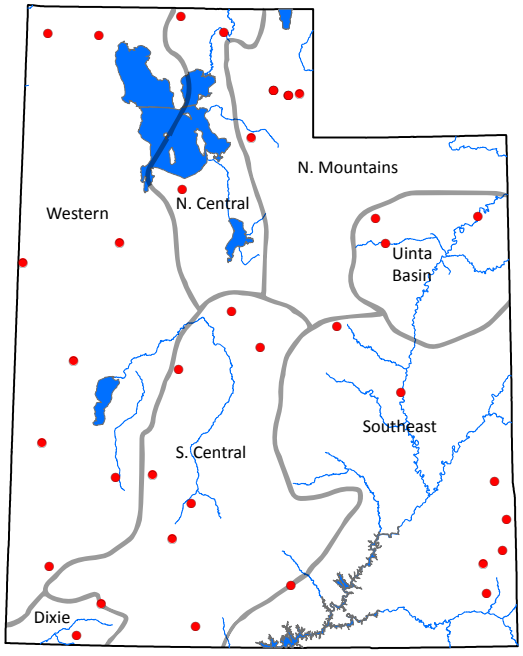
SNOTEL

- 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
June 1, 2021

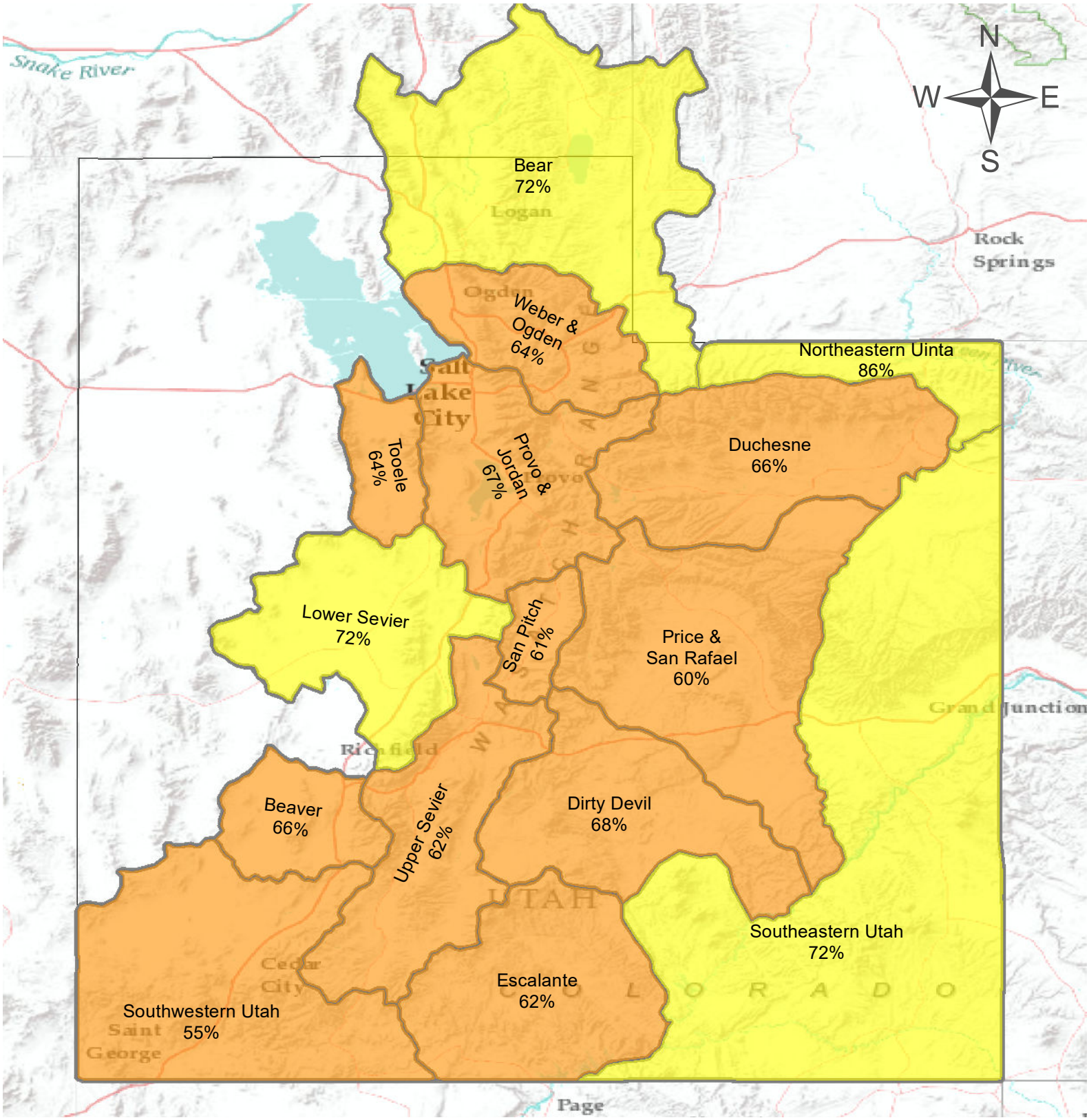
*This report has been reorganized to better reflect two distinct geographic areas being monitored – the low elevation valley sites (**S**oil **C**limate **A**nalysis **N**etwork) that are critical for agricultural production and operations, and the high elevation mountainous areas where water supply 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)

Unfortunately, a dry April was followed by an even drier May, with an average of 0.3 inches of precipitation accumulated in Utah's valley locations. So far in the 2021 water year, 3.9 inches of precipitation has accumulated on average at Utah's SCAN sites. Southwestern Utah has consistently fared the worst and subsequently soil moisture values are very low—below levels we've previously seen in 10 years of measurement. Soil temperatures across the state, while moderate most of May, increased rapidly at the end of the month. Drought conditions remained largely unchanged during May, with the entire state continuing to experience Moderate (D1) to Exceptional (D4) drought. The portion of Utah persisting in Exceptional Drought remains at a very discouraging 62%.

Current Mountain Conditions (SNOTEL)

This has been a tough year so far to be an optimist. Each month we have been hoping for Utah's mountain precipitation to catch up a bit, but almost every month this water year has had below average rain and snow. Unfortunately, May continued the trend. Last month's accumulated precipitation was only 42% of normal, bringing the water-year-to-date accumulation to 66%. We are now entering the climatologically driest portion of the year, so abundant additional supply is unlikely to be delivered by mother nature over the next couple months. Statewide soil moisture is at 64% of normal, and soil temperatures are generally well above average. Utah's reservoir storage has been trending about 15% lower than last year for months until now. Normally, this is the time of year when reservoir levels rebound due to melting snow. However, the lack of a significant runoff response from this winter's snowpack has greatly diminished the ability for our reservoirs to replenish their supply. Statewide storage is currently at 66% of capacity, which is actually 3% LOWER than last month and 23% lower than last year at this time. These water supply conditions are causing Utah's current Water Availability Indices (WAIs) to drop to historically-low levels for 10 of Utah's 18 major basins, with several others at extremely low levels.



Statewide Precipitation

As of June 1, 2021:

66% of Normal Precipitation

42% 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%

June 1, 2021

Water Availability Index

Basin or Region	May EOM* Storage	May Flow	Storage + Flow	Percentile	WAI#	Years with similiar WAI
	*KAF^*	*KAF^*	*KAF^*	*%*		
Bear River	**804**	**24.7**	**829**	**52**	**0.2**	**11, 01, 89, 13**
Woodruff Narrows	**12.8**	**24.7**	**37.5**	**5**	**-3.8**	**02, 99, 90, 95**
Little Bear	**13.3**	**1.9**	**15.2**	**3**	**-3.9**	**01, 15, 12, 07**
Ogden	**67.3**	**6.0**	**73.3**	**5**	**-3.8**	**92, 88, 87, 13**
Weber	**124.0**	**28.3**	**152.3**	**3**	**-3.9**	**13, 92, 02, 04**
Provo River	**344.5**	**17.3**	**361.8**	**4**	**-3.9**	**13, 04, 08, 11**
Western Uinta	**185.6**	**10.0**	**195.6**	**31**	**-1.6**	**98, 08, 04, 92**
Eastern Uinta	**27.2**	**13.0**	**40.2**	**5**	**-3.8**	**02, 14, 19, 89**
Blacks Fork	**16.6**	**24.8**	**41.4**	**18**	**-2.7**	**91, 10, 19, 89**
Price	**33.3**	**1.9**	**35.1**	**14**	**-3.0**	**04, 14, 16, 91**
Smiths Creek	**8.3**	**10.0**	**18.3**	**37**	**-1.1**	**99, 98, 97, 93**
Joes Valley	**37.6**	**2.5**	**40.1**	**5**	**-3.8**	**91, 19, 95, 90**
Moab	**0.9**	**0.5**	**1.4**	**14**	**-3.0**	**18, 89, 12, 90**
Upper Sevier River	**39.4**	**0.7**	**40.0**	**5**	**-3.8**	**04, 91, 03, 18**
San Pitch	**0.0**	**2.5**	**2.5**	**2**	**-4.0**	**13, 18, 15, 16**
Lower Sevier	**62.6**	**1.7**	**64.3**	**7**	**-3.6**	**18, 04, 17, 16**
Beaver	**6.9**	**2.9**	**9.8**	**2**	**-4.0**	**00, 18, 03, 04**
Virgin River	**35.6**	**4.6**	**40.3**	**20**	**-2.5**	**14, 02, 18, 13**

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

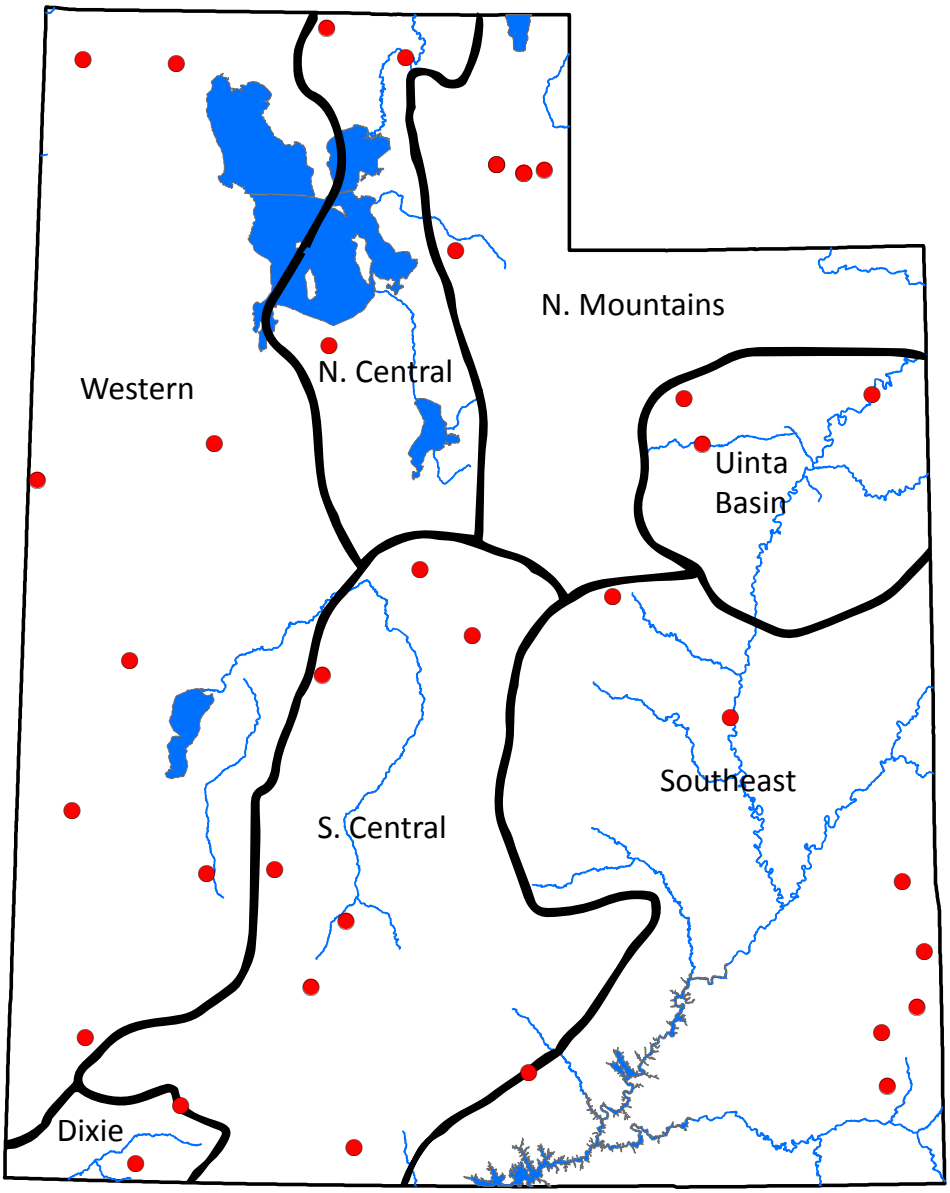
What is a Water Availability Index?

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.

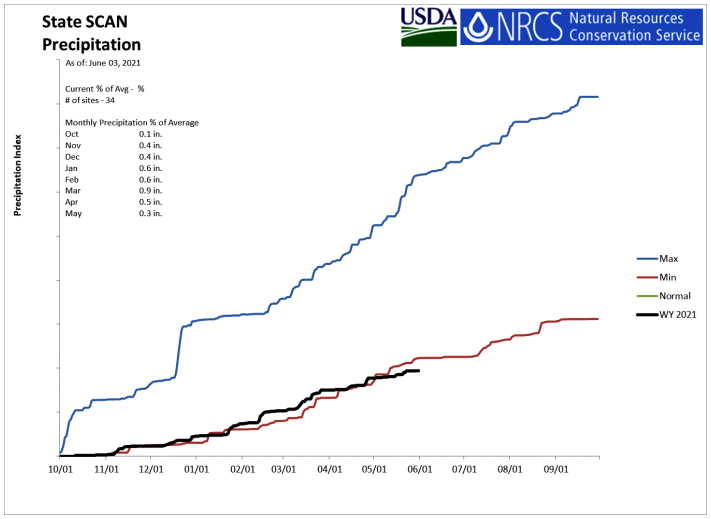
SCAN portion of report

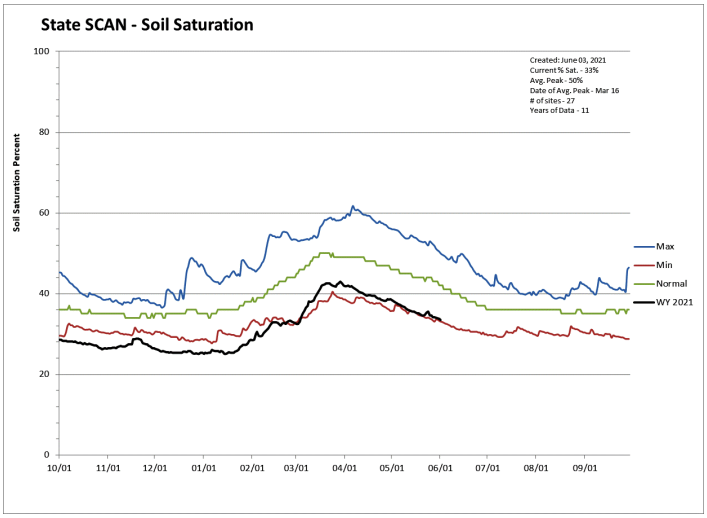


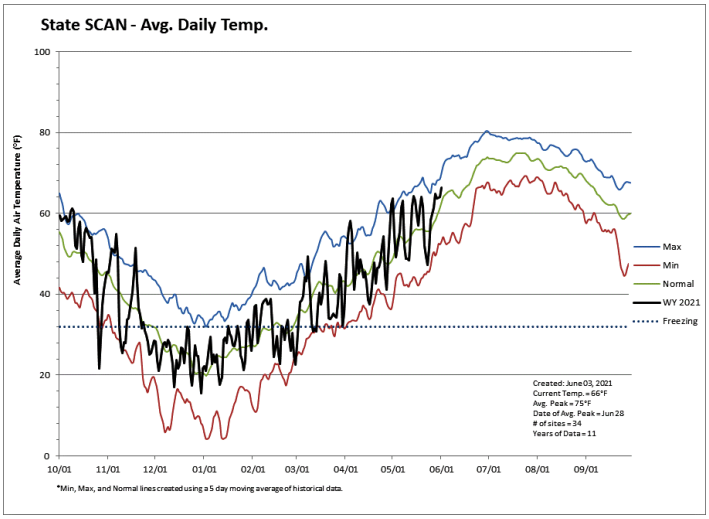
Statewide SCAN

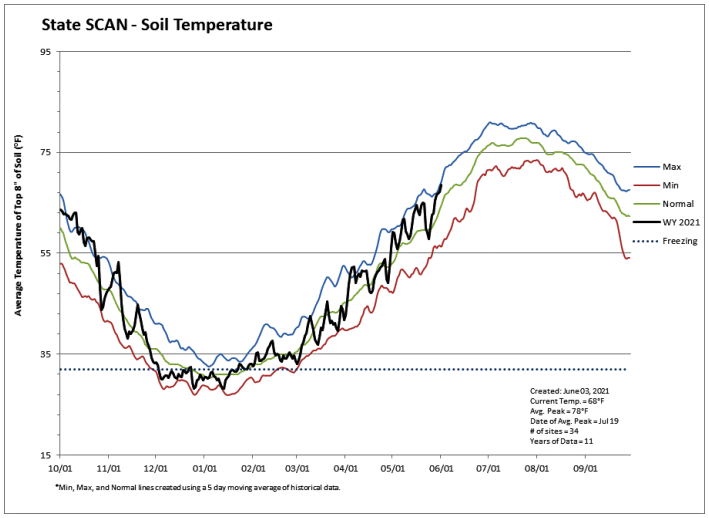
June 1, 2021

The average precipitation at SCAN sites within Utah was 0.3 inches in May, which brings the seasonal accumulation (Oct-May) to 3.9 inches. Soil moisture is at 34% compared to 35% last year.





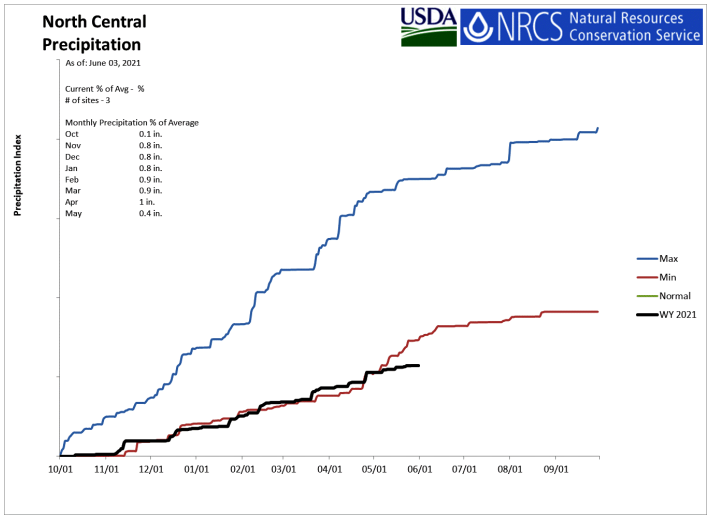


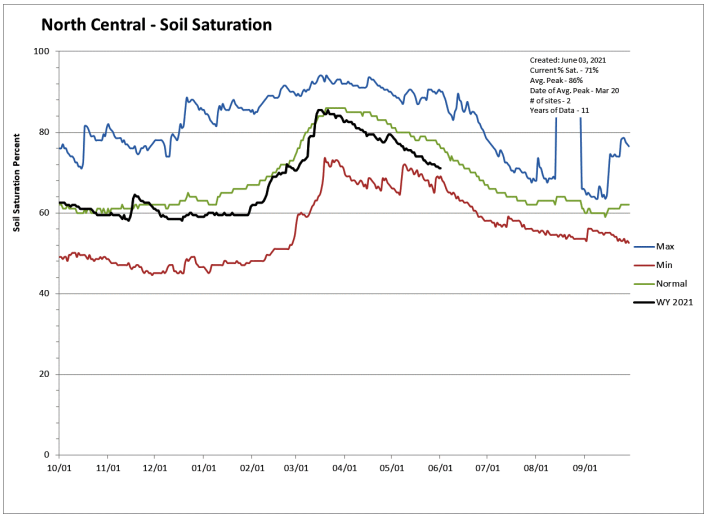


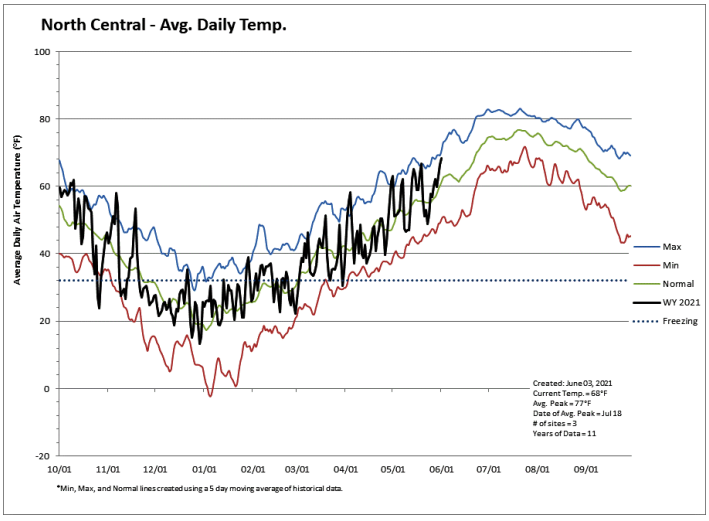
North Central

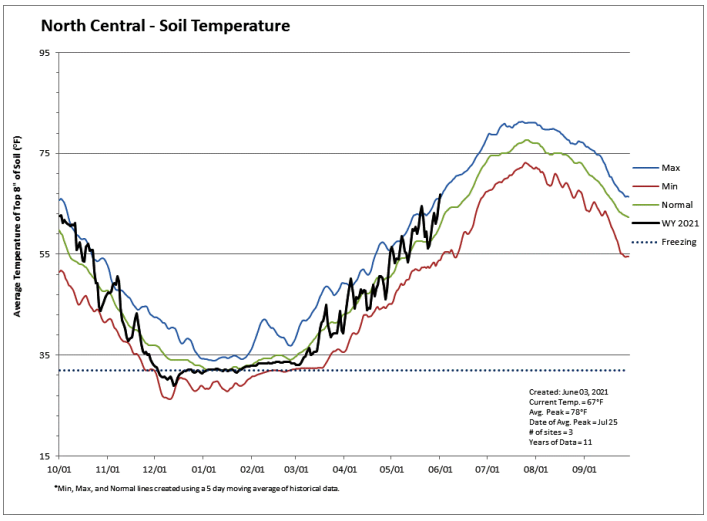
June 1, 2021

The average precipitation in May at SCAN sites within the basin was 0.4 inches, which brings the seasonal accumulation (Oct-May) to 5.7 inches. Soil moisture is at 71% compared to 76% last year.





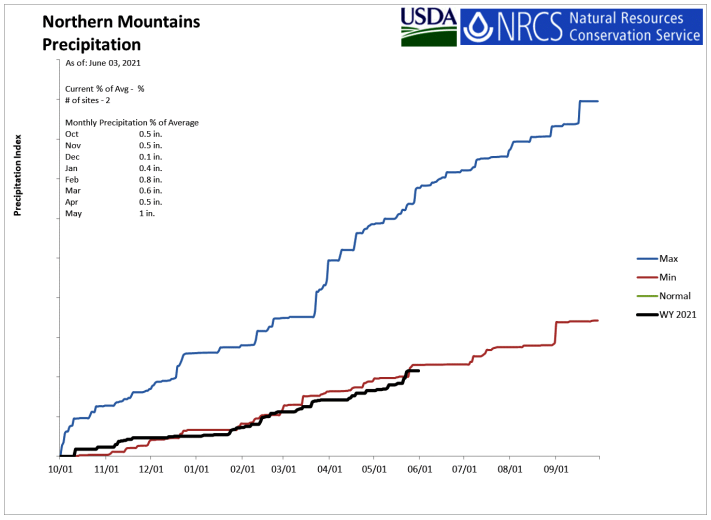


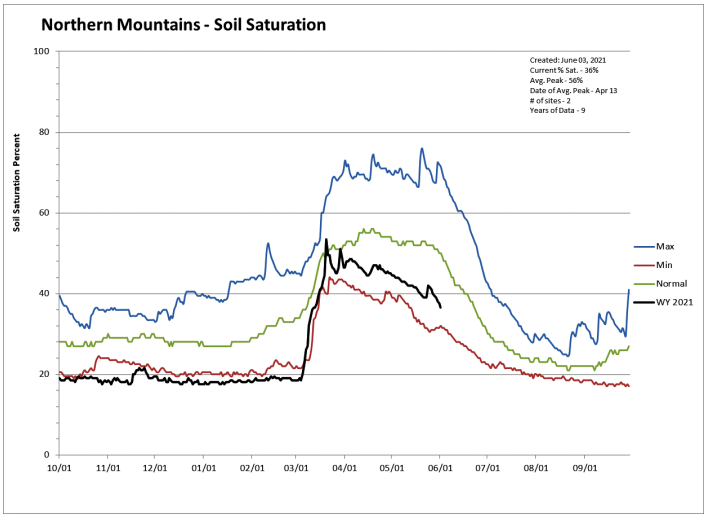


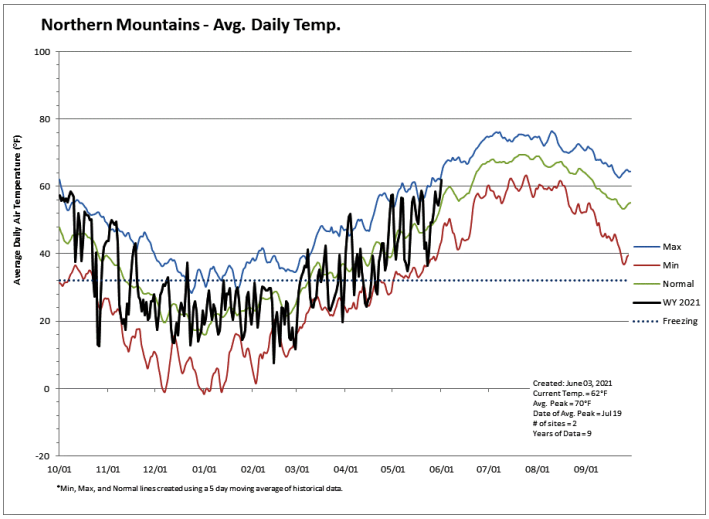
Northern Mountains

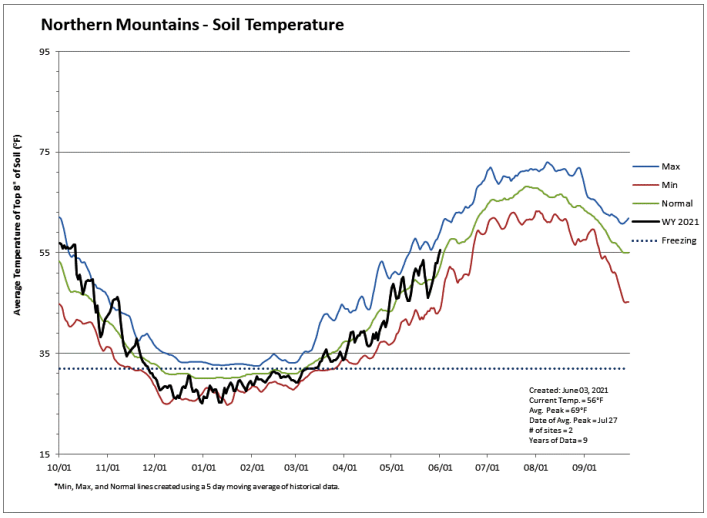
June 1, 2021

The average precipitation in May at SCAN sites within the basin was 1 inch, which brings the seasonal accumulation (Oct-May) to 4.3 inches. Soil moisture is at 37% compared to 40% last year.





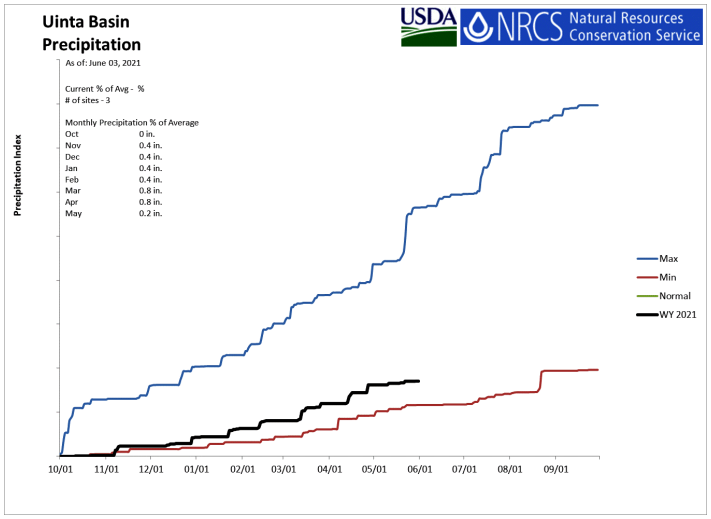


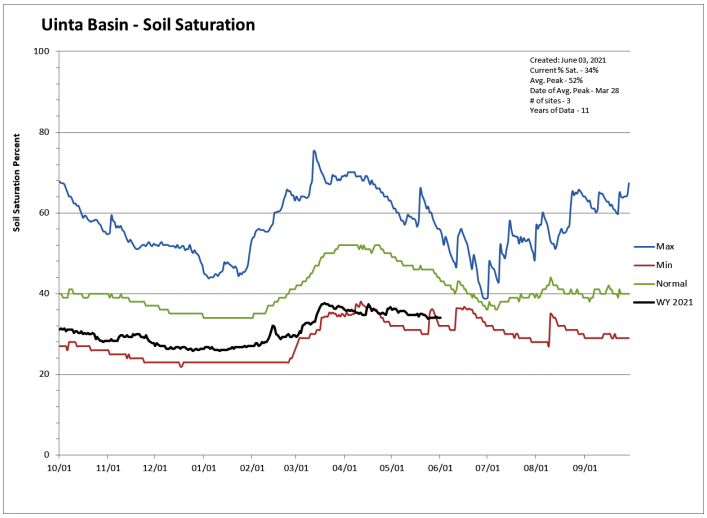


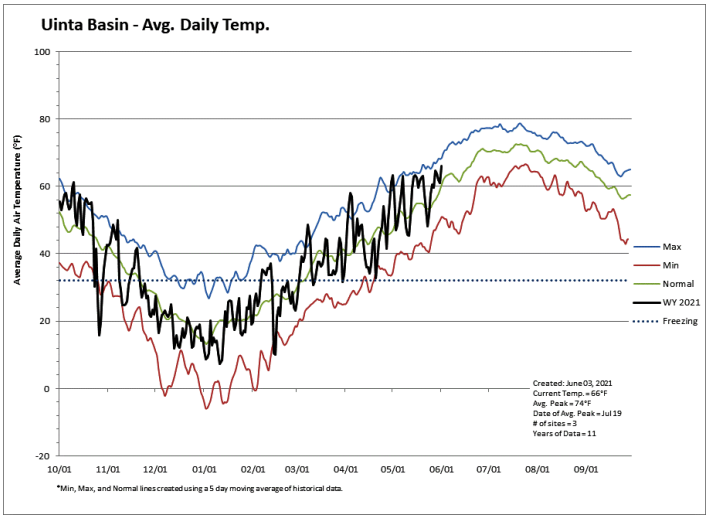
Uinta Basin

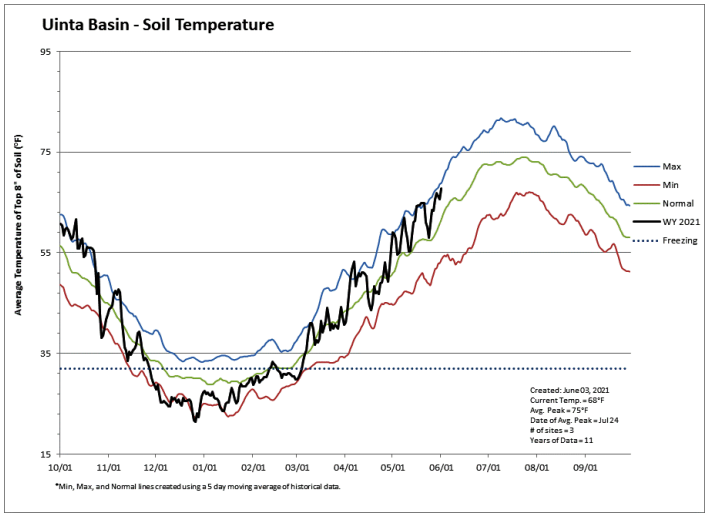
June 1, 2021

The average precipitation in May at SCAN sites within the basin was 0.2 inches, which brings the seasonal accumulation (Oct-May) to 3.4 inches. Soil moisture is at 34% compared to 35% last year.





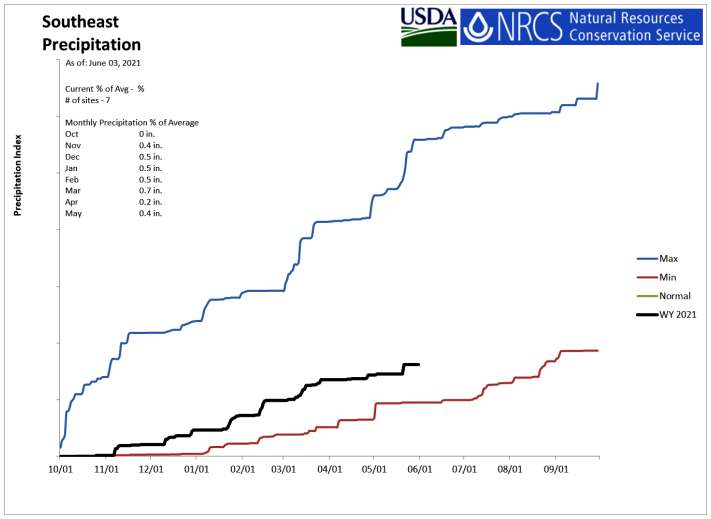


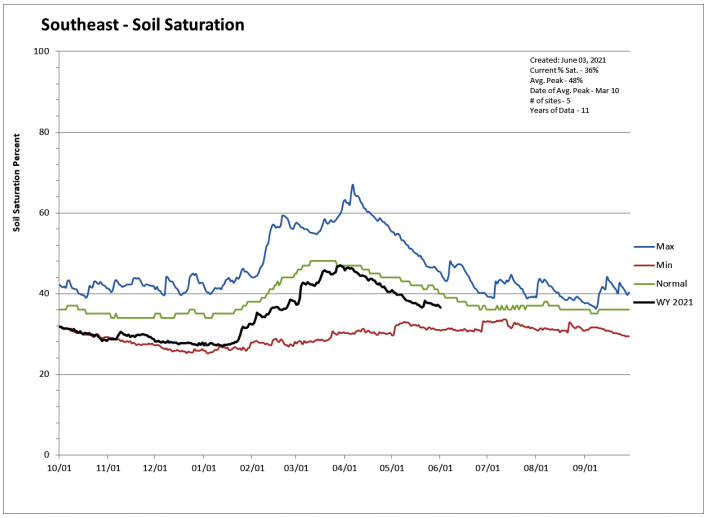


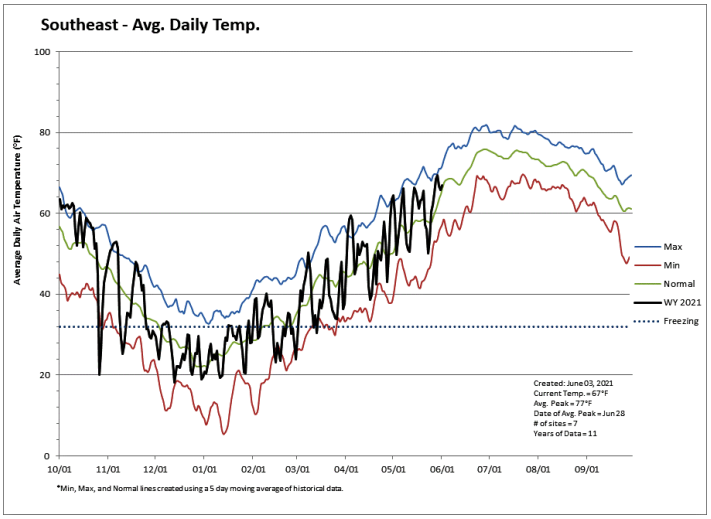
Southeast

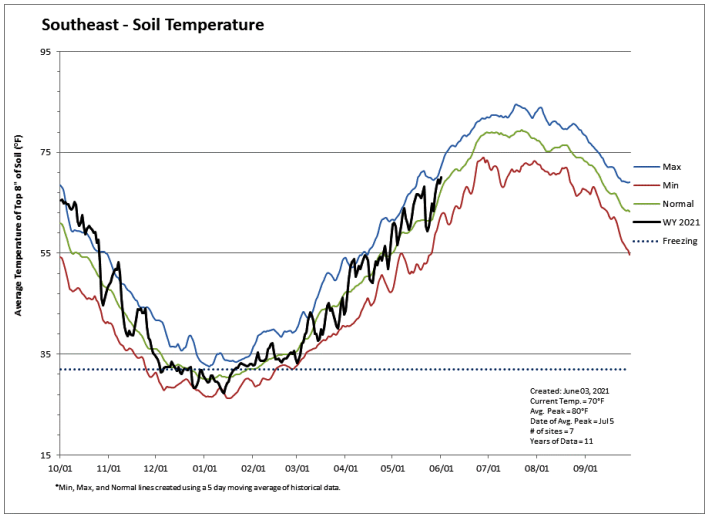
June 1, 2021

The average precipitation in May at SCAN sites within the basin was 0.4 inches, which brings the seasonal accumulation (Oct-May) to 3.2 inches. Soil moisture is at 37% compared to 37% last year.





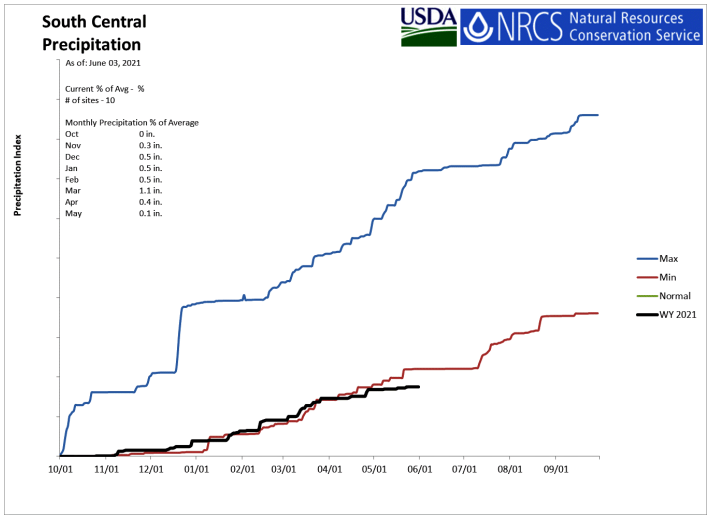


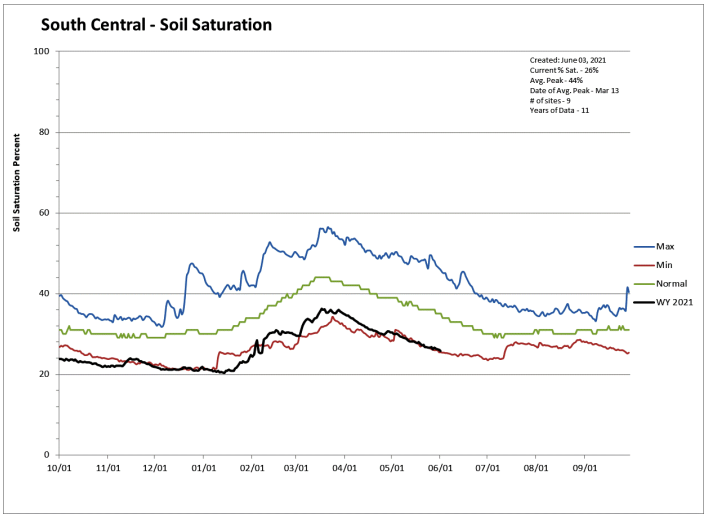


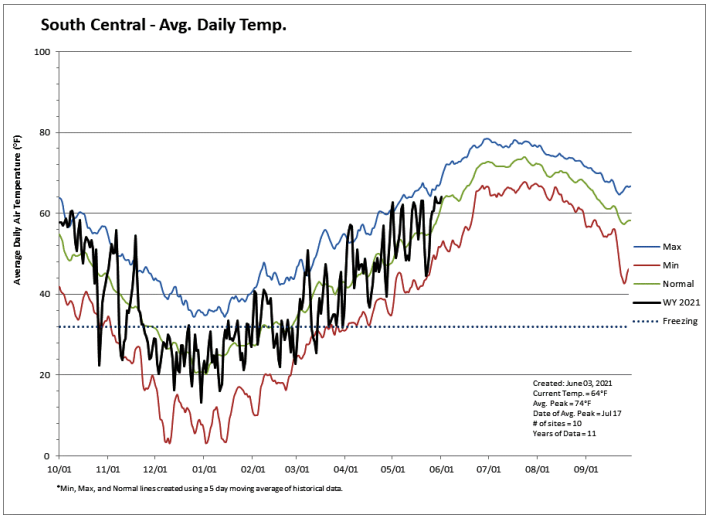
South Central

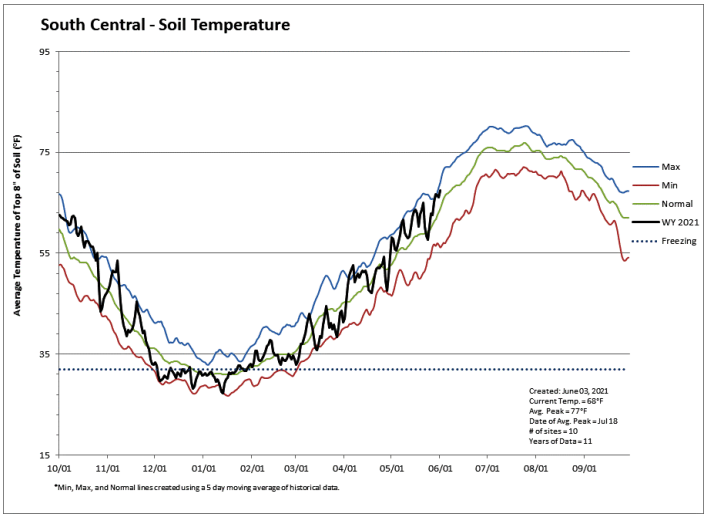
June 1, 2021

The average precipitation in May at SCAN sites within the basin was 0.1 inches, which brings the seasonal accumulation (Oct-May) to 3.5 inches. Soil moisture is at 26% compared to 30% last year.





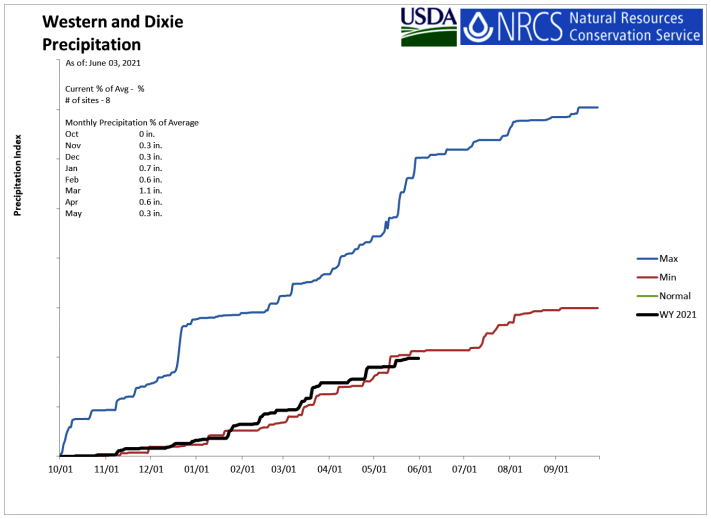


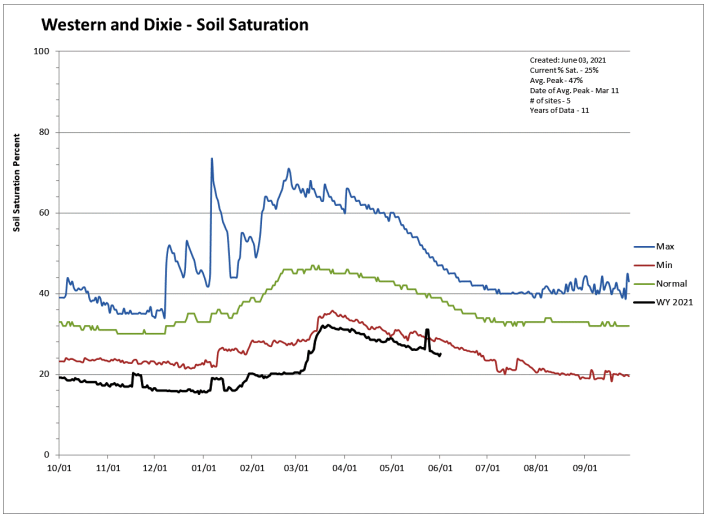


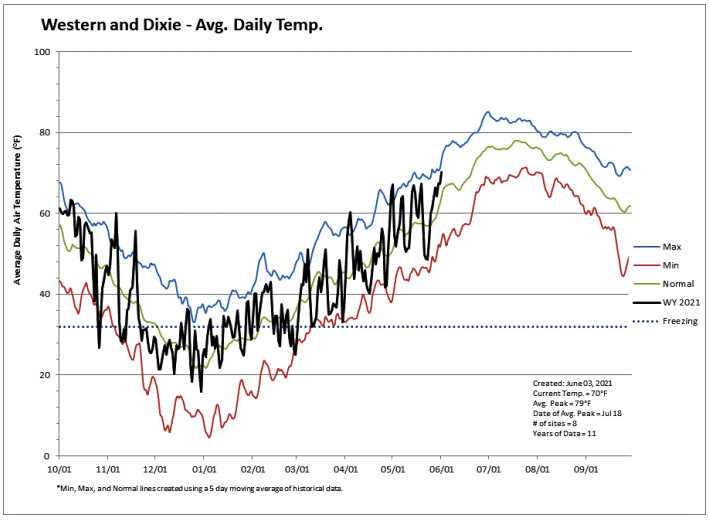
Western and Dixie

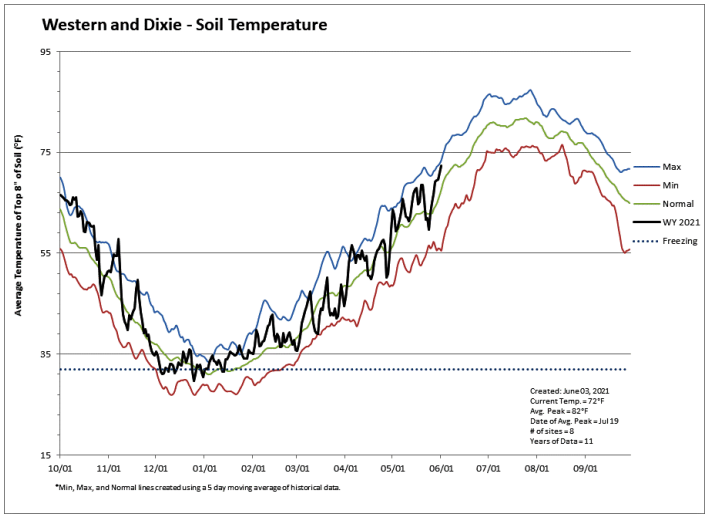
June 1, 2021

The average precipitation in May at SCAN sites within the basin was 0.3 inches, which brings the seasonal accumulation (Oct-May) to 3.9 inches. Soil moisture is at 25% compared to 26% last year.

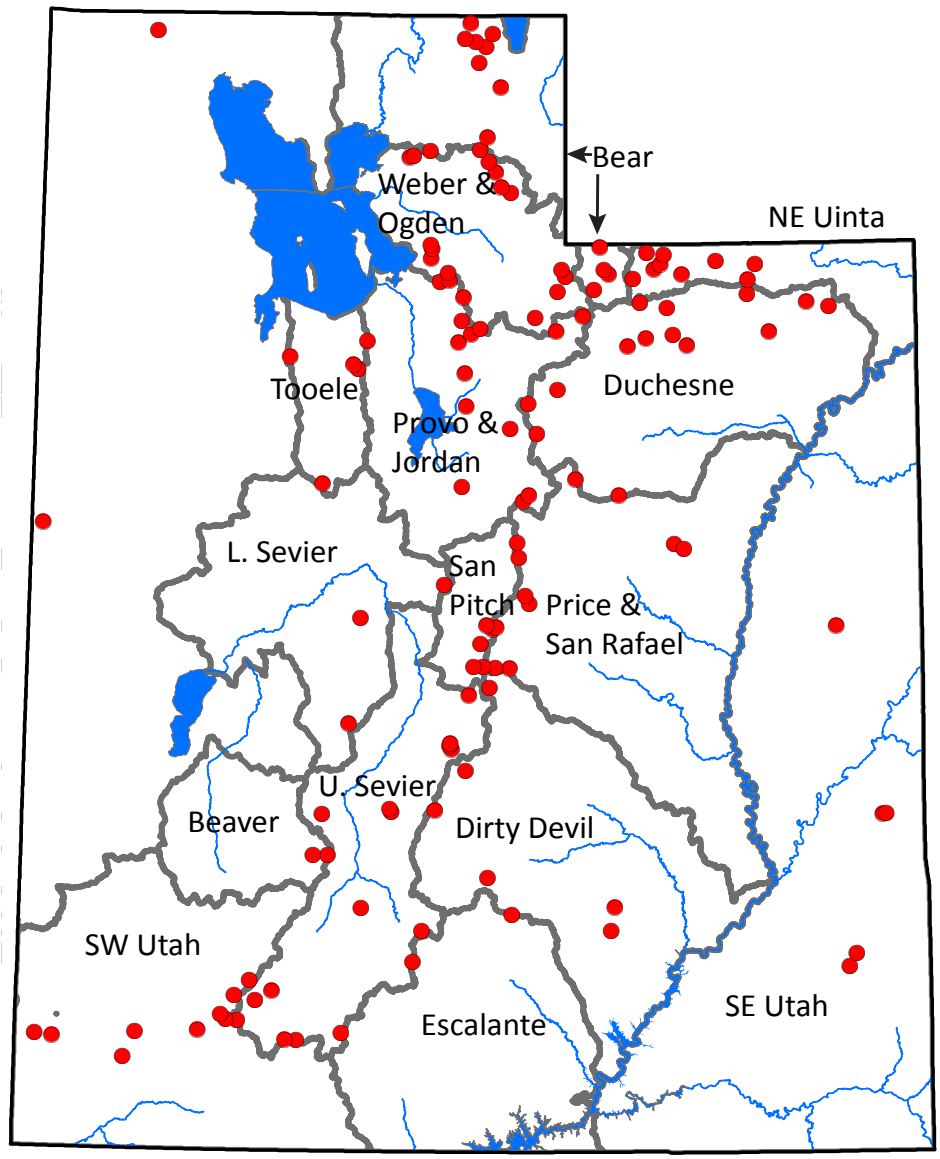








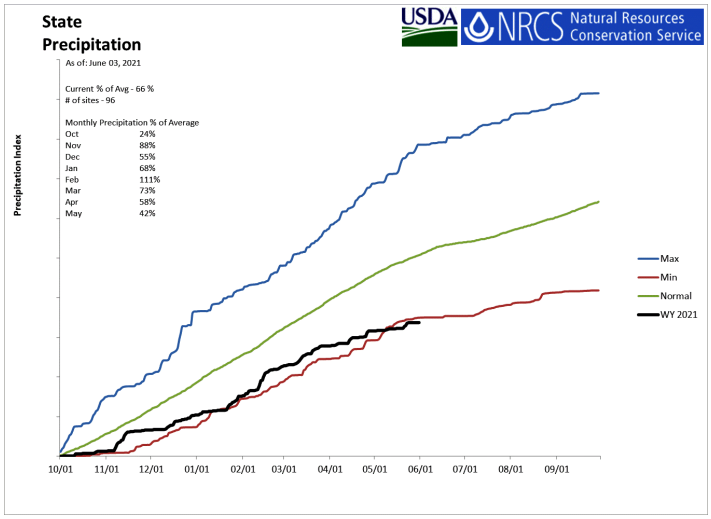
SNOTEL portion of report

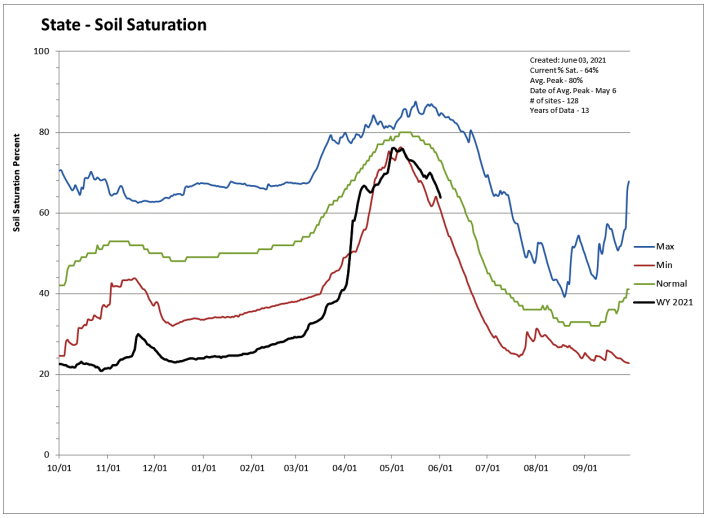


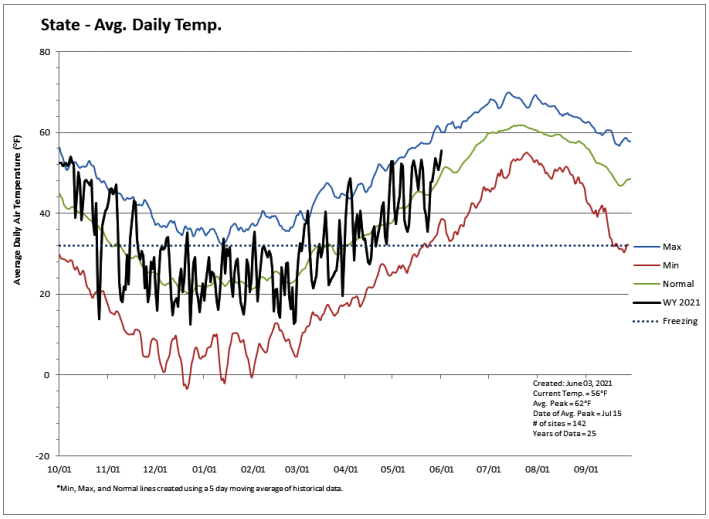
Statewide SNOTEL

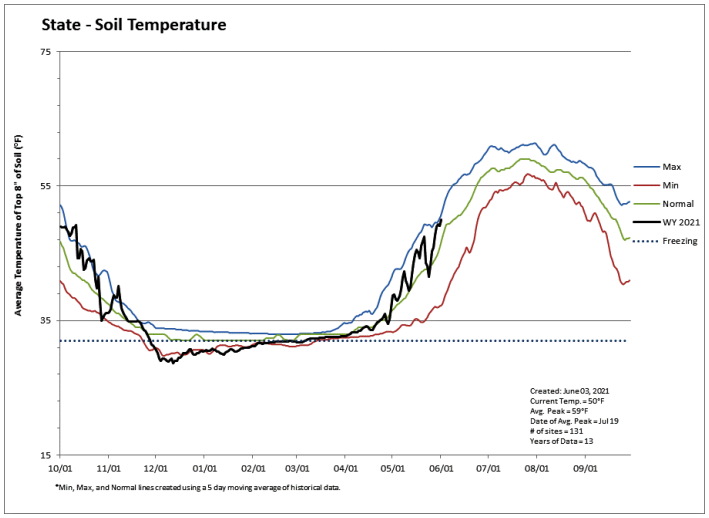
June 1, 2021

Precipitation at SNOTEL sites during May was much below average at 42%, which brings the seasonal accumulation (Oct-May) to 66% of average. Soil moisture is at 64% compared to 65% last year. Reservoir storage is at 66% of capacity, compared to 89% last year.





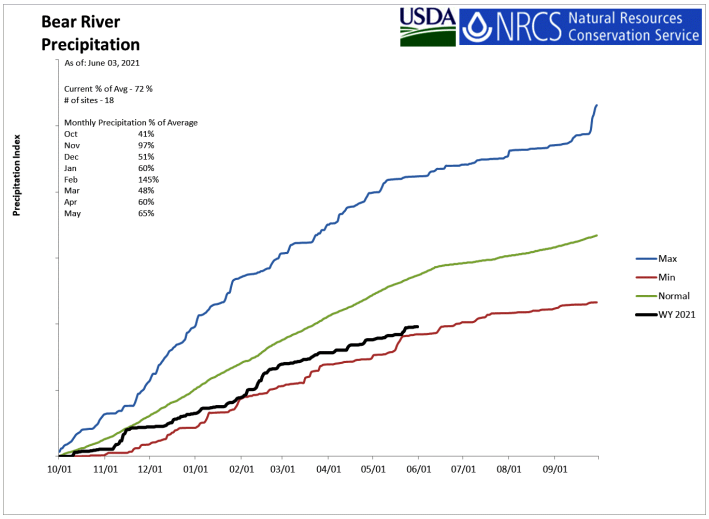


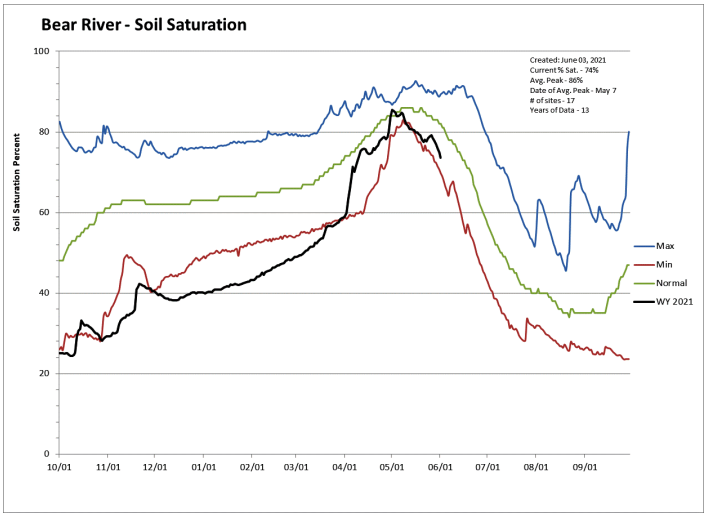


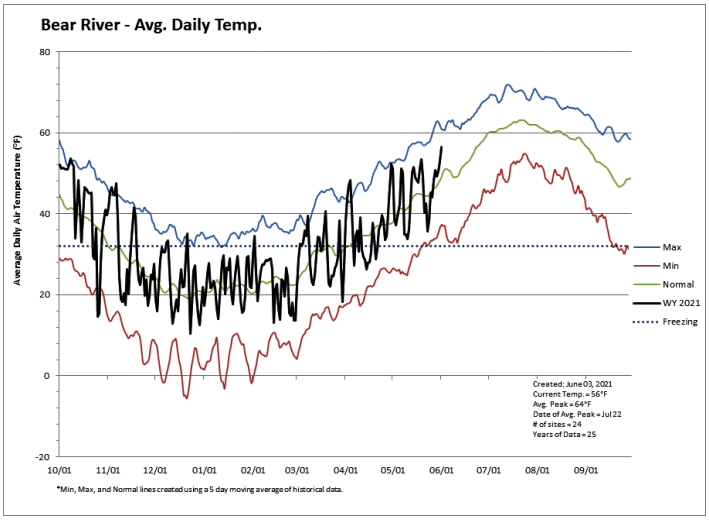
Bear River Basin

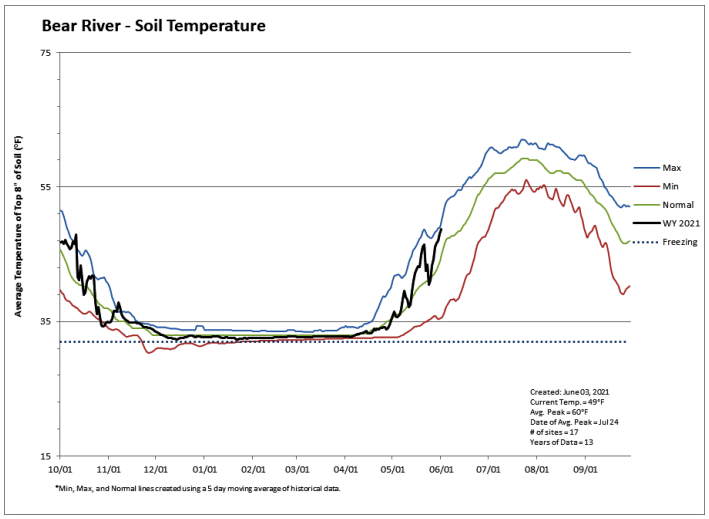
June 1, 2021

Precipitation in May was much below average at 65%, which brings the seasonal accumulation (Oct-May) to 72% of average. Soil moisture is at 76% compared to 79% last year. Reservoir storage is at 61% of capacity, compared to 86% last year. The water availability index for the Bear River is 52%, 5% for Woodruff Narrows and 3% for the Little Bear.









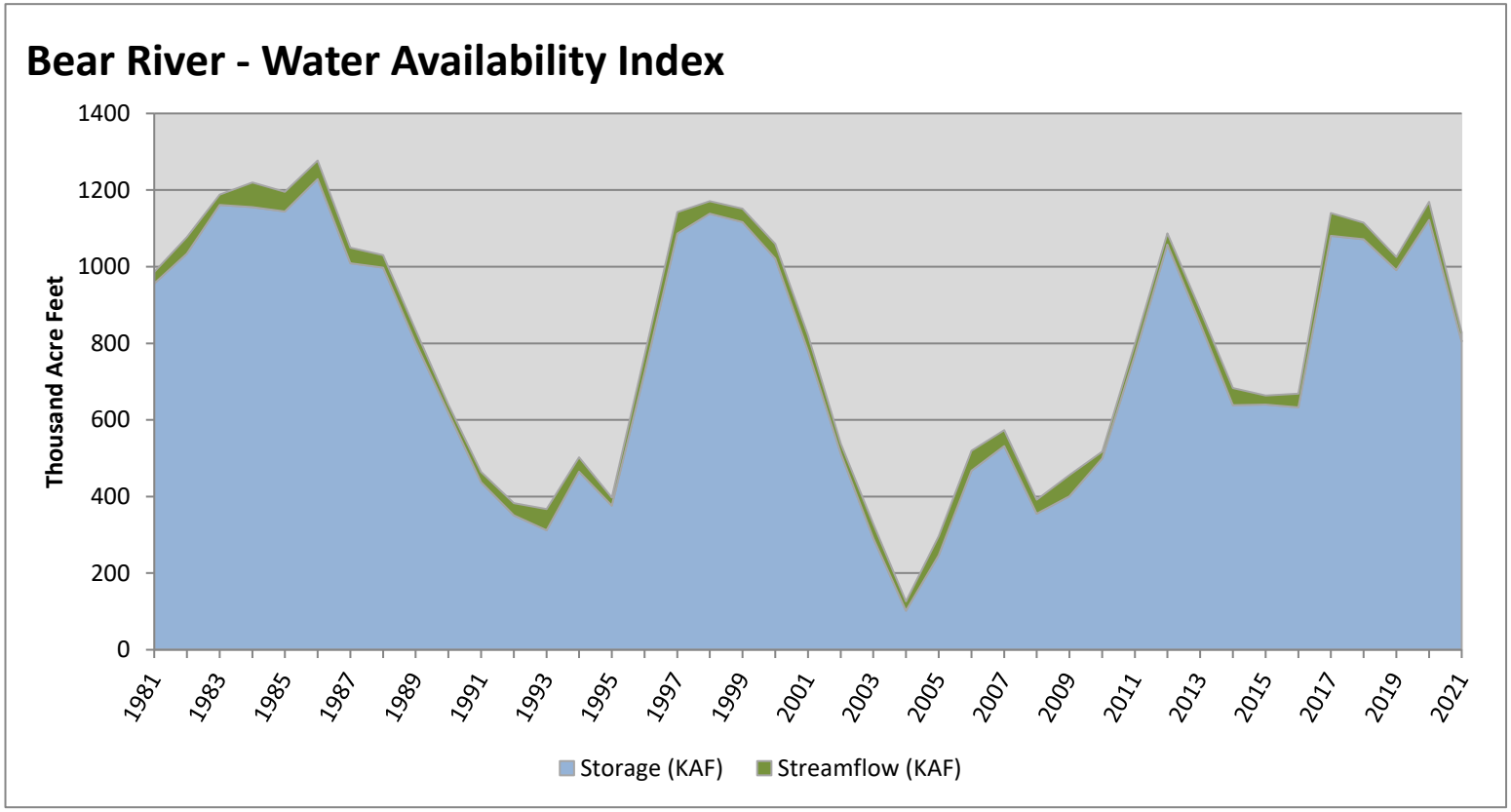
SNOTEL Data

June 1, 2021

Water Availability Index

Basin or Region	May EOM* Storage	May Flow	Storage + Flow	Percentile	WAI#	Years with similiar WAI
	KAF^	KAF^	KAF^	%		
Bear River	**804.33**	**24.70**	**829.03**	**52**	**0.2**	**11, 01, 89, 13**

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

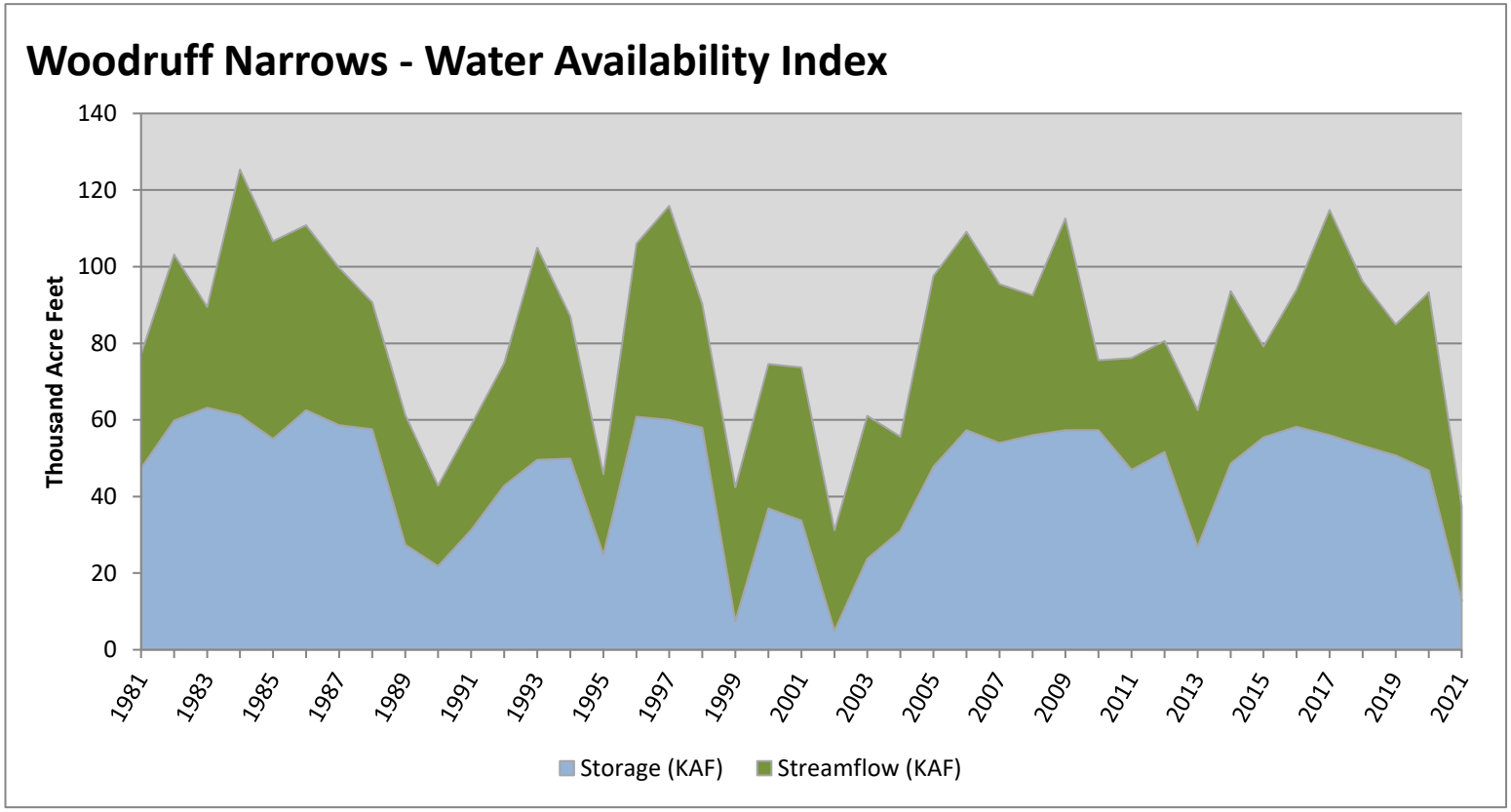


June 1, 2021

Water Availability Index

Basin or Region	May EOM* Storage	May Flow	Storage + Flow	Percentile	WAI#	Years with similiar WAI
	KAF^	KAF^	KAF^	%		
Woodruff Narrows	**12.77**	**24.70**	**37.47**	**5**	**-3.77**	**02, 99, 90, 95**

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

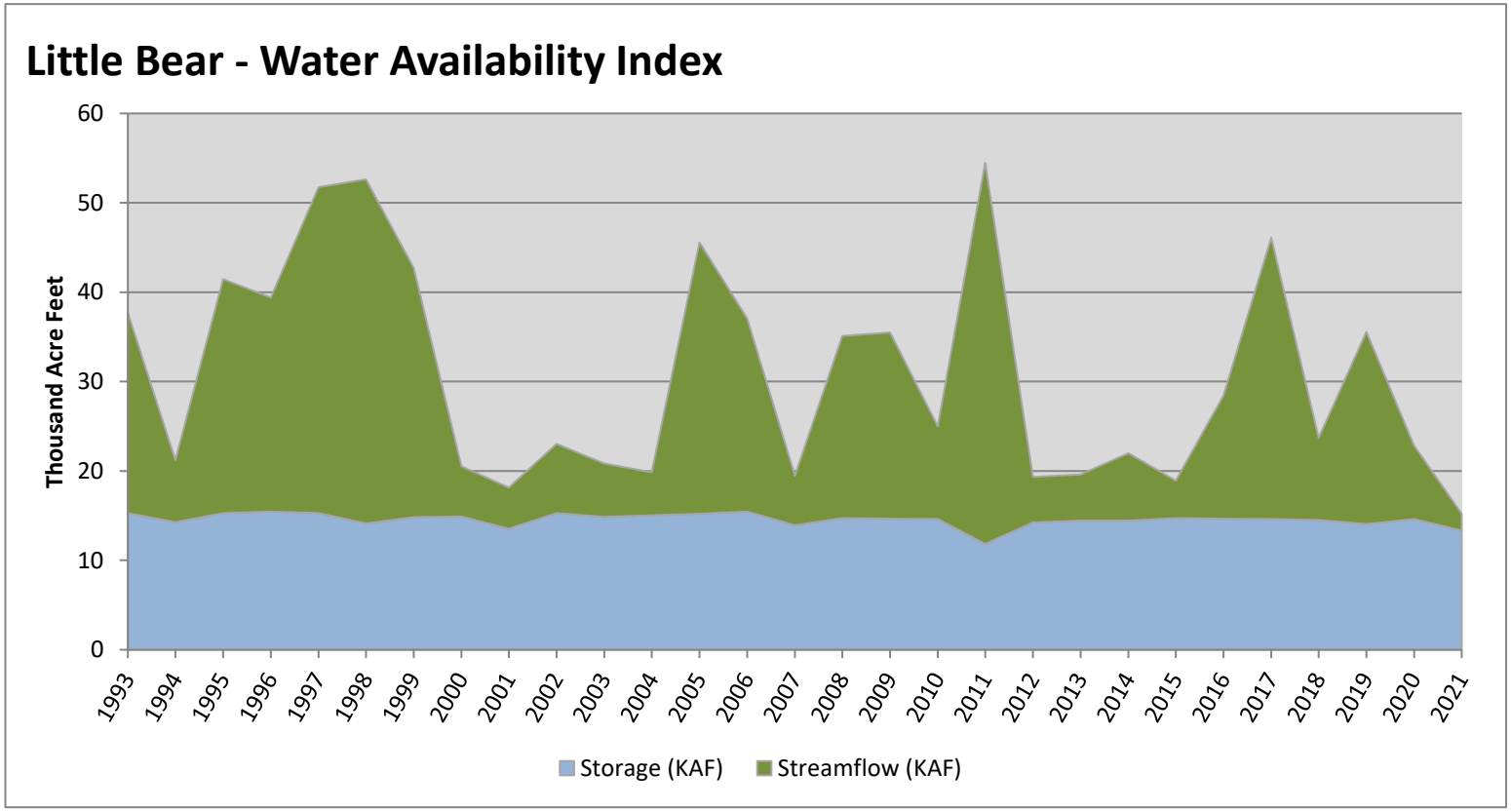


June 1, 2021

Water Availability Index

Basin or Region	May EOM* Storage	May Flow	Storage + Flow	Percentile	WAI#	Years with similiar WAI
	KAF^	KAF^	KAF^	%		
Little Bear	**13.34**	**1.86**	**15.20**	**3**	**-3.89**	**01, 15, 12, 07**

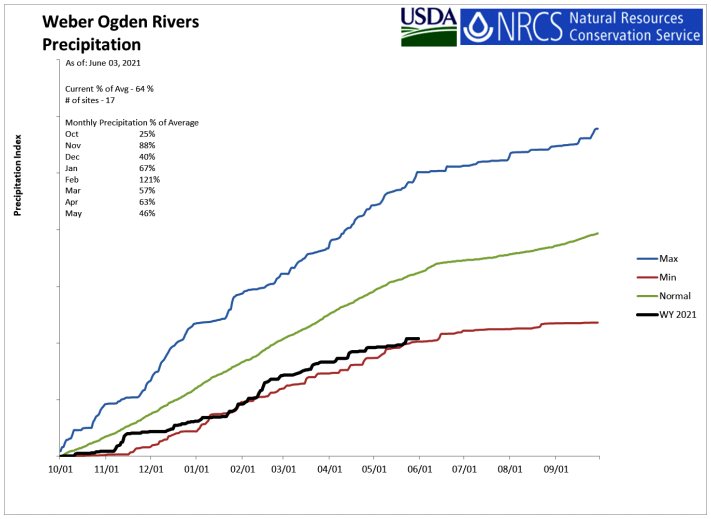
*EOM, end of month; #WAI, Water Availability Index; ^KAF, thousand acre-feet.

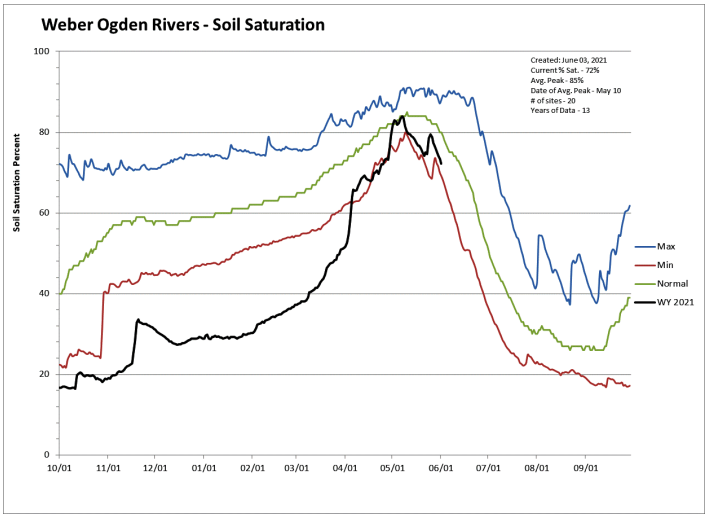


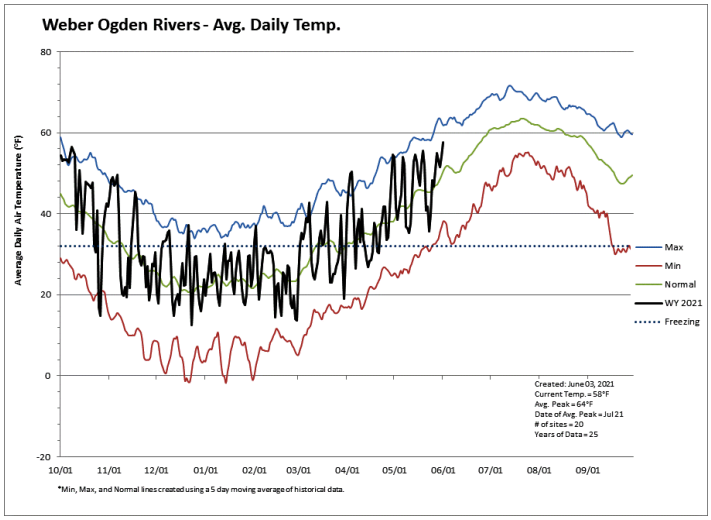
Weber & Ogden River Basins

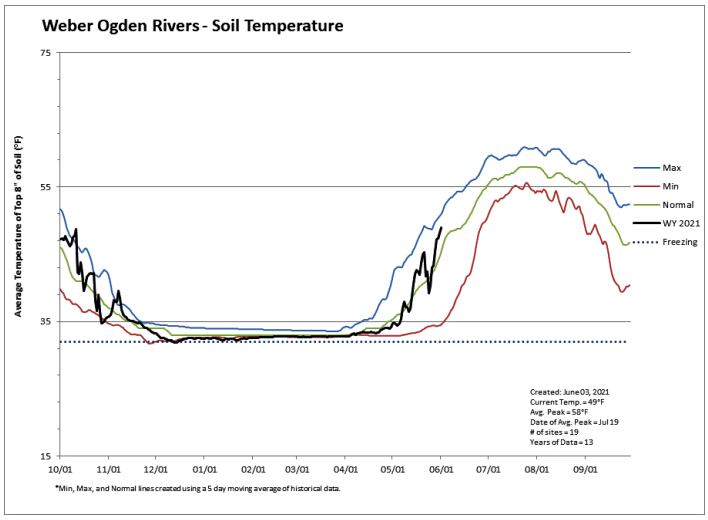
June 1, 2021

Precipitation in May was much below average at 46%, which brings the seasonal accumulation (Oct-May) to 64% of average. Soil moisture is at 72% compared to 74% last year. Reservoir storage is at 60% of capacity, compared to 92% last year. The water availability index for the Ogden River is 5% and 3% for the Weber River.









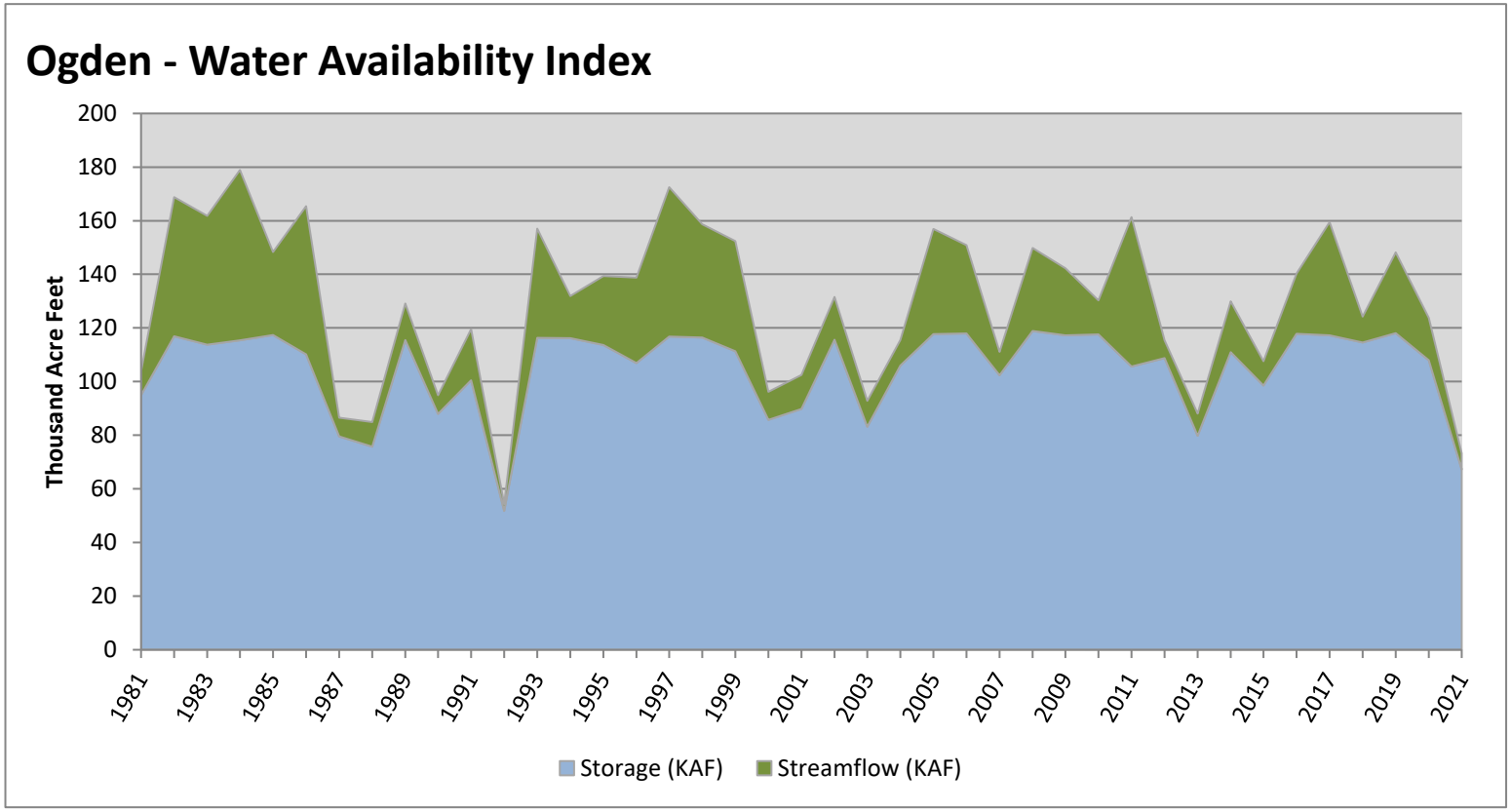
SNOTEL Data

June 1, 2021

Water Availability Index

Basin or Region	May EOM* Storage	May Flow	Storage + Flow	Percentile	WAI#	Years with similiar WAI
	KAF^	KAF^	KAF^	%		
Ogden	**67.25**	**6.01**	**73.26**	**5**	**-3.77**	**92, 88, 87, 13**

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

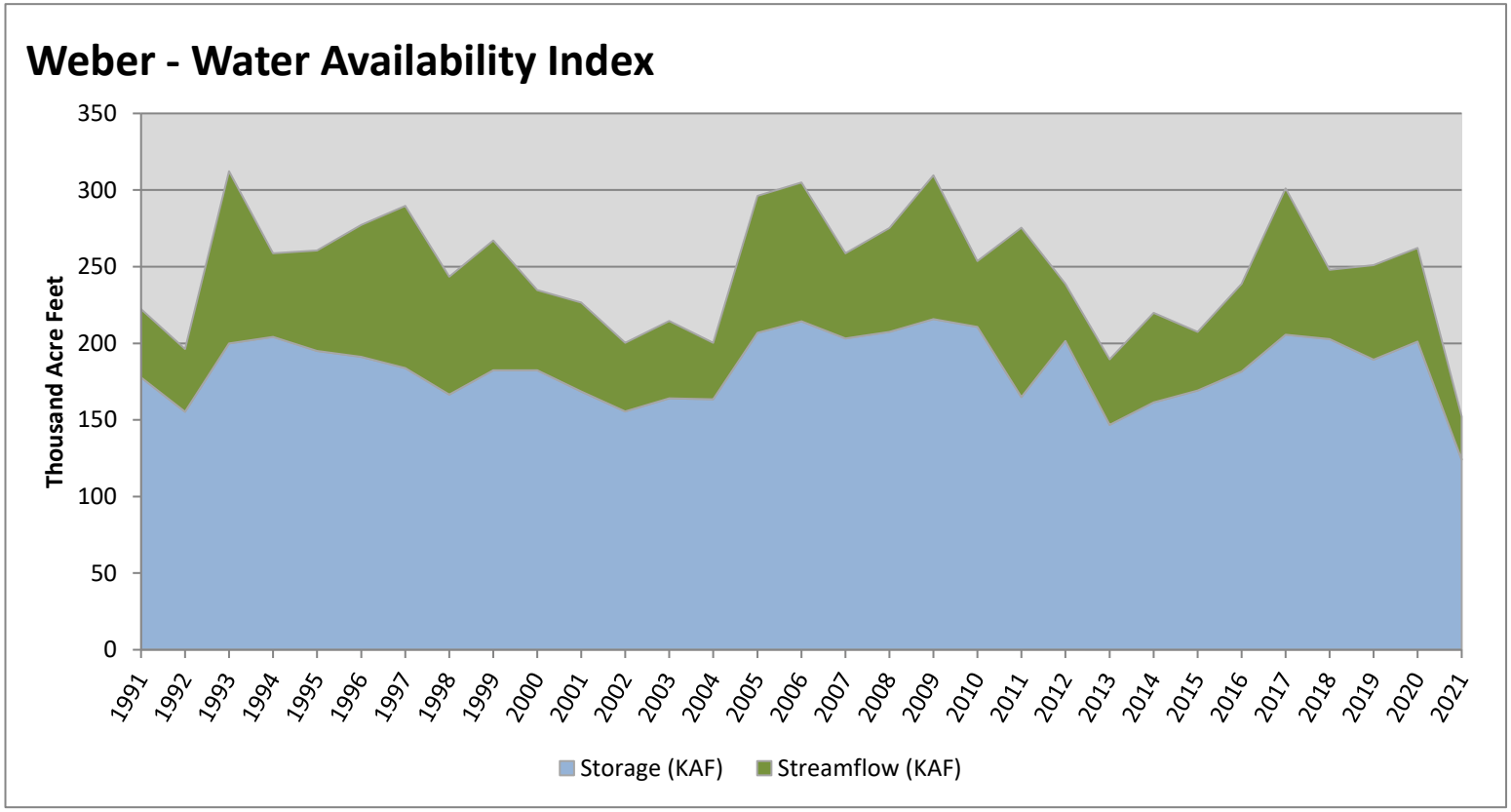


June 1, 2021

Water Availability Index

Basin or Region	May EOM* Storage	May Flow	Storage + Flow	Percentile	WAI#	Years with similiar WAI
	KAF^	KAF^	KAF^	%		
Weber	**124.01**	**28.28**	**152.29**	**3**	**-3.91**	**13, 92, 02, 04**

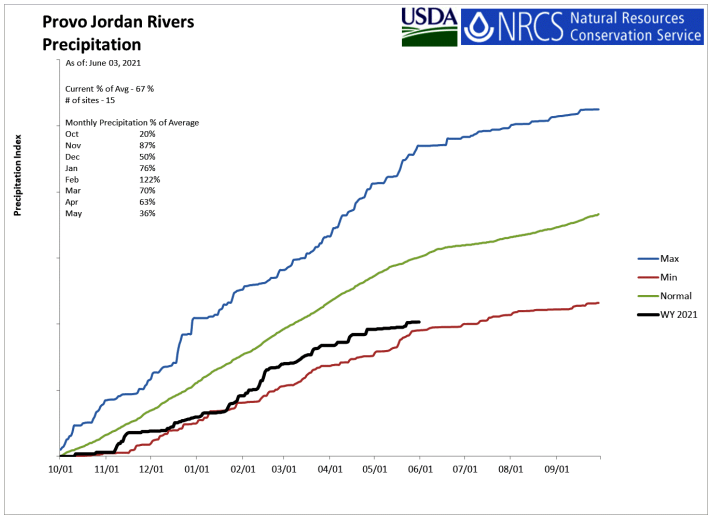
*EOM, end of month; #WAI, Water Availability Index; ^KAF, thousand acre-feet.

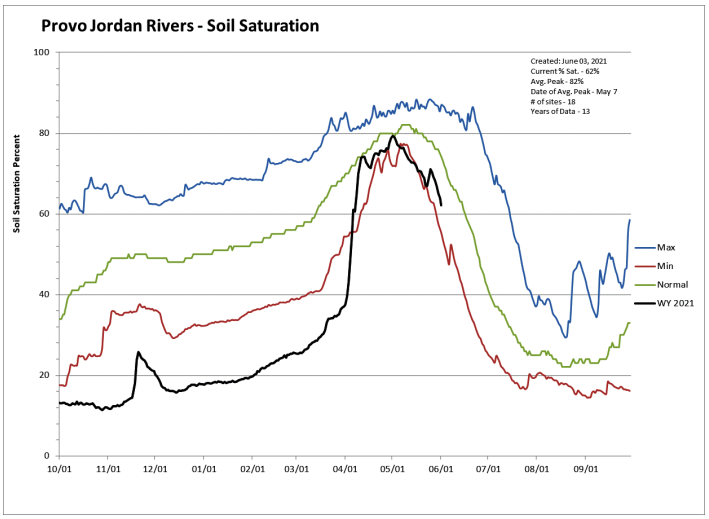


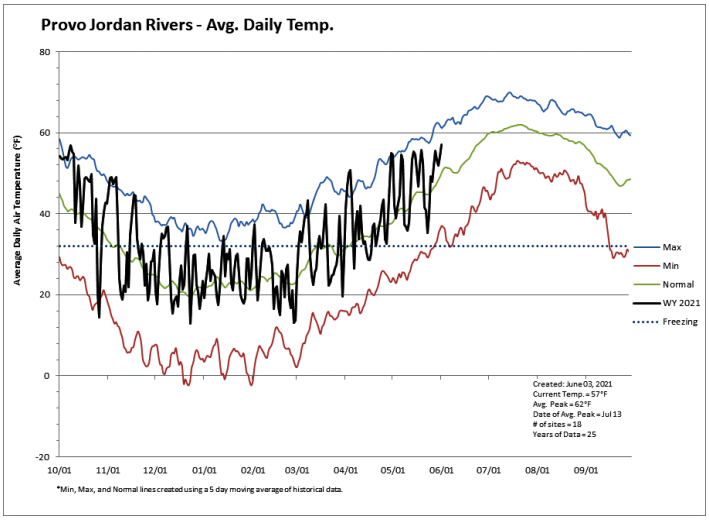
Provo & Jordan River Basins

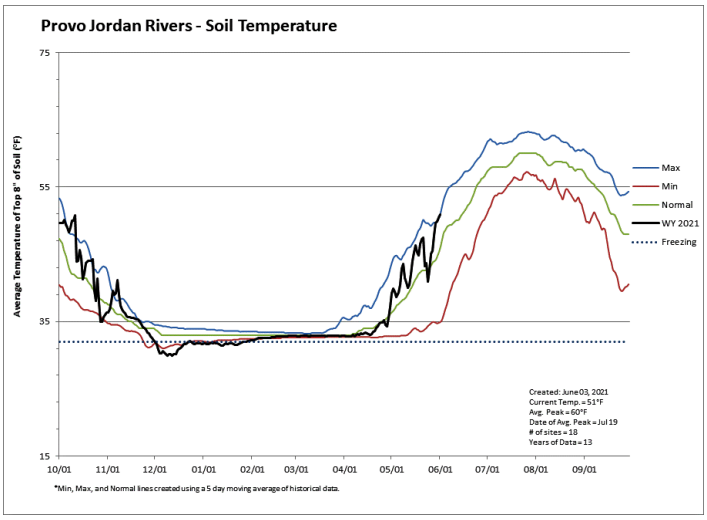
June 1, 2021

Precipitation in May was much below average at 36%, which brings the seasonal accumulation (Oct-May) to 67% of average. Soil moisture is at 63% compared to 62% last year. Reservoir storage is at 76% of capacity, compared to 94% last year. The water availability index for the Provo River is 4%.









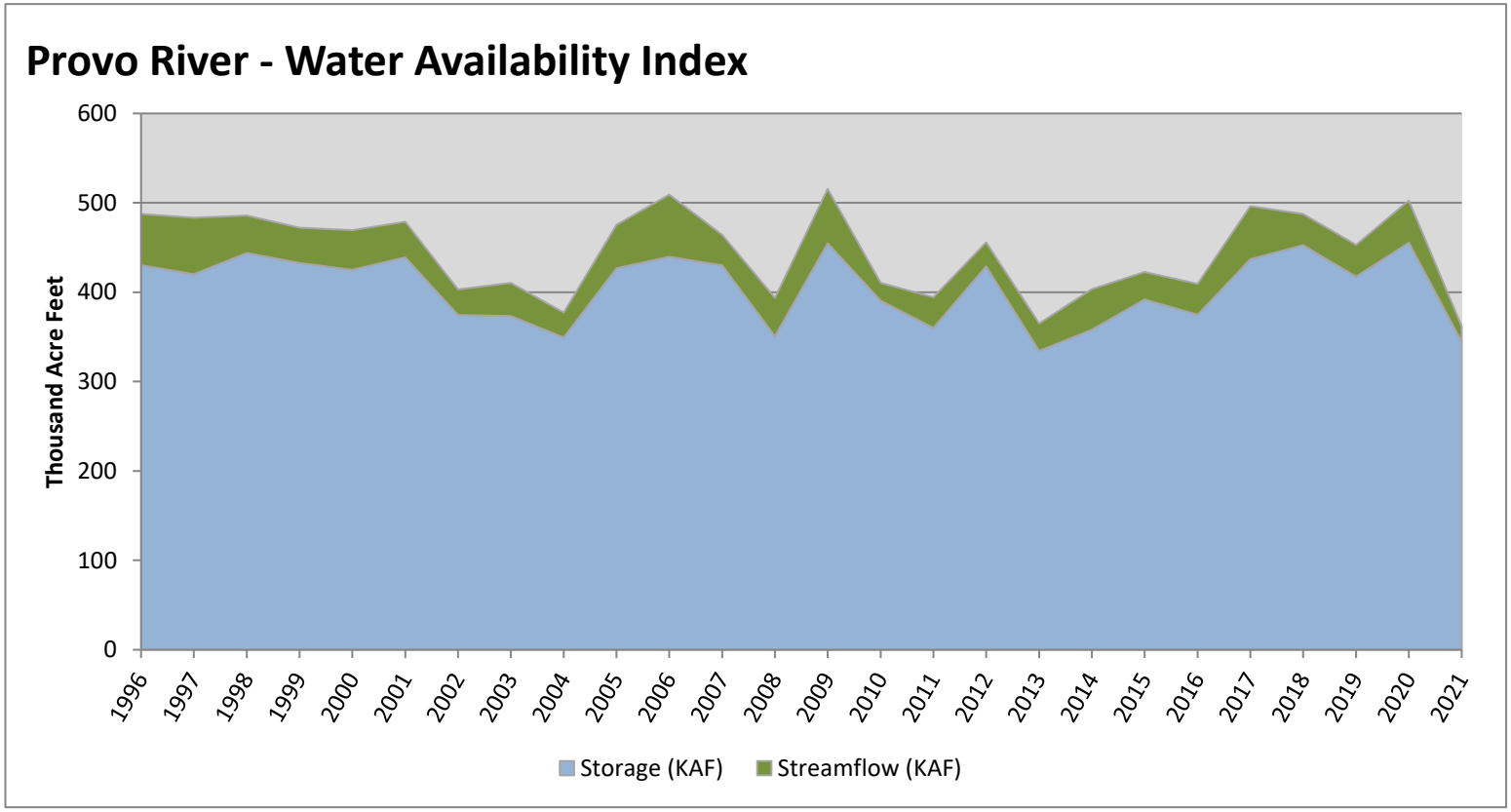
SNOTEL Data

June 1, 2021

Water Availability Index

Basin or Region	May EOM* Storage	May Flow	Storage + Flow	Percentile	WAI#	Years with similiar WAI
	KAF^	KAF^	KAF^	%		
Provo River	**344.45**	**17.30**	**361.75**	**4**	**-3.86**	**13, 04, 08, 11**

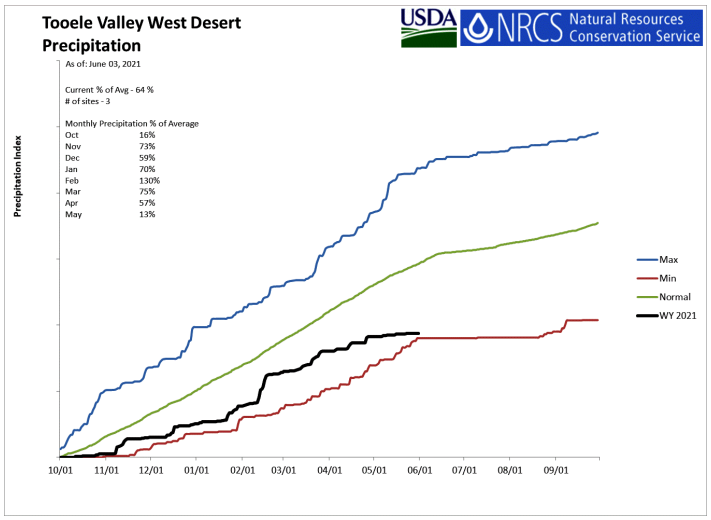
*EOM, end of month; #WAI, Water Availability Index; ^KAF, thousand acre-feet.

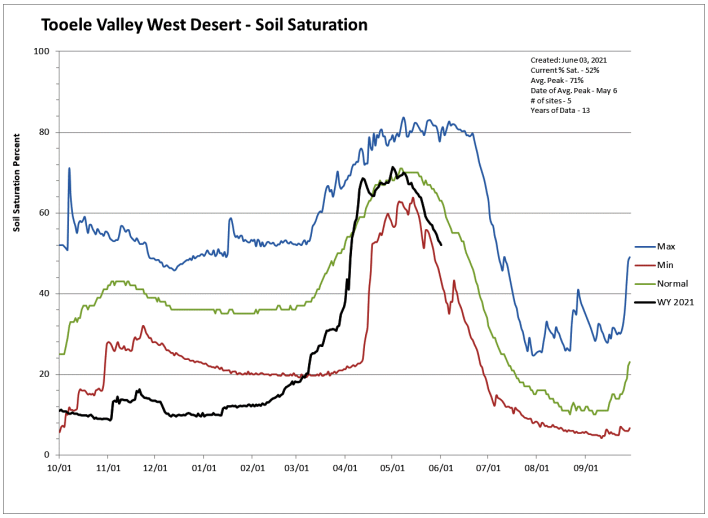


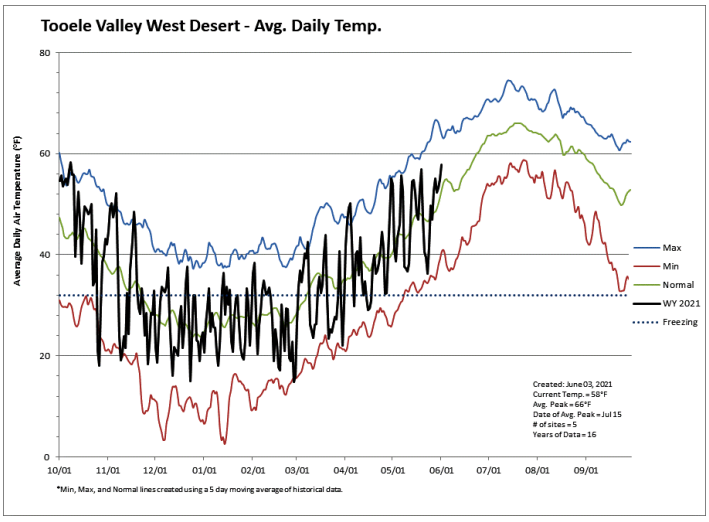
Tooele Valley & West Desert Basins

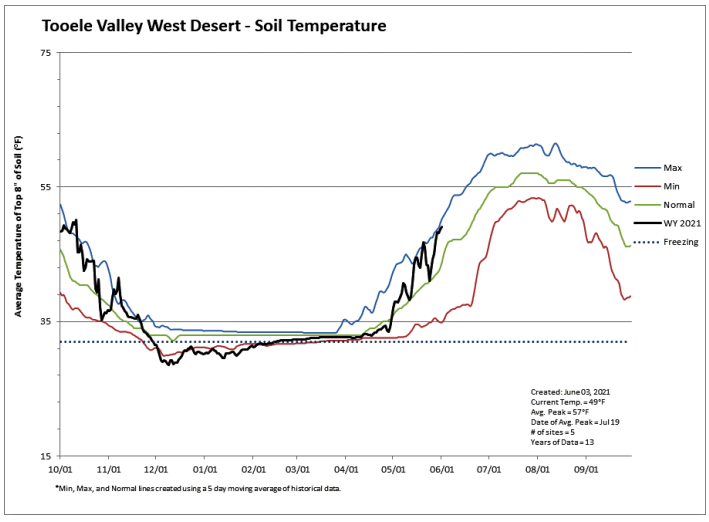
June 1, 2021

Precipitation in May was much below average at 13%, which brings the seasonal accumulation (Oct-May) to 64% of average. Soil moisture is at 52% compared to 54% last year. Reservoir storage is at 61% of capacity, compared to 64% last year.







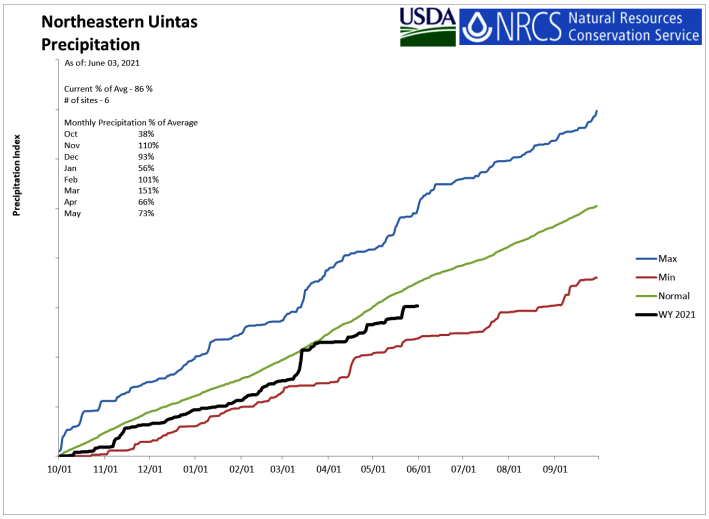


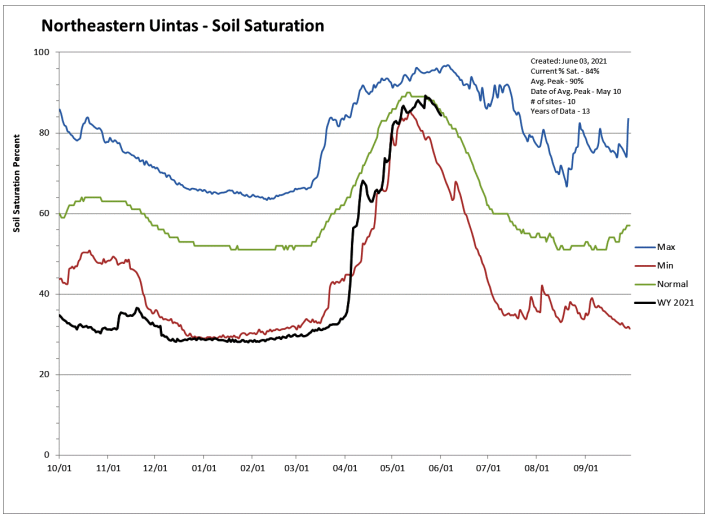
SNOTEL Data

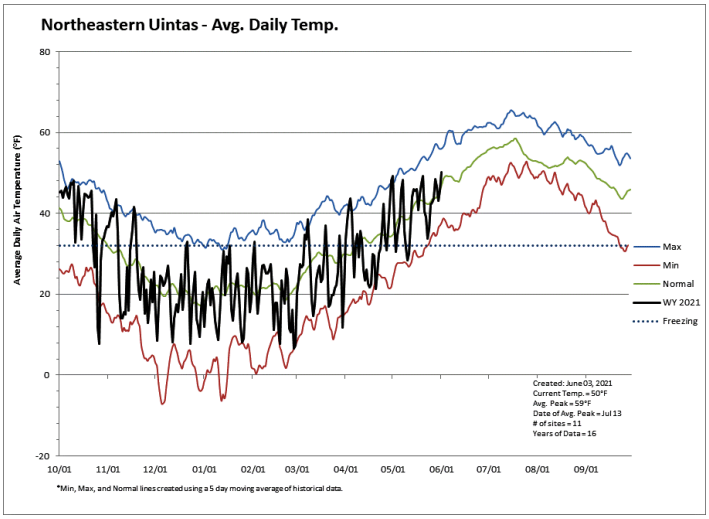
Northeastern Uinta Basin

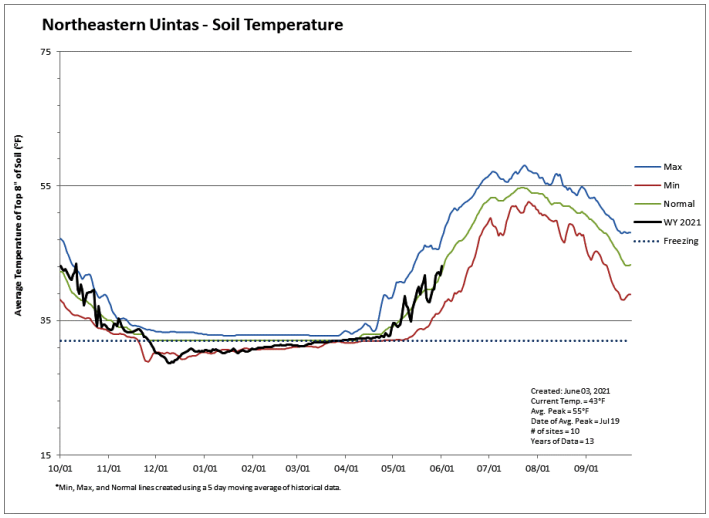
June 1, 2021

Precipitation in May was below average at 72%, which brings the seasonal accumulation (Oct-May) to 86% of average. Soil moisture is at 83% compared to 85% last year. Reservoir storage is at 84% of capacity, compared to 86% last year. The water availability index for Blacks Fork is 18% and 37% for Smiths Creek.









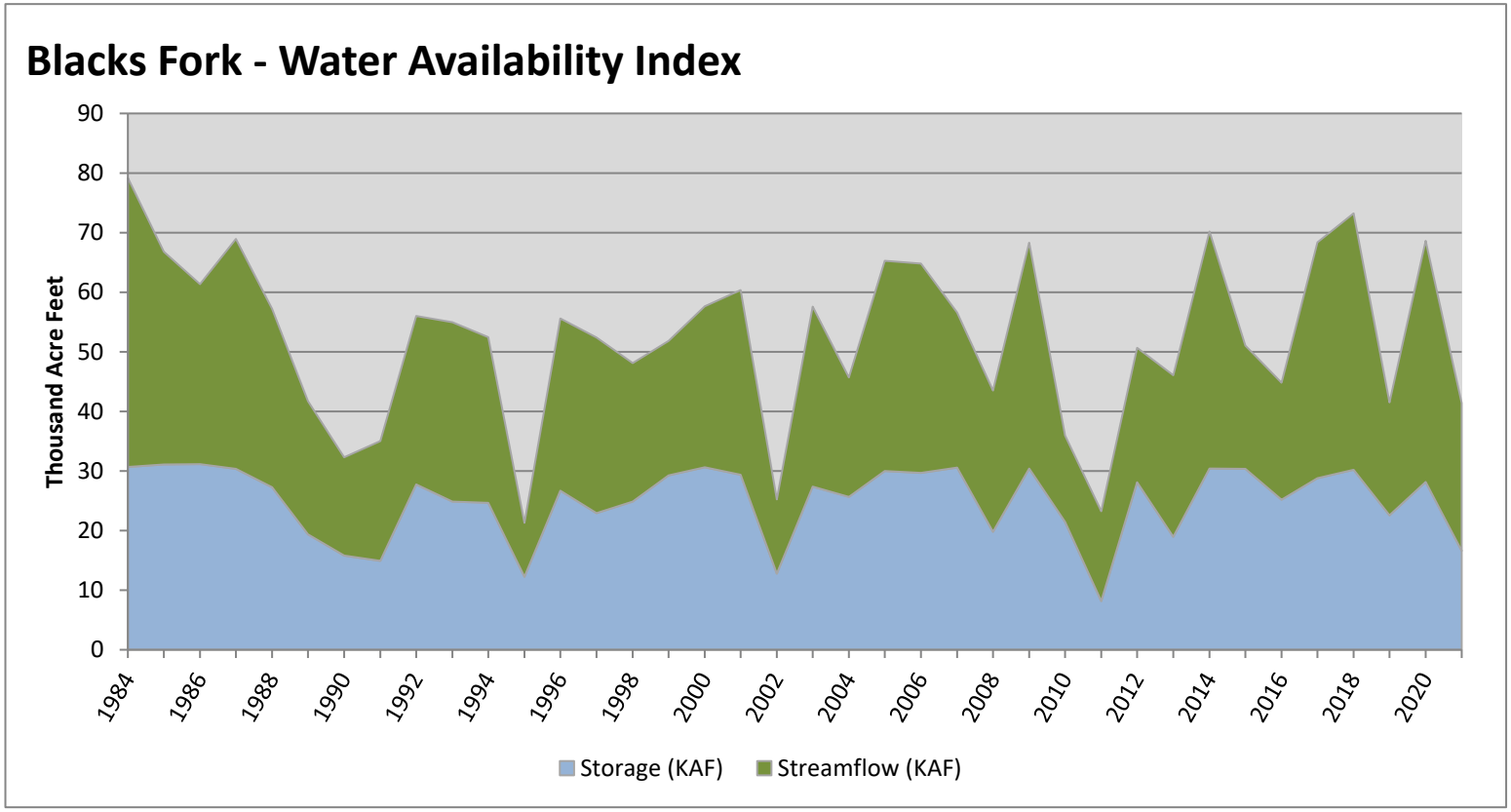
SNOTEL Data

June 1, 2021

Water Availability Index

Basin or Region	May EOM* Storage	May Flow	Storage + Flow	Percentile	WAI#	Years with similiar WAI
	KAF^	KAF^	KAF^	%		
Blacks Fork	**16.61**	**24.78**	**41.39**	**18**	**-2.67**	**91, 10, 19, 89**

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

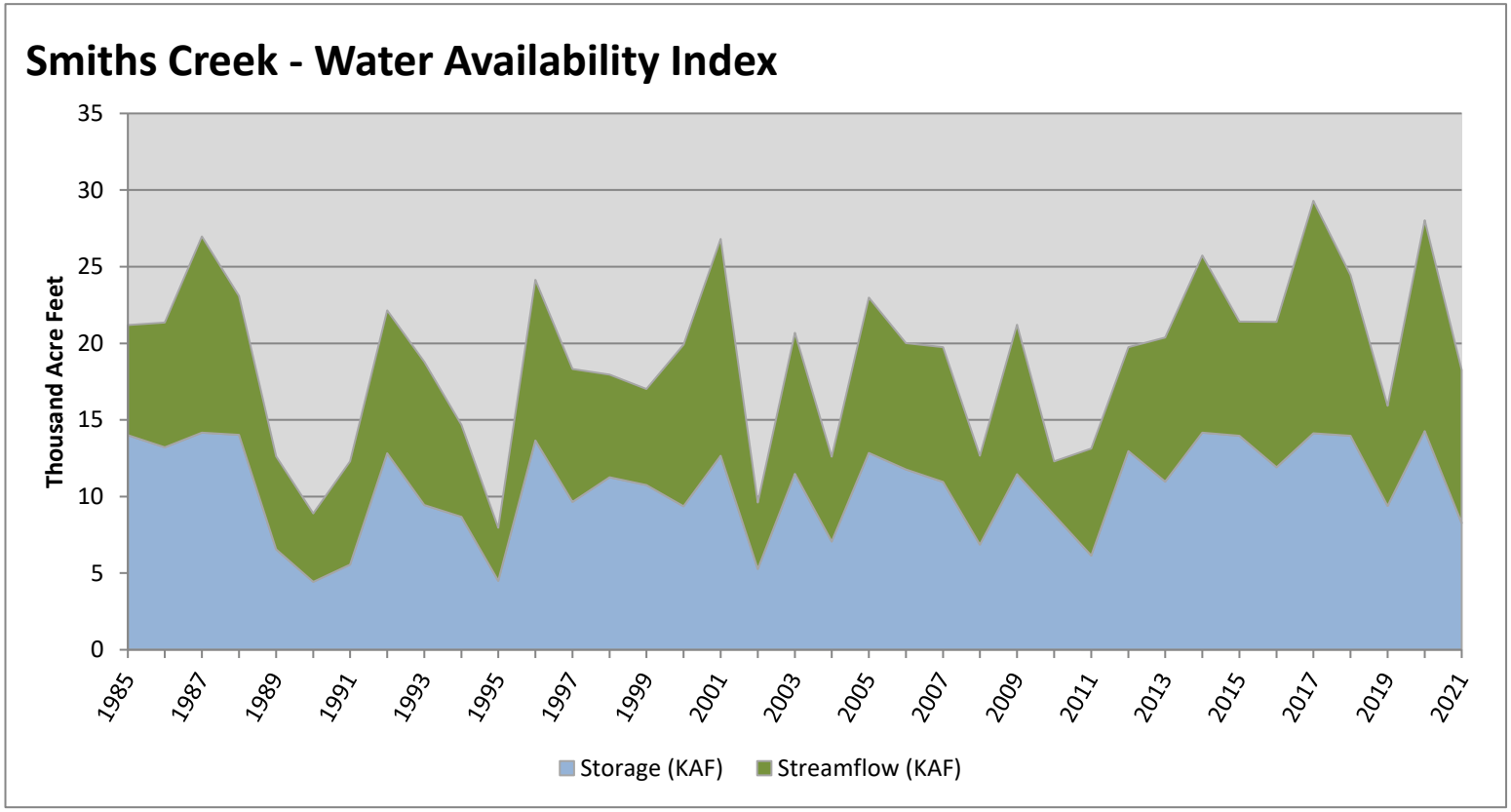


June 1, 2021

Water Availability Index

Basin or Region	May EOM* Storage	May Flow	Storage + Flow	Percentile	WAI#	Years with similiar WAI
	KAF^	KAF^	KAF^	%		
Smiths Creek	**8.27**	**10.00**	**18.27**	**37**	**-1.1**	**99, 98, 97, 93**

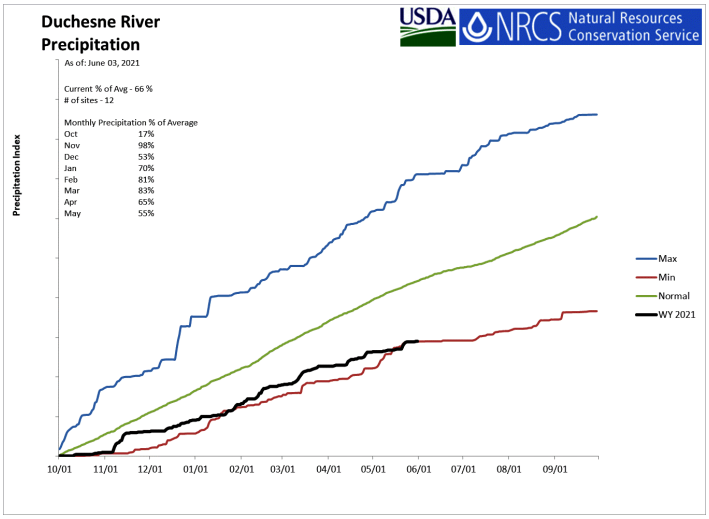
*EOM, end of month; #WAI, Water Availability Index; ^KAF, thousand acre-feet.

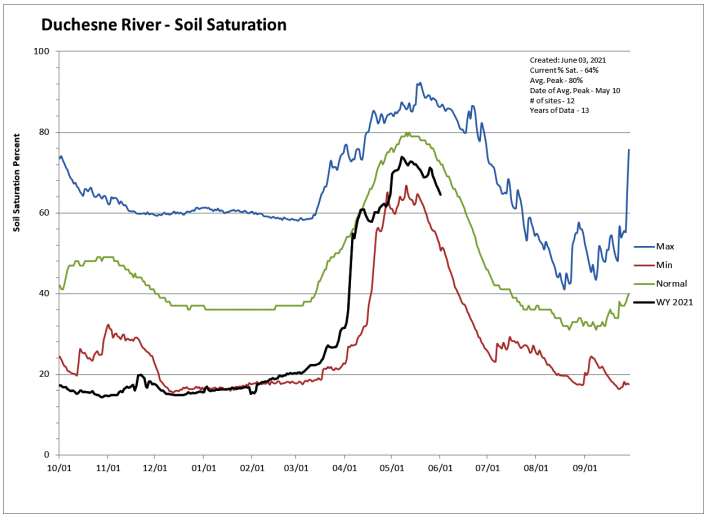


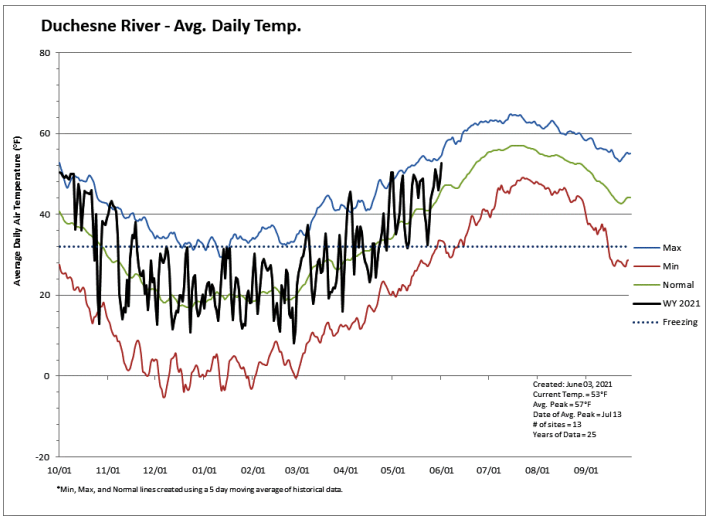
Duchesne River Basin

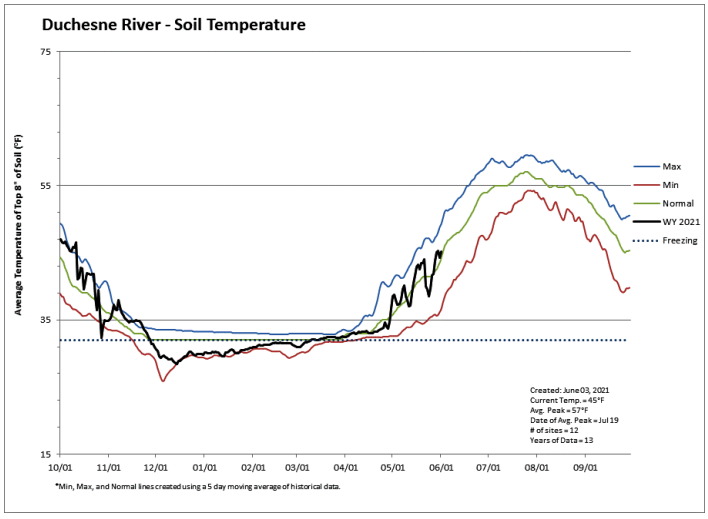
June 1, 2021

Precipitation in May was much below average at 55%, which brings the seasonal accumulation (Oct-May) to 66% of average. Soil moisture is at 64% compared to 62% last year. Reservoir storage is at 80% of capacity, compared to 90% last year. The water availability index for the Western Uintas is 31% and 5% for the Eastern Uintas.









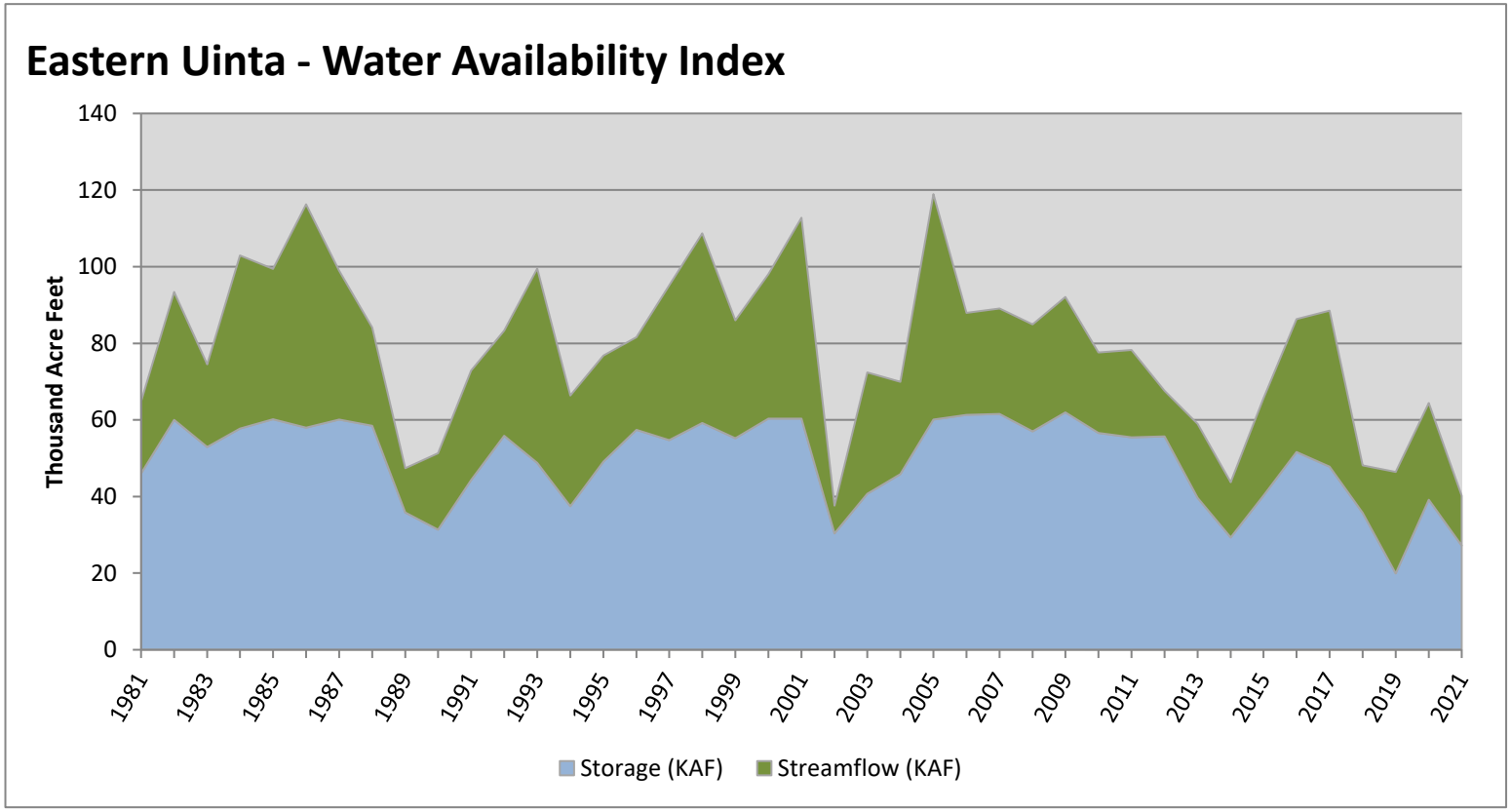
SNOTEL Data

June 1, 2021

Water Availability Index

Basin or Region	May EOM* Storage	May Flow	Storage + Flow	Percentile	WAI#	Years with similiar WAI
	KAF^	KAF^	KAF^	%		
Eastern Uinta	**27.20**	**13.02**	**40.22**	**5**	**-3.77**	**02, 14, 19, 89**

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

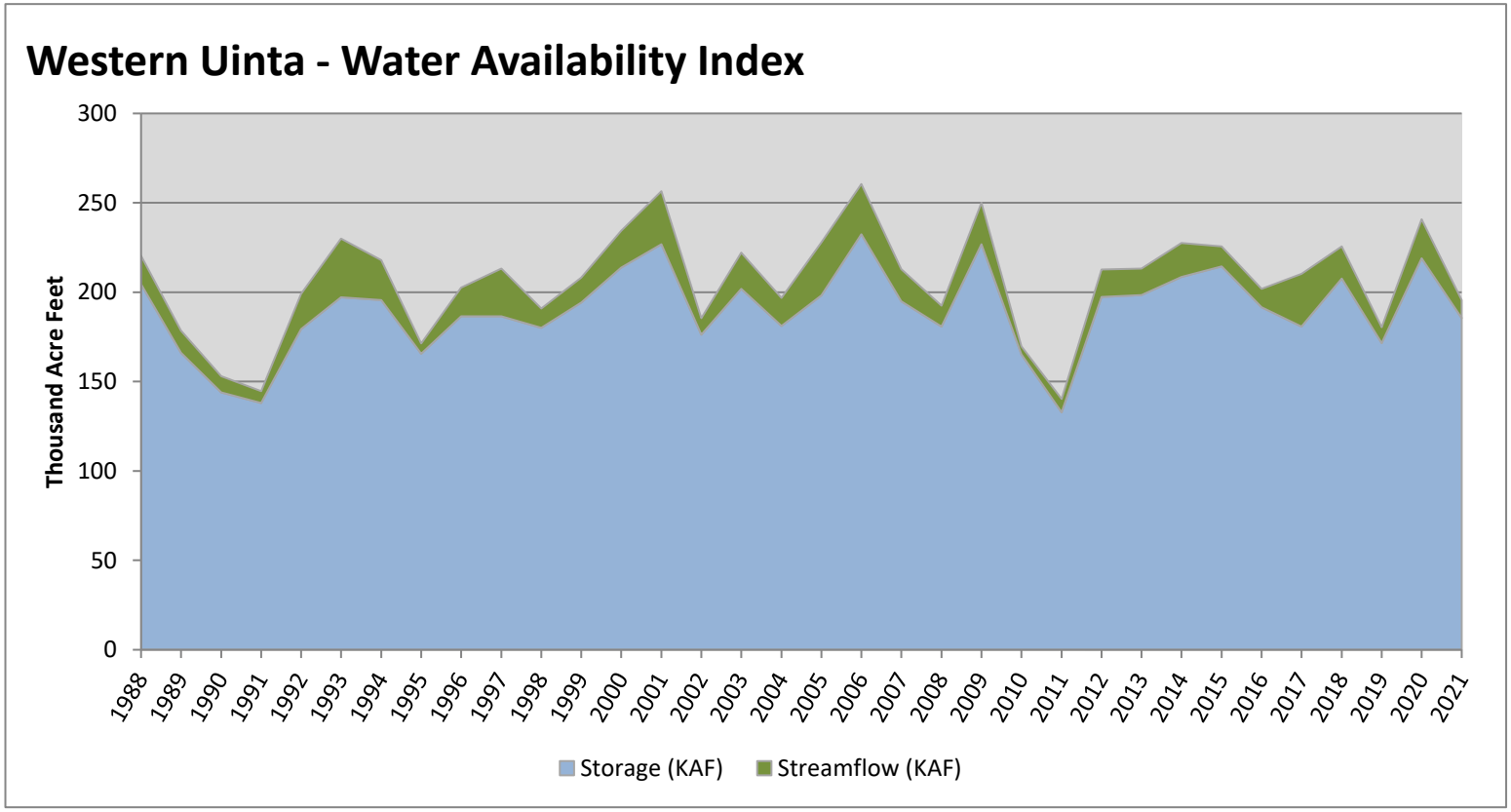


June 1, 2021

Water Availability Index

Basin or Region	May EOM* Storage	May Flow	Storage + Flow	Percentile	WAI#	Years with similiar WAI
	KAF^	KAF^	KAF^	%		
Western Uinta	**185.55**	**10.02**	**195.57**	**31**	**-1.55**	**98, 08, 04, 92**

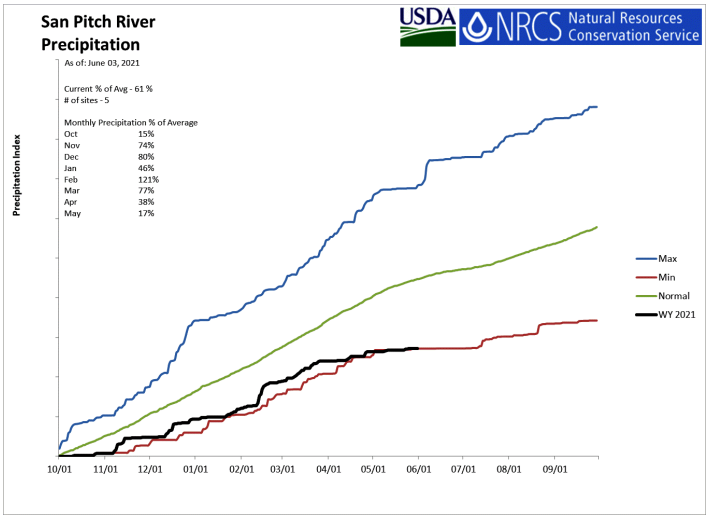
*EOM, end of month; #WAI, Water Availability Index; ^KAF, thousand acre-feet.

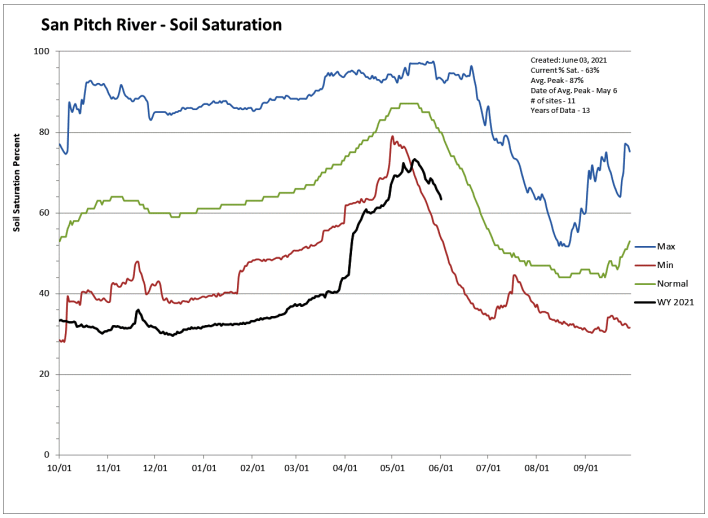


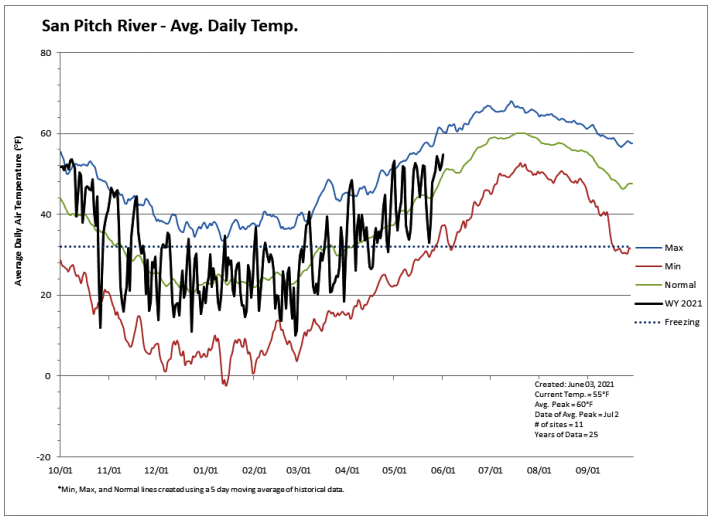
San Pitch River Basin

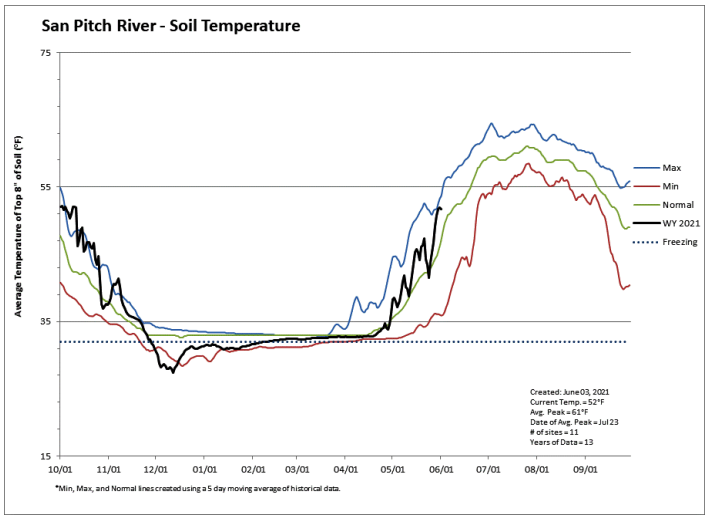
June 1, 2021

Precipitation in May was much below average at 17%, which brings the seasonal accumulation (Oct-May) to 61% of average. Soil Moisture is at 64% compared to 73% last year. Reservoir storage is at 0% of capacity, compared to 33% last year.The water availability index for the San Pitch is 2%.









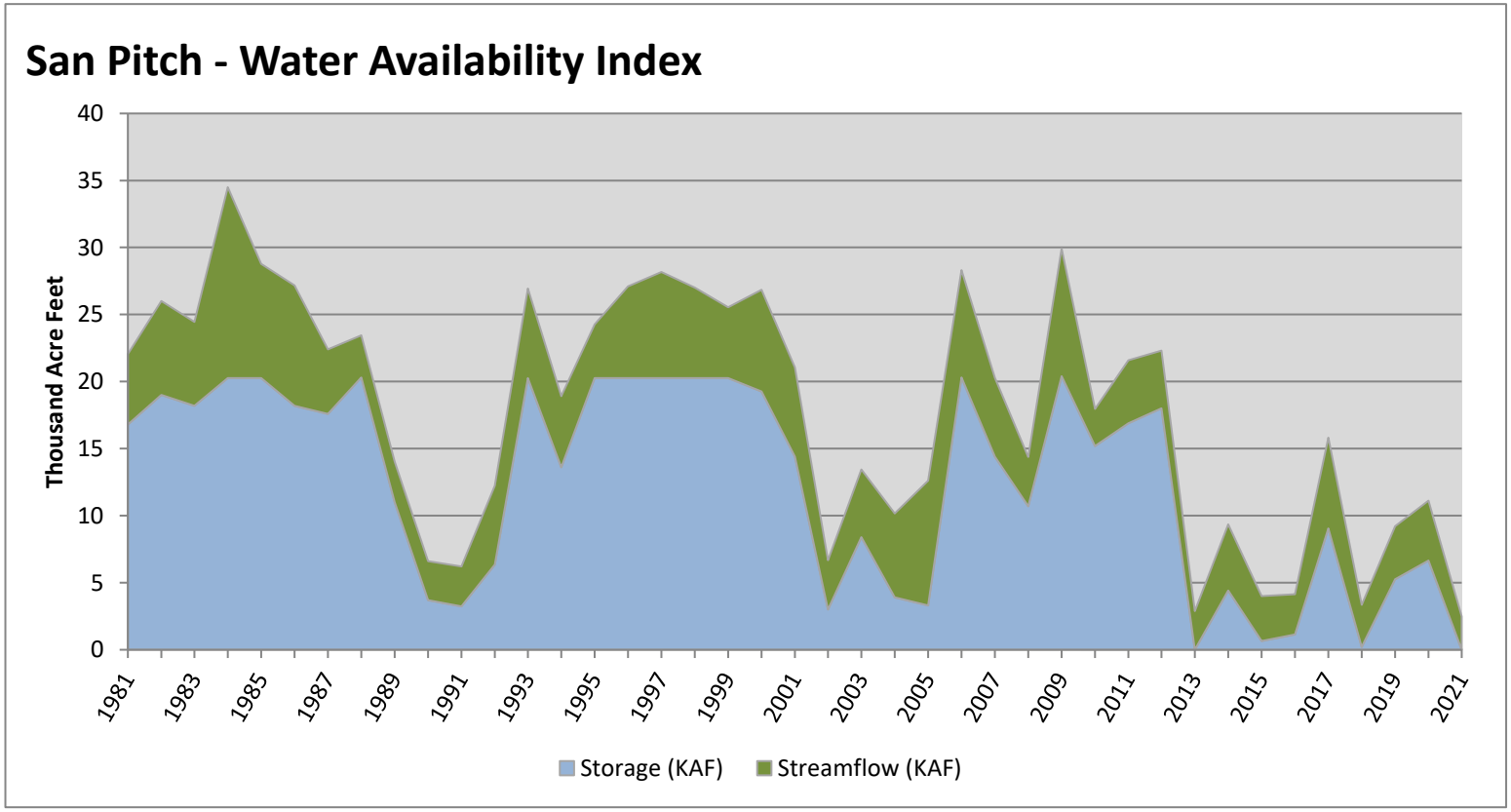
SNOTEL Data

June 1, 2021

Water Availability Index

Basin or Region	May EOM* Storage	May Flow	Storage + Flow	Percentile	WAI#	Years with similiar WAI
	KAF^	KAF^	KAF^	%		
San Pitch	**0.00**	**2.48**	**2.48**	**2**	**-3.97**	**13, 18, 15, 16**

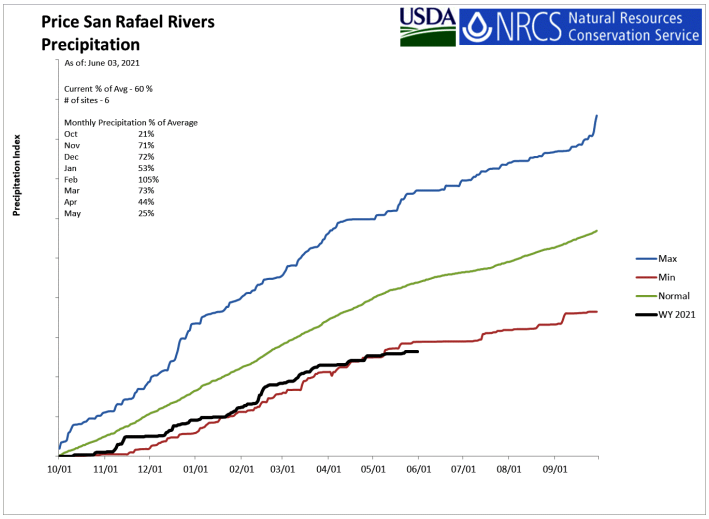
*EOM, end of month; #WAI, Water Availability Index; ^KAF, thousand acre-feet.

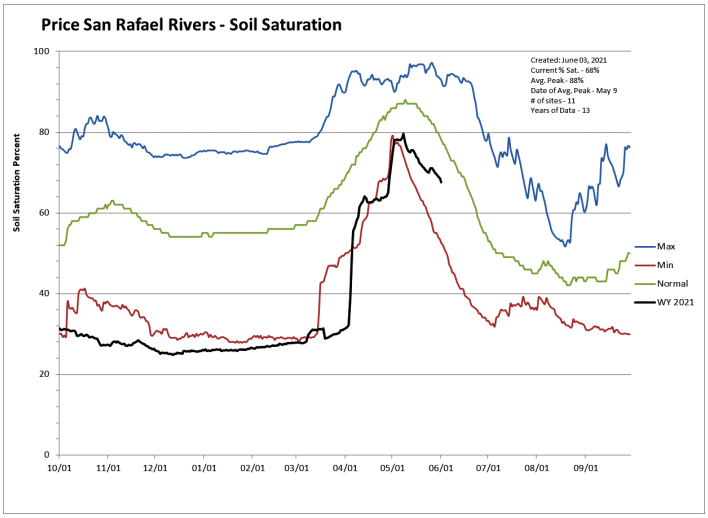


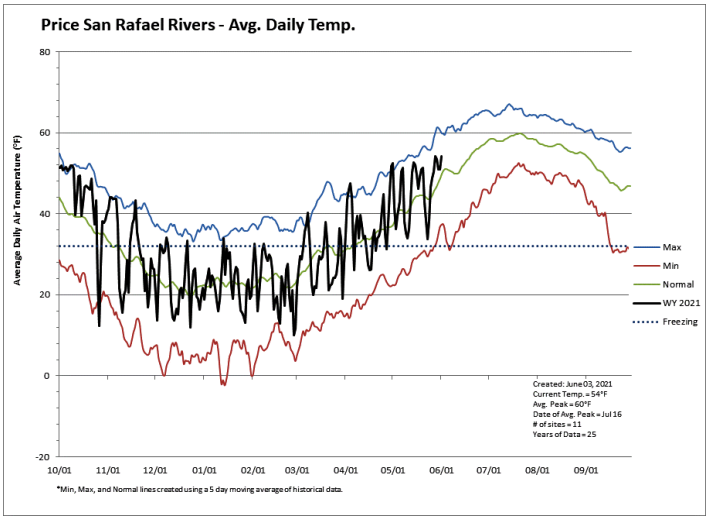
Price & San Rafael Basins

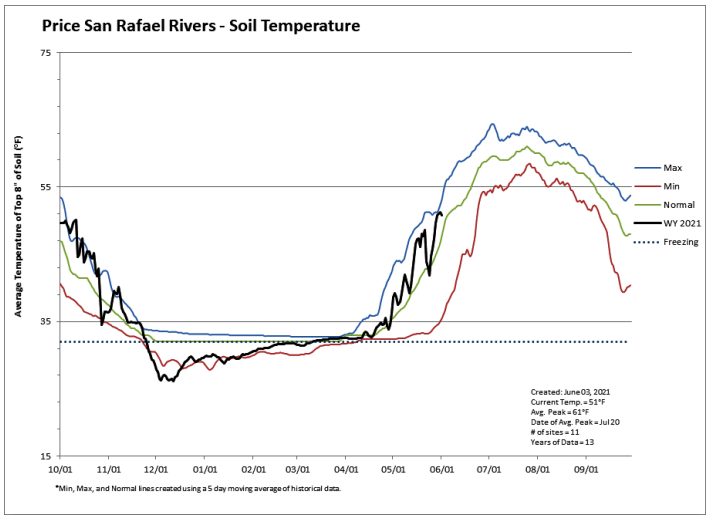
June 1, 2021

Precipitation in May was much below average at 25%, which brings the seasonal accumulation (Oct-May) to 60% of average. Soil moisture is at 68% compared to 70% last year. Reservoir storage is at 54% of capacity, compared to 88% last year. The water availability index for the Price River is 14%, and 5% for Joe's Valley.









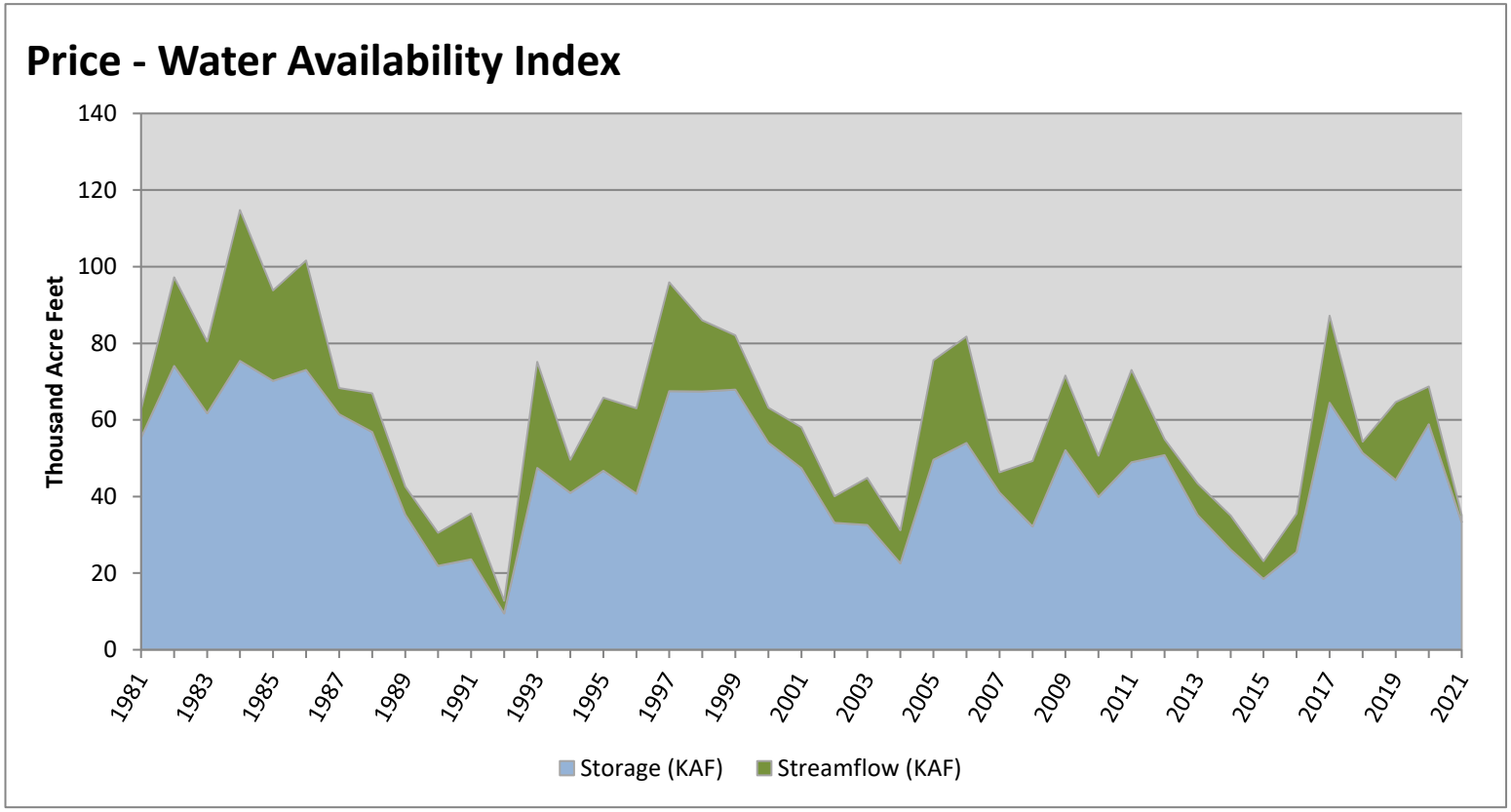
SNOTEL Data

June 1, 2021

Water Availability Index

Basin or Region	May EOM* Storage	May Flow	Storage + Flow	Percentile	WAI#	Years with similiar WAI
	KAF^	KAF^	KAF^	%		
Price	**33.28**	**1.86**	**35.14**	**14**	**-2.98**	**04, 14, 16, 91**

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

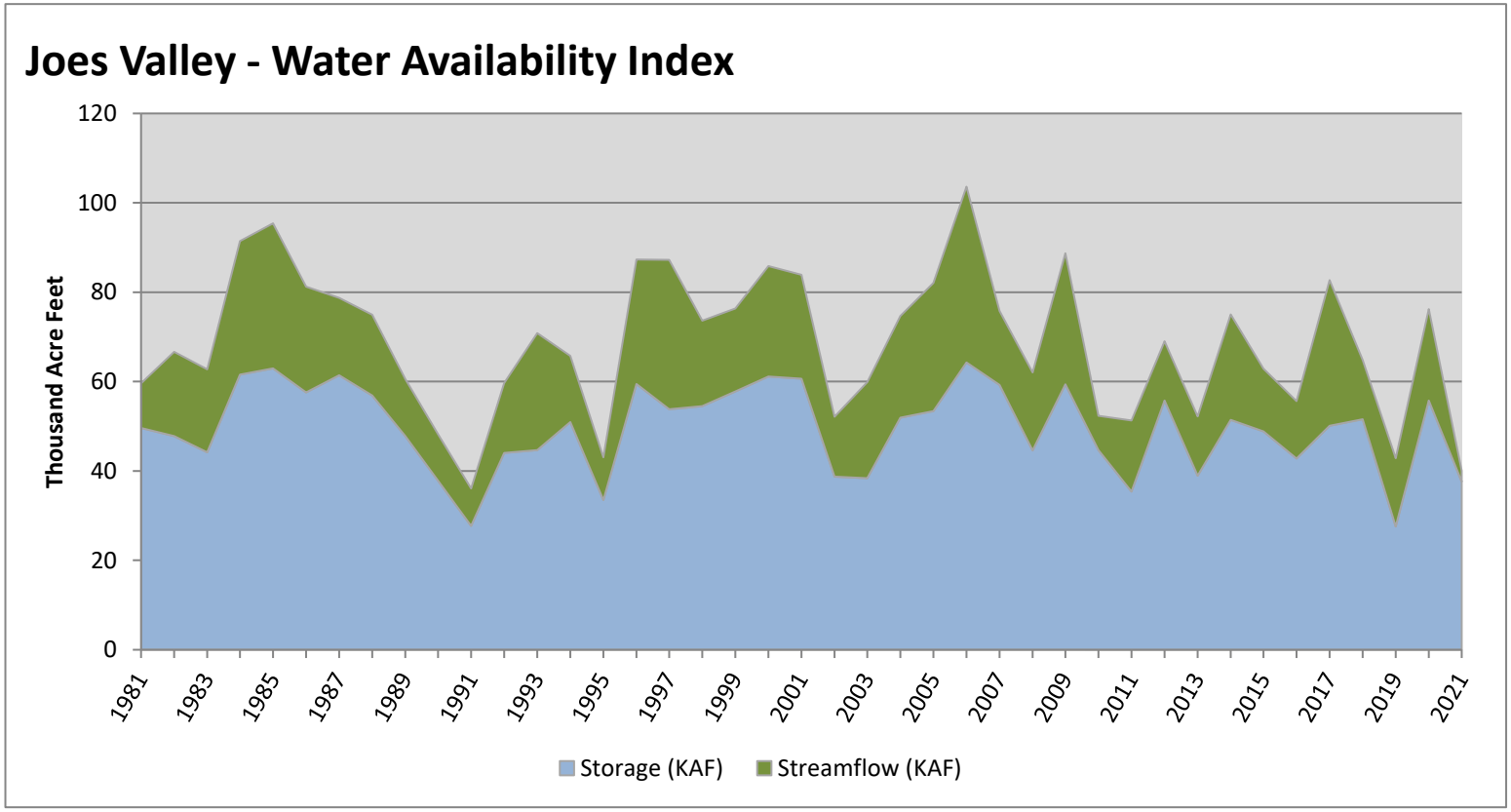


June 1, 2021

Water Availability Index

Basin or Region	May EOM* Storage	May Flow	Storage + Flow	Percentile	WAI#	Years with similiar WAI
	KAF^	KAF^	KAF^	%		
Joes Valley	**37.62**	**2.45**	**40.07**	**5**	**-3.77**	**91, 19, 95, 90**

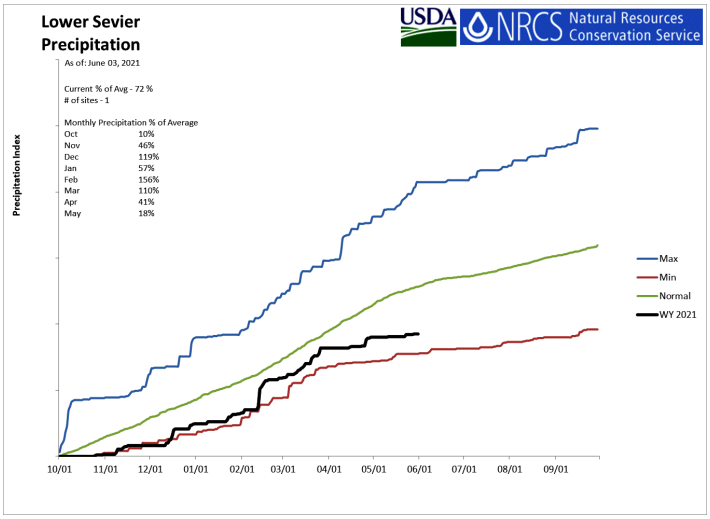
*EOM, end of month; #WAI, Water Availability Index; ^KAF, thousand acre-feet.

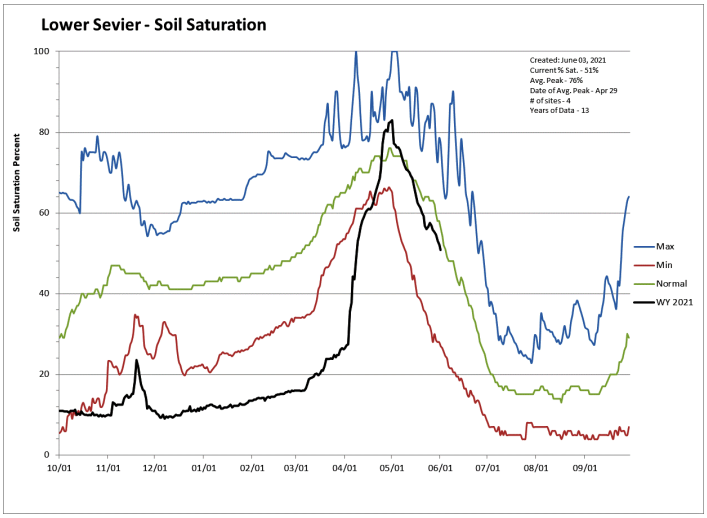


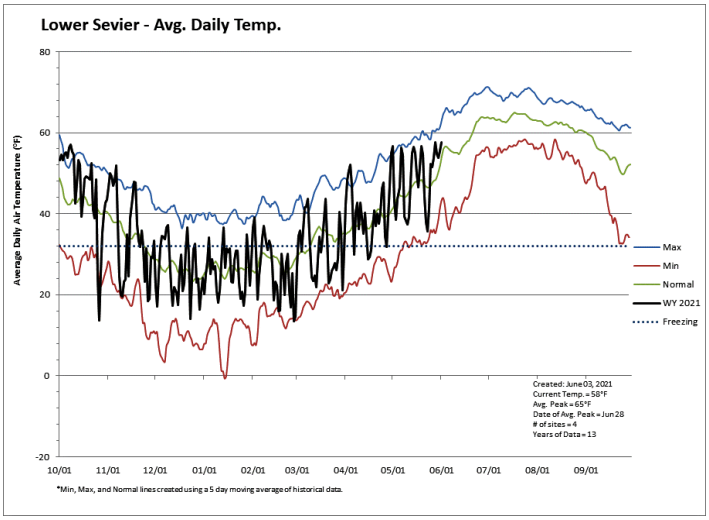
Lower Sevier Basin

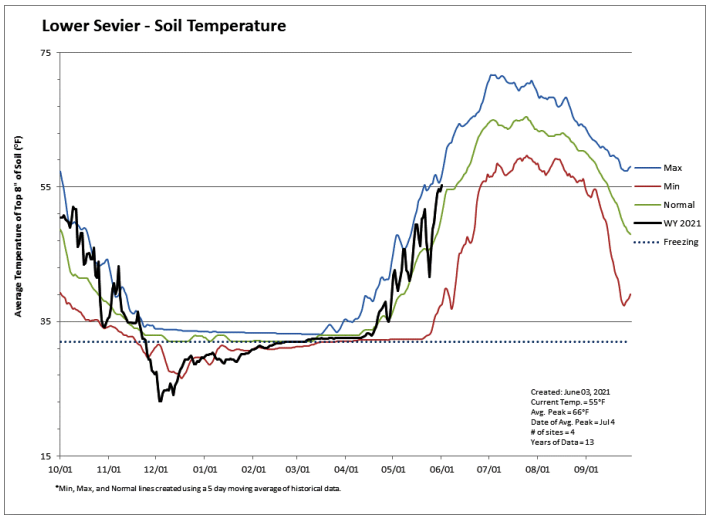
June 1, 2021

Precipitation in May was much below average at 17%, which brings the seasonal accumulation (Oct-May) to 72% of average. Soil moisture is at 51% compared to 49% last year. Reservoir storage is at 27% of capacity, compared to 44% last year. The water availability index for the Lower Sevier is 7%.







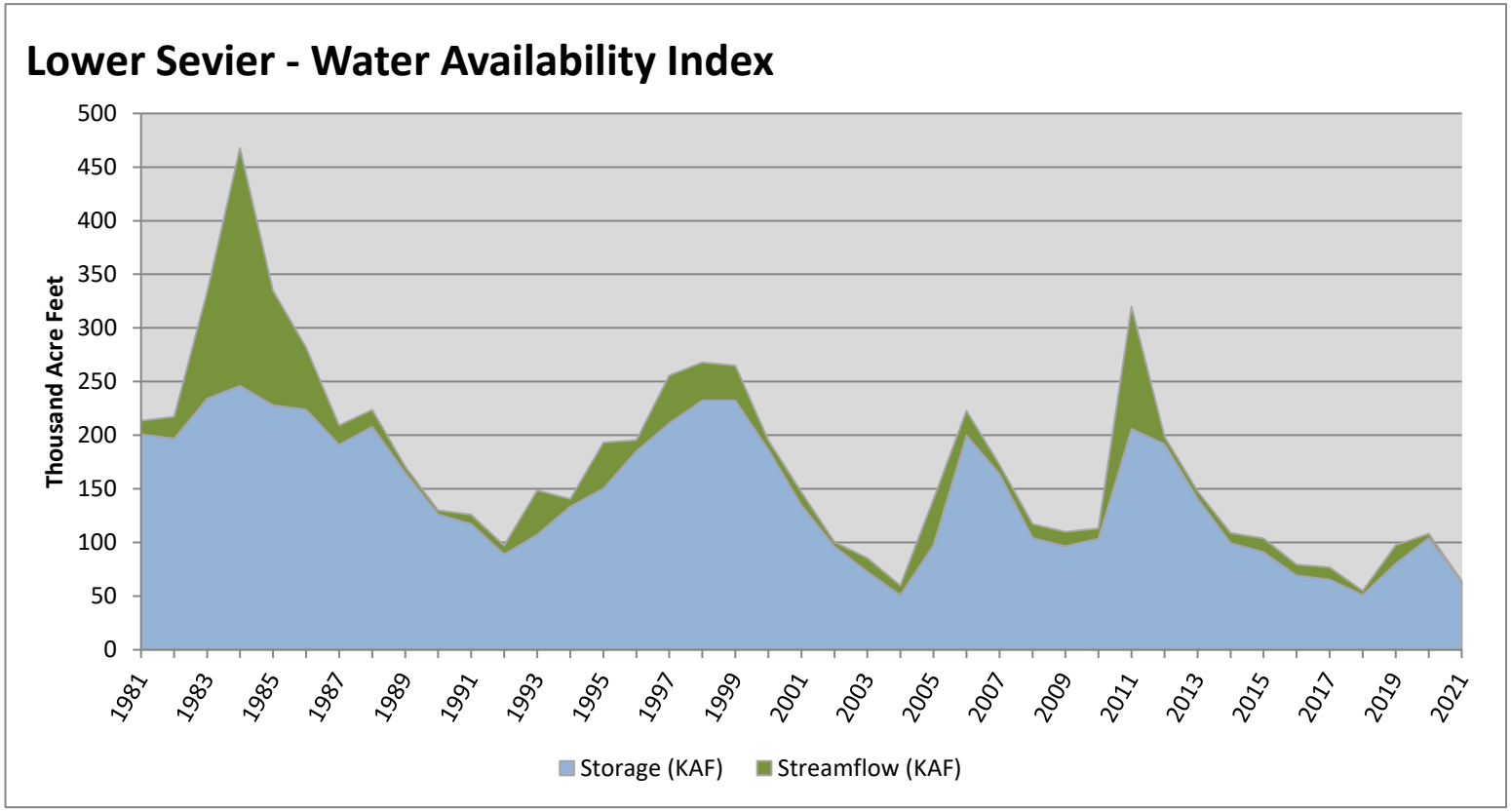


June 1, 2021

Water Availability Index

Basin or Region	May EOM* Storage	May Flow	Storage + Flow	Percentile	WAI#	Years with similiar WAI
	KAF^	KAF^	KAF^	%		
Lower Sevier	**62.60**	**1.71**	**64.31**	**7**	**-3.57**	**18, 04, 17, 16**

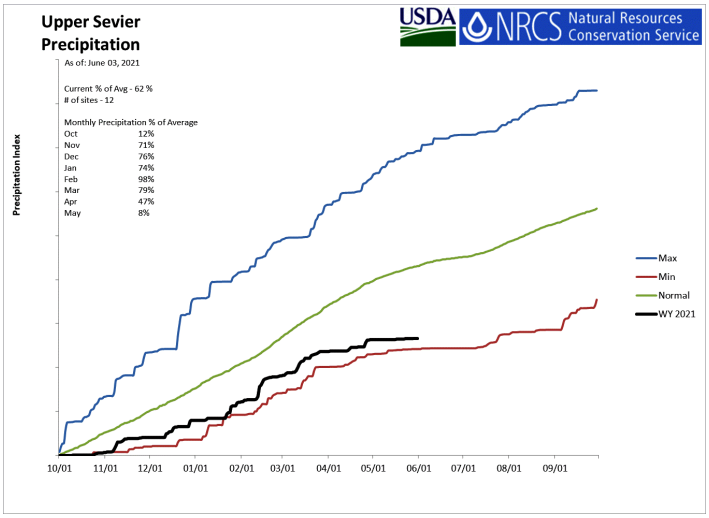
*EOM, end of month; #WAI, Water Availability Index; ^KAF, thousand acre-feet.

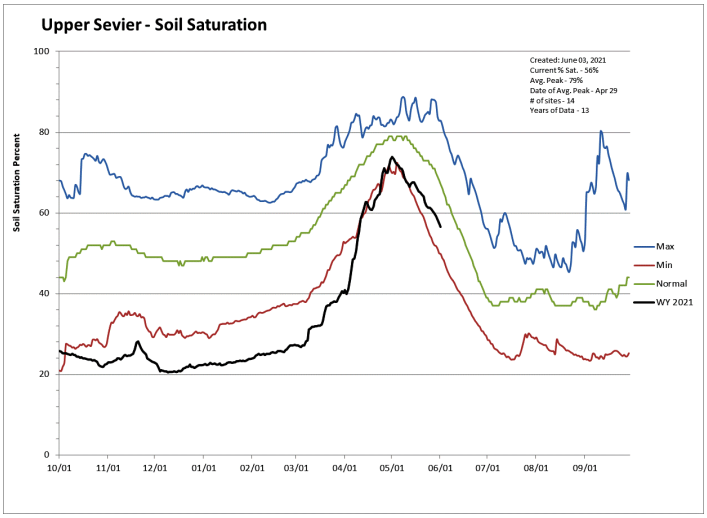


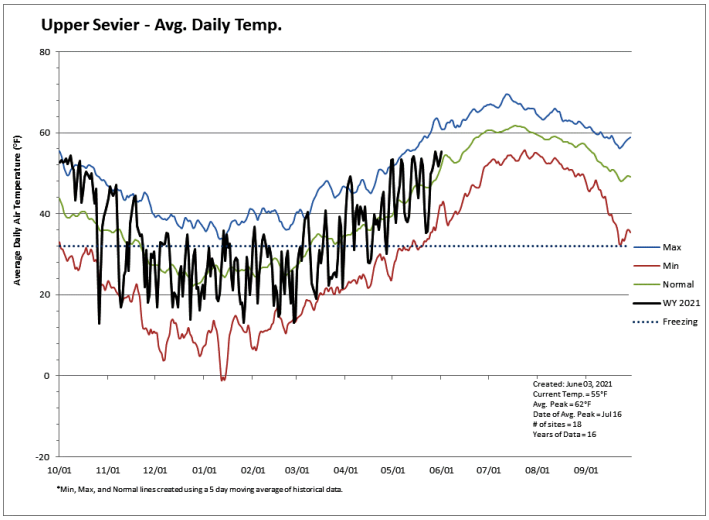
Upper Sevier Basin

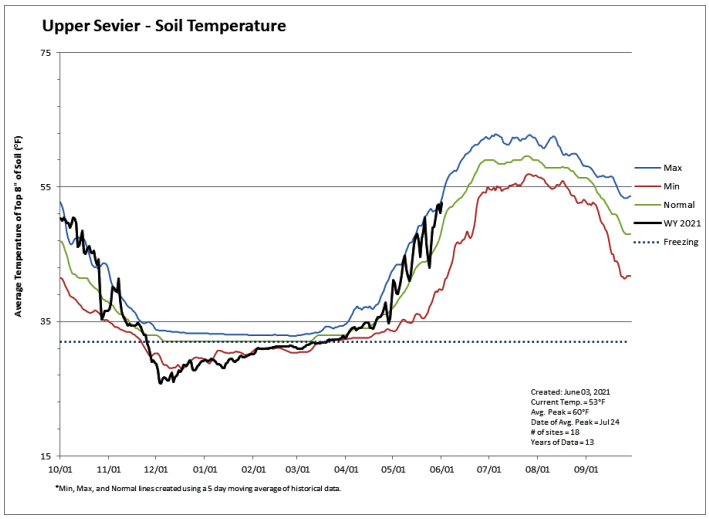
June 1, 2021

Precipitation in May was much below average at 8%, which brings the seasonal accumulation (Oct-May) to 62% of average. Soil moisture is at 57% compared to 59% last year. Reservoir storage is at 39% of capacity, compared to 92% last year. The water availability index for the Upper Sevier is 5%.







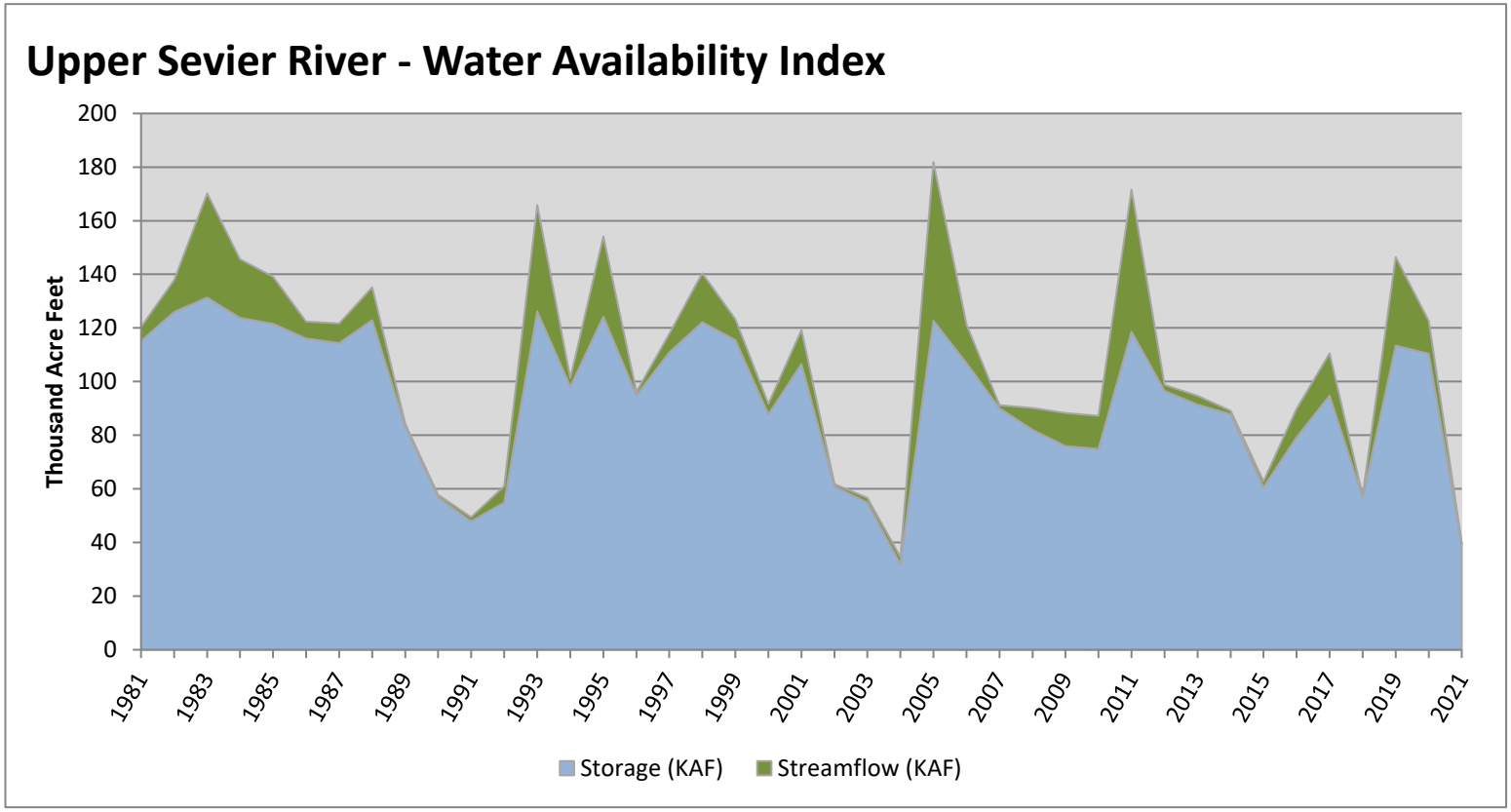


June 1, 2021

Water Availability Index

Basin or Region	May EOM* Storage	May Flow	Storage + Flow	Percentile	WAI#	Years with similiar WAI
	KAF^	KAF^	KAF^	%		
Upper Sevier River	**39.35**	**0.69**	**40.04**	**5**	**-3.77**	**04, 91, 03, 18**

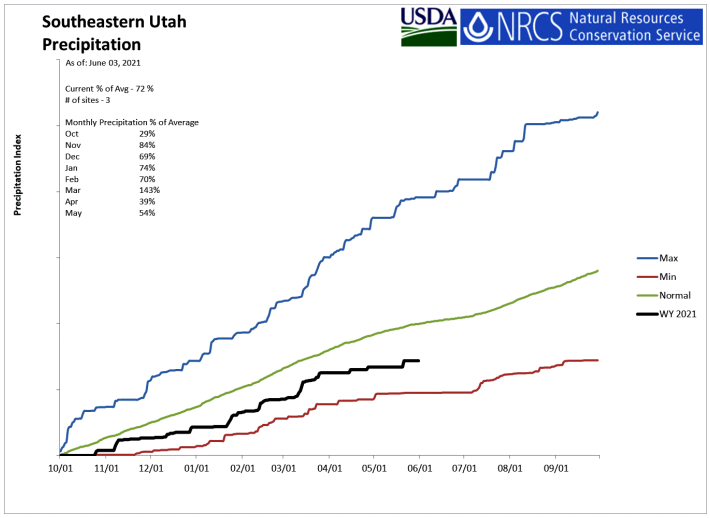
*EOM, end of month; #WAI, Water Availability Index; ^KAF, thousand acre-feet.

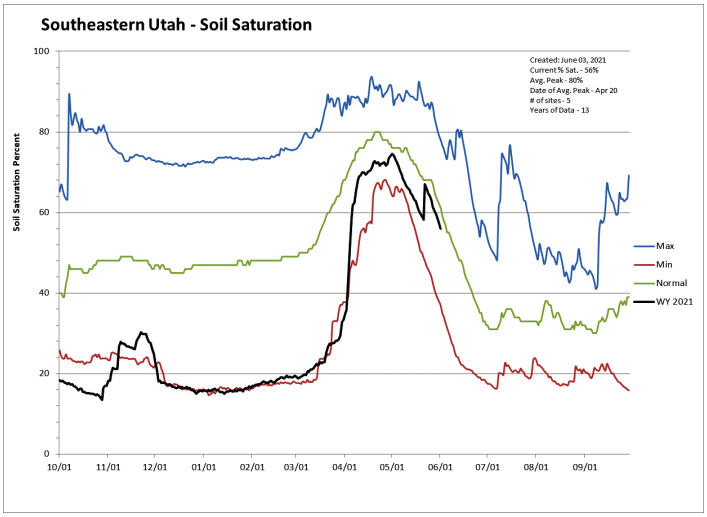


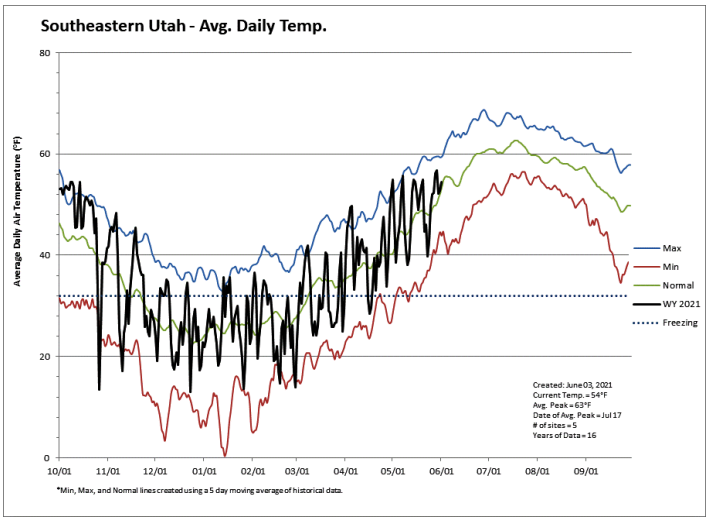
Southeastern Utah

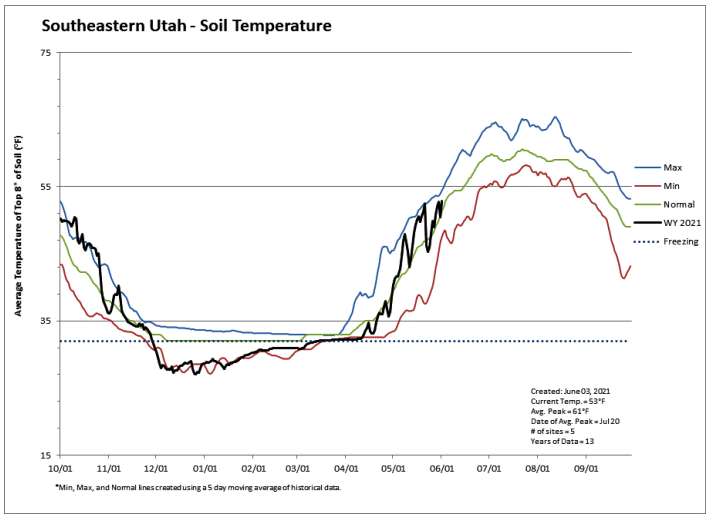
June 1, 2021

Precipitation in May was much below average at 54%, which brings the seasonal accumulation (Oct-May) to 72% of average. Soil moisture is at 57% compared to 47% last year. Reservoir storage is at 38% of capacity, compared to 74% last year. The water availability index for Moab is 14%.









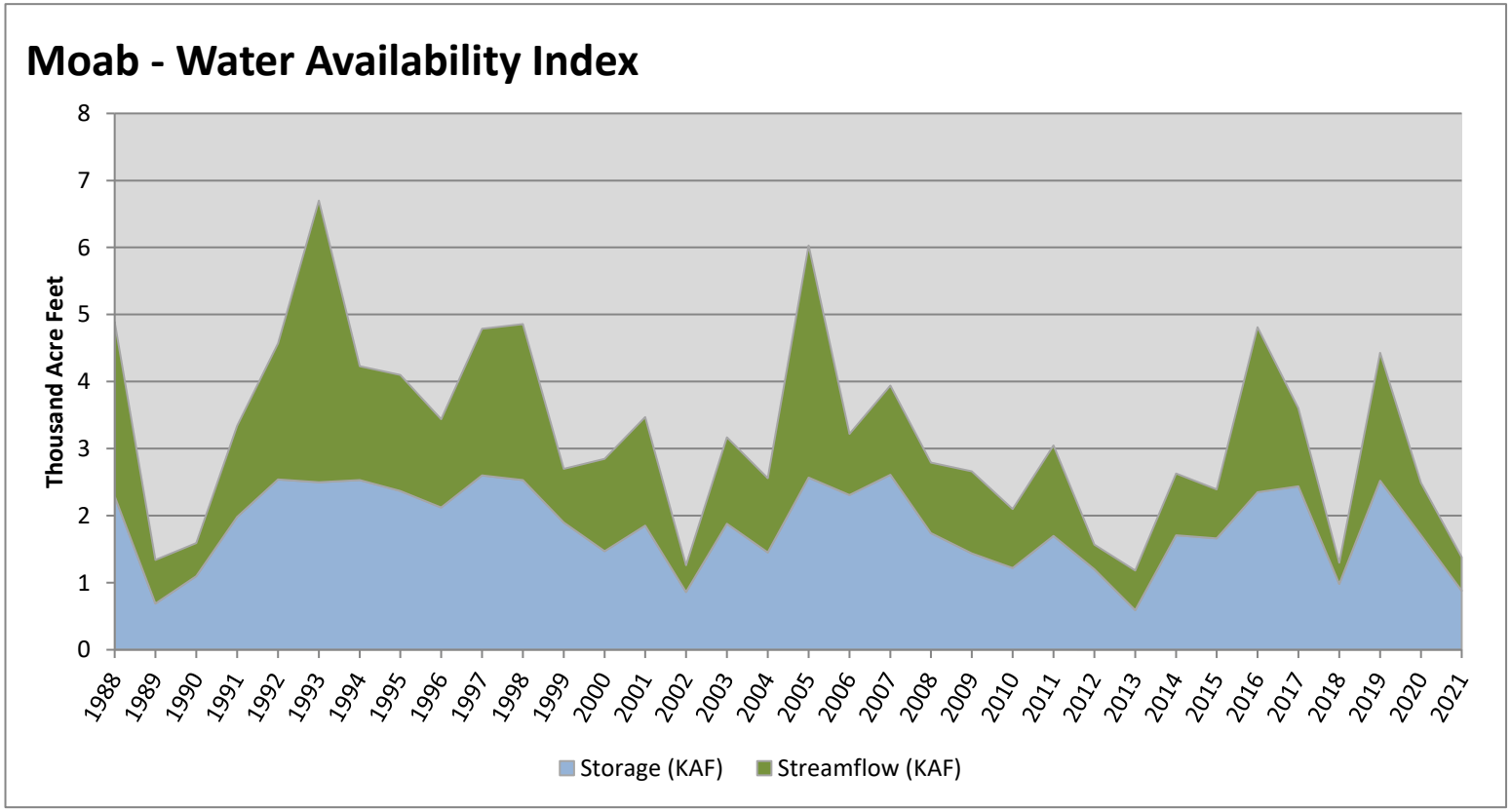
SNOTEL Data

June 1, 2021

Water Availability Index

Basin or Region	May EOM* Storage	May Flow	Storage + Flow	Percentile	WAI#	Years with similiar WAI
	KAF^	KAF^	KAF^	%		
Moab	**0.88**	**0.50**	**1.38**	**14**	**-2.98**	**18, 89, 12, 90**

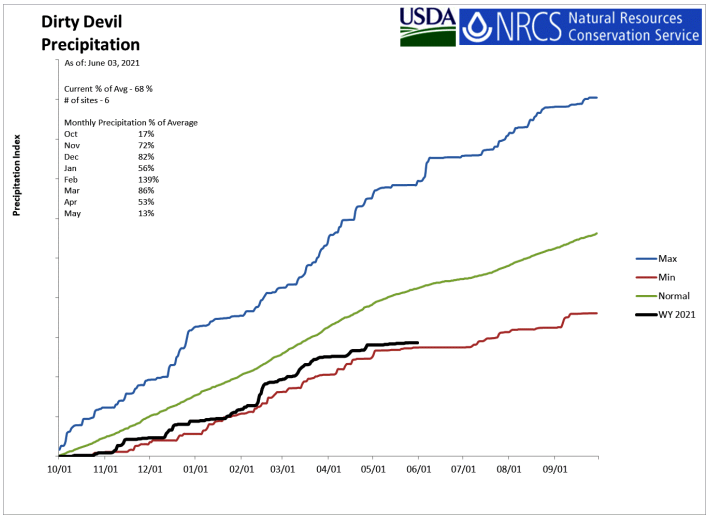
*EOM, end of month; #WAI, Water Availability Index; ^KAF, thousand acre-feet.

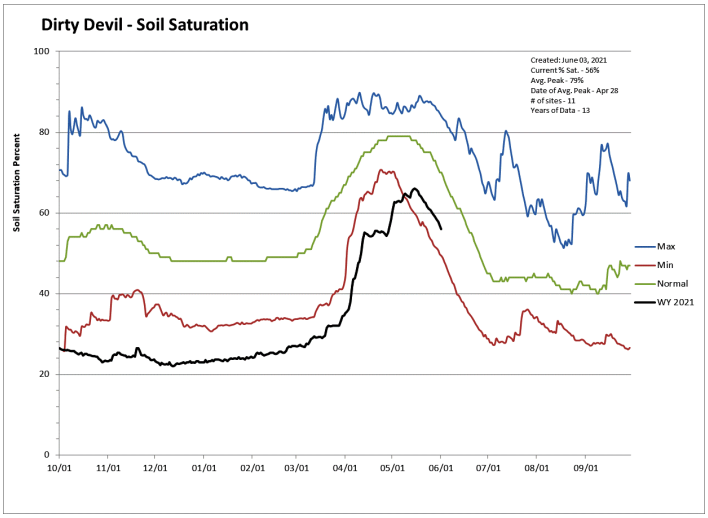


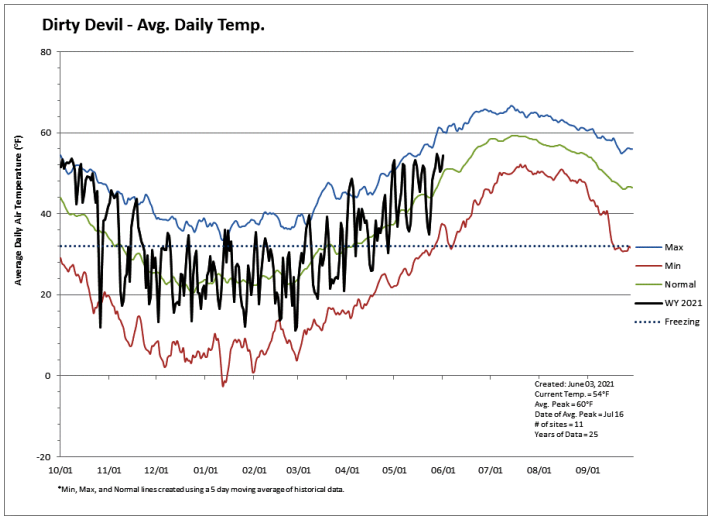
Dirty Devil Basin

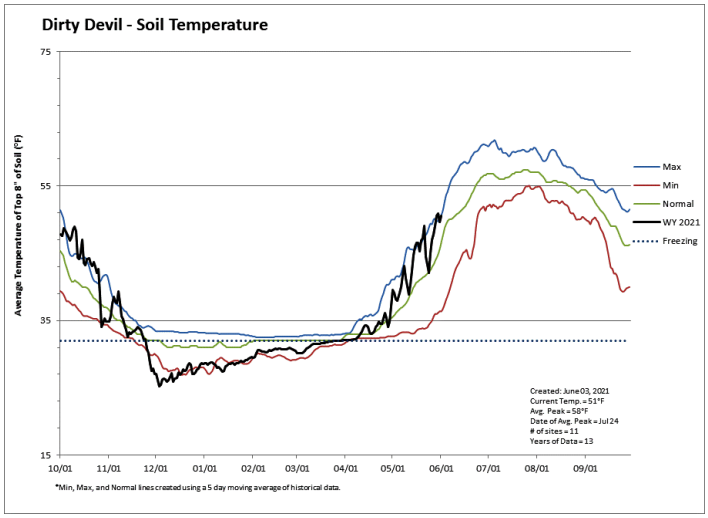
June 1, 2021

Precipitation in May was much below average at 13%, which brings the seasonal accumulation (Oct-May) to 68% of average. Soil moisture is at 54% compared to 58% last year.





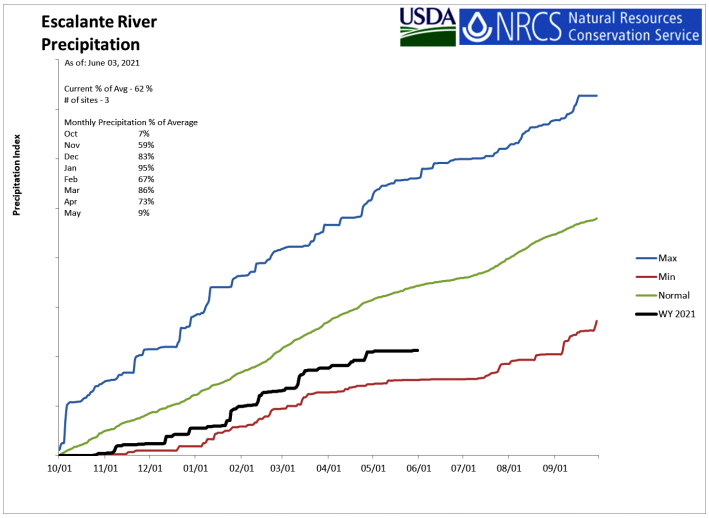


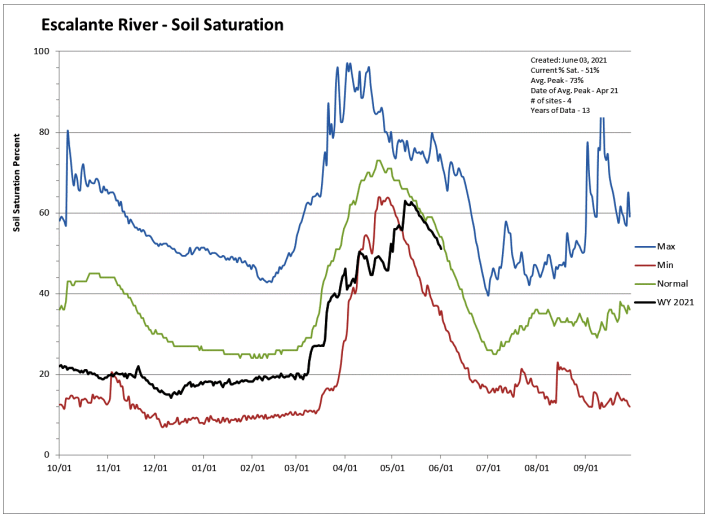


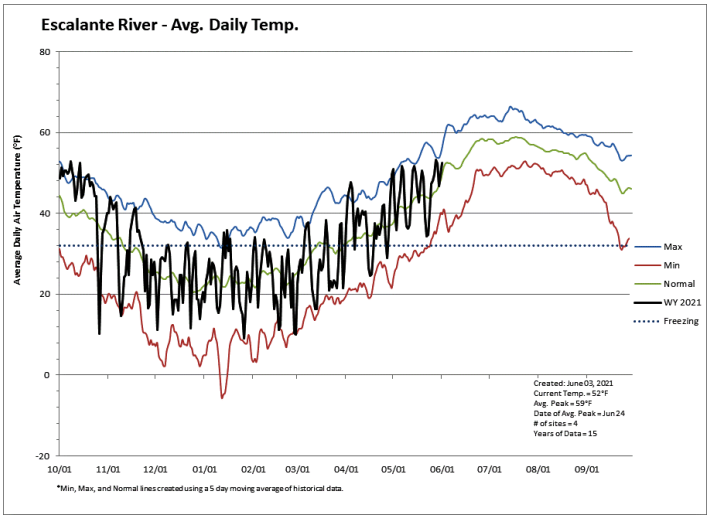
Escalante River Basin

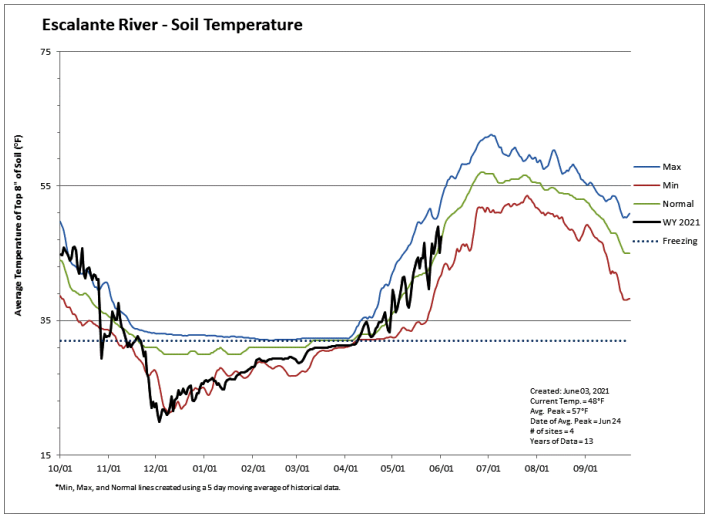
June 1, 2021

Precipitation in May was much below average at 9%, which brings the seasonal accumulation (Oct-May) to 62% of average. Soil moisture is at 51% compared to 50% last year.







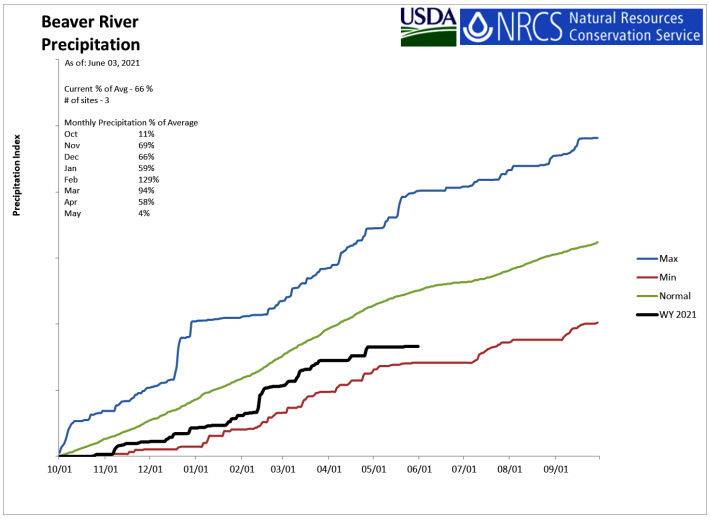


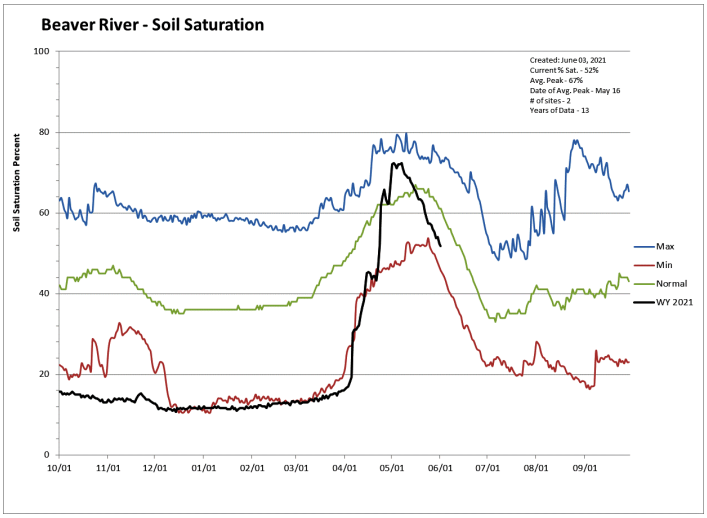
SNOTEL Data

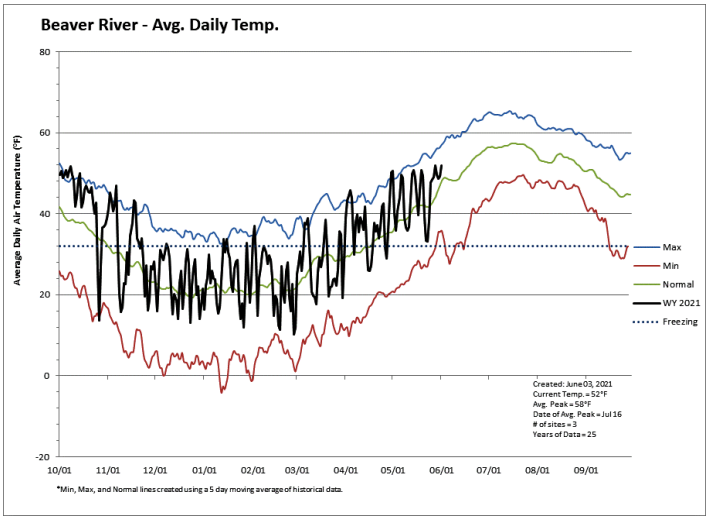
Beaver River Basin

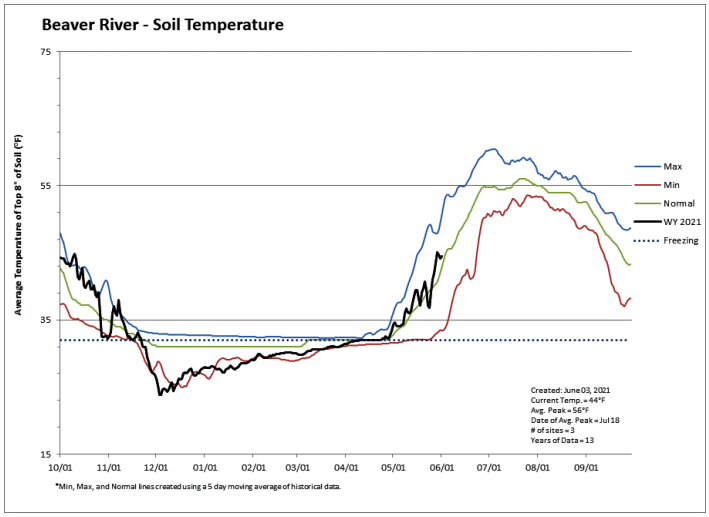
June 1, 2021

Precipitation in May was much below average at 4%, which brings the seasonal accumulation (Oct-May) to 66% of average. Soil moisture is at 52% compared to 60% last year. Reservoir storage is at 30% of capacity, compared to 75% last year. The water availability index for the Beaver River is 2%.







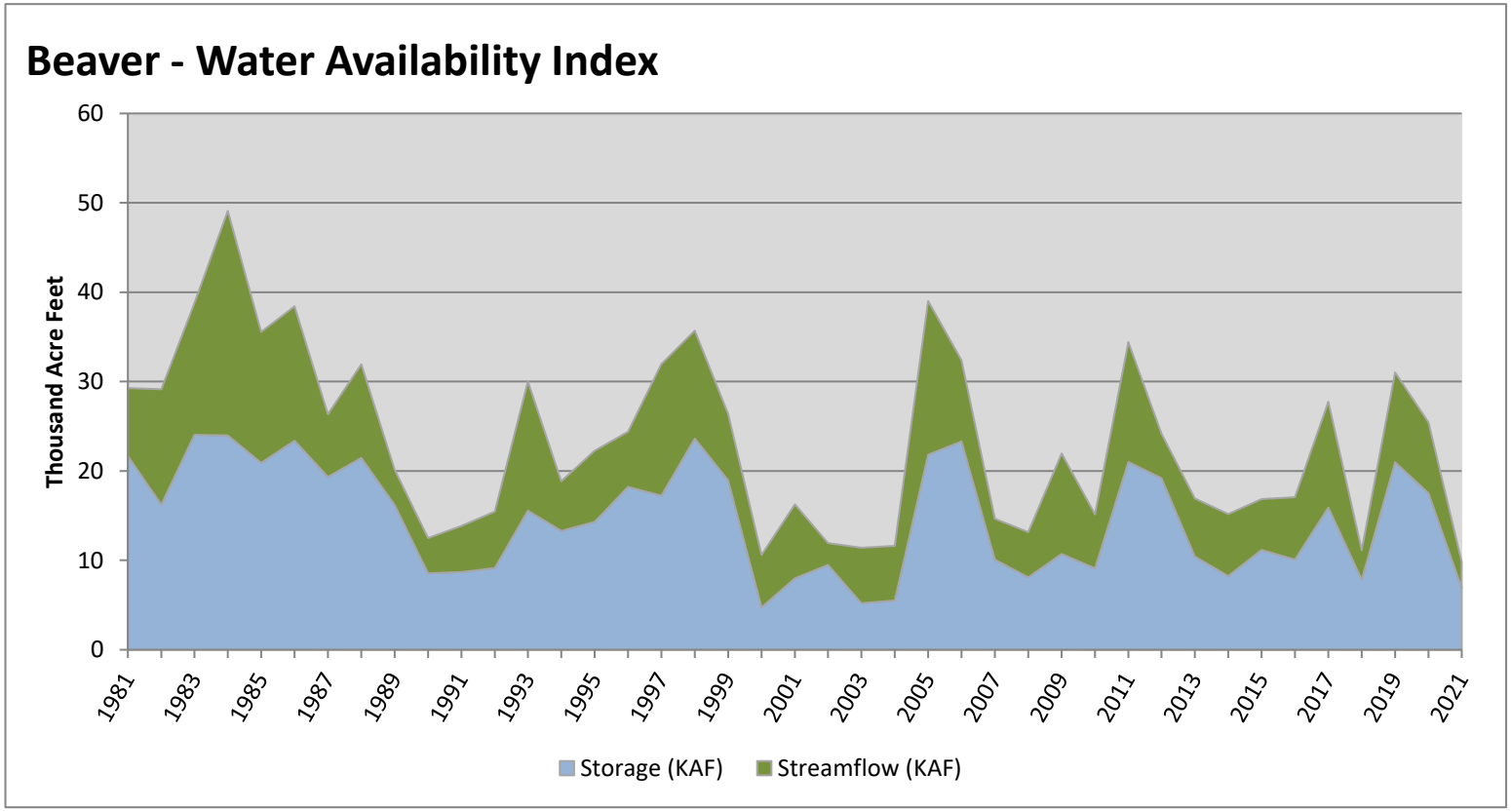


June 1, 2021

Water Availability Index

Basin or Region	May EOM* Storage	May Flow	Storage + Flow	Percentile	WAI#	Years with similiar WAI
	KAF^	KAF^	KAF^	%		
Beaver	**6.91**	**2.93**	**9.84**	**2**	**-3.97**	**00, 18, 03, 04**

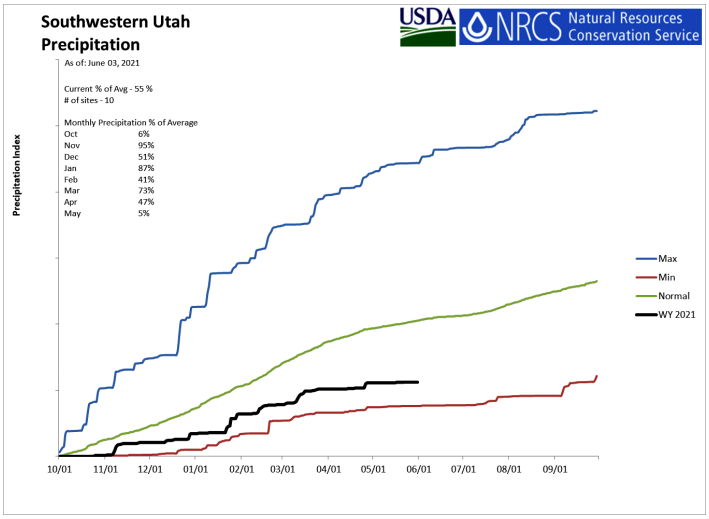
*EOM, end of month; #WAI, Water Availability Index; ^KAF, thousand acre-feet.

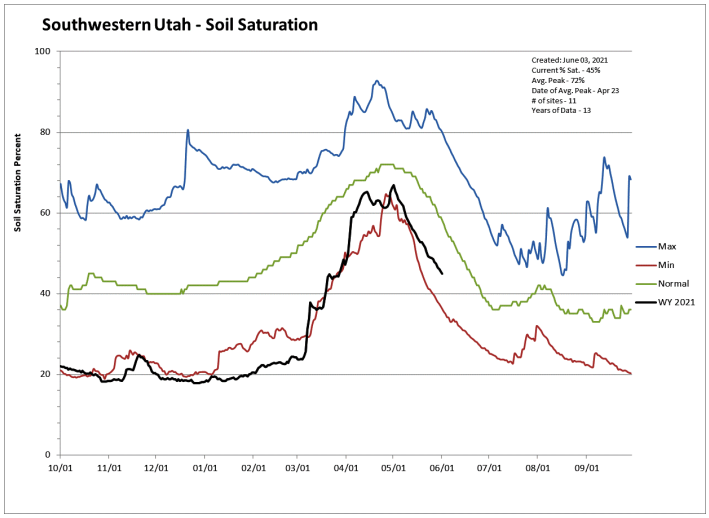


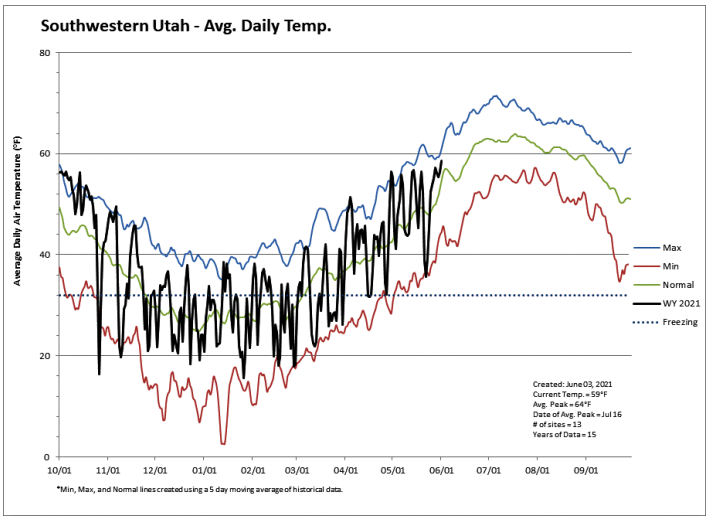
Southwestern Utah

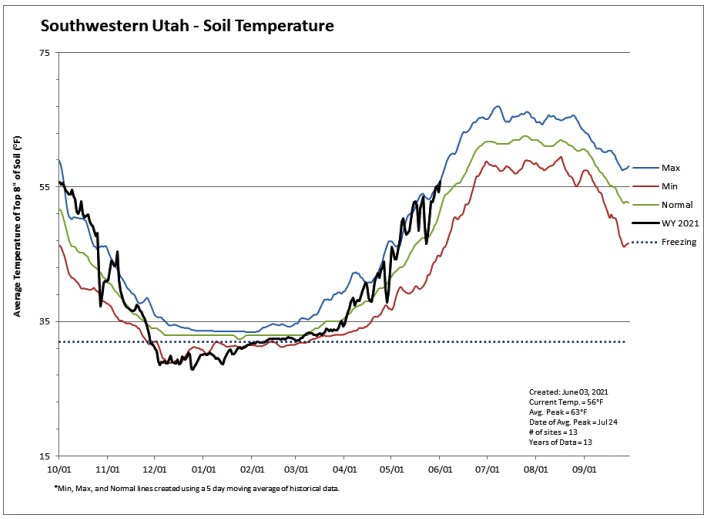
June 1, 2021

Precipitation in May was much below average at 5%, which brings the seasonal accumulation (Oct-May) to 55% of average. Soil moisture is at 45% compared to 49% last year. Reservoir storage is at 34% of capacity, compared to 50% last year. The water availability index for the Virgin River is 20%.









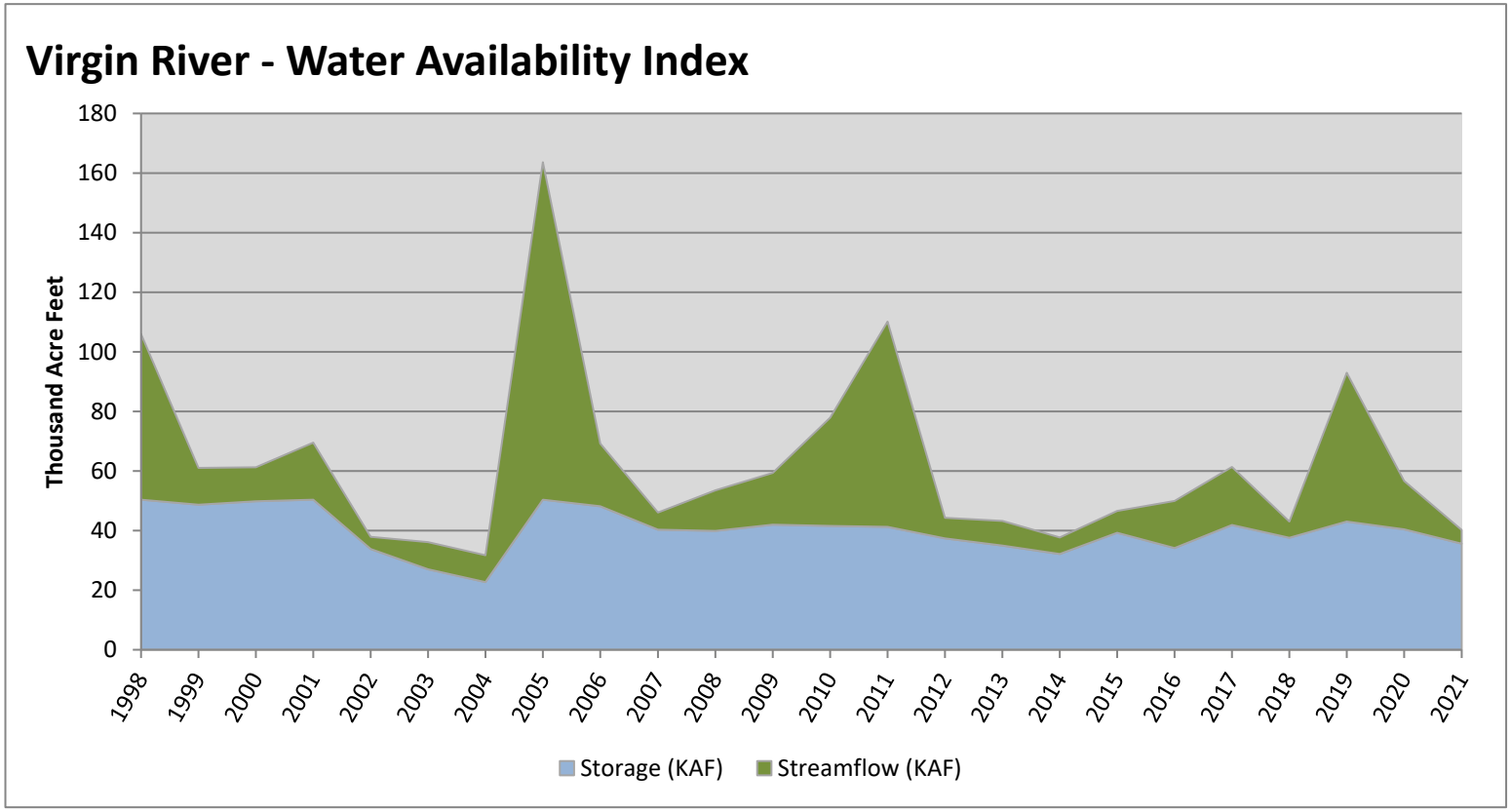
SNOTEL Data

June 1, 2021

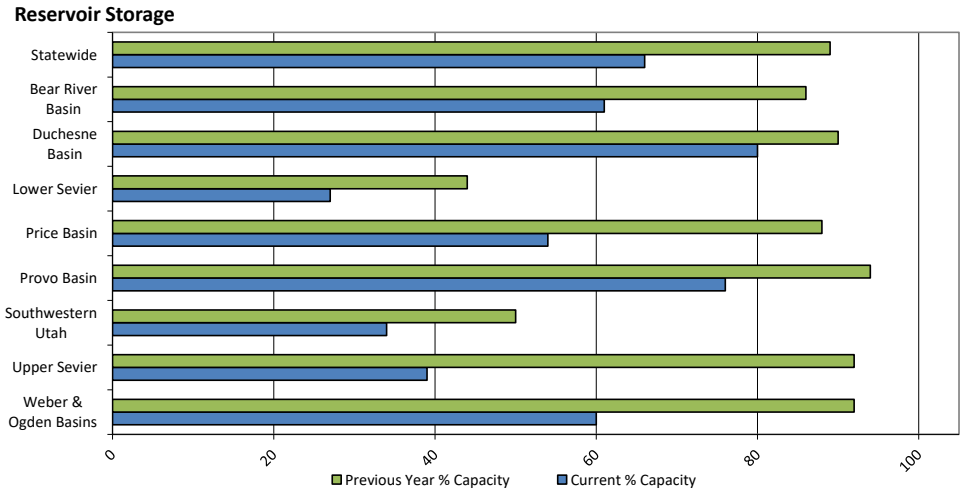
Water Availability Index

Basin or Region	May EOM* Storage	May Flow	Storage + Flow	Percentile	WAI#	Years with similiar WAI
	KAF^	KAF^	KAF^	%		
Virgin River	**35.61**	**4.64**	**40.25**	**20**	**-2.5**	**14, 02, 18, 13**

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



Reservoir Storage Summary for the end of May 2021	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	15.2	21.1		25.7	59%	82%			
Causey Reservoir	7.0	7.1	7.0	7.1	99%	99%	99%	101%	101%
Cleveland Lake	2.3	5.4		5.4	43%	100%			
Currant Creek Reservoir	14.7	14.7	15.2	15.5	95%	95%	98%	97%	97%
Deer Creek Reservoir	118.4	147.9	132.8	149.7	79%	99%	89%	89%	111%
East Canyon Reservoir	36.9	49.0	46.7	49.5	75%	99%	94%	79%	105%
Echo Reservoir	33.1	65.4	67.0	73.9	45%	89%	91%	49%	98%
Grantsville Reservoir	2.2	2.1	2.8	3.3	65%	65%	85%	77%	76%
Gunlock	4.7	9.1	7.9	10.4	45%	87%	76%	59%	115%
Gunnison Reservoir	0.0	6.7	14.7	20.3	0%	33%	72%	0%	45%
Huntington North Reservoir	3.0	3.2	3.7	4.2	72%	77%	88%	81%	87%
Hyrum Reservoir	13.3	14.6	14.6	15.3	87%	96%	95%	91%	100%
Joes Valley Reservoir	37.6	55.8	51.0	61.6	61%	91%	83%	74%	109%
Jordanelle Reservoir	226.0	307.6	274.4	314.0	72%	98%	87%	82%	112%
Ken's Lake	0.9	1.7	2.0	2.3	38%	74%	87%	44%	85%
Kolob Reservoir	3.0	5.6		5.6	54%	100%			
Lost Creek Reservoir	15.7	22.6	18.7	22.5	70%	100%	83%	84%	121%
Lower Enterprise	0.8	1.0	1.2	2.6	31%	38%	45%	68%	85%
Miller Flat Reservoir	1.8	4.2		5.2	34%	80%			
Millsite	6.1	12.5	15.9	16.7	37%	75%	95%	38%	79%
Minersville Reservoir	6.9	17.5	15.0	23.3	30%	75%	64%	46%	117%
Moon Lake Reservoir	13.8	37.0	28.6	35.8	38%	103%	80%	48%	129%
Otter Creek Reservoir	25.6	48.3	43.7	52.5	49%	92%	83%	59%	111%
Panguitch Lake	17.5	24.4	18.1	22.3	79%	109%	81%	97%	135%
Pineview Reservoir	60.2	100.9	97.8	110.1	55%	92%	89%	62%	103%
Piute Reservoir	13.7	62.1	53.0	71.8	19%	87%	74%	26%	117%
Porcupine Reservoir	8.8	13.1	10.8	11.3	78%	116%	96%	81%	121%
Quail Creek	30.9	31.3	31.5	40.0	77%	78%	79%	98%	99%
Red Fleet Reservoir	17.1	23.4	23.5	25.7	67%	91%	91%	73%	100%
Rockport Reservoir	33.5	55.6	50.8	60.9	55%	91%	83%	66%	109%
Sand Hollow Reservoir	41.8	49.8		50.0	84%	100%			
Scofield Reservoir	33.3	58.9	48.7	65.8	51%	90%	74%	68%	121%
Settlement Canyon Reservoir	0.4	0.6	0.9	1.0	45%	61%	85%	52%	72%
Sevier Bridge Reservoir	62.6	104.2	159.0	236.0	27%	44%	67%	39%	66%
Smith And Morehouse Reservoir	4.8	8.5	6.7	8.1	59%	105%	83%	72%	127%
Starvation Reservoir	150.6	162.7	154.8	164.1	92%	99%	94%	97%	105%
Stateline Reservoir	8.3	14.3	10.2	12.0	69%	119%	85%	81%	140%
Steinaker Reservoir	10.1	15.8	29.2	33.4	30%	47%	87%	35%	54%
Strawberry Reservoir	902.7	1003.1	714.9	1105.9	82%	91%	65%	126%	140%
Upper Enterprise	2.3	5.1	4.8	10.0	23%	51%	48%	48%	106%
Upper Stillwater Reservoir	21.2	19.3	15.7	32.5	65%	59%	48%	135%	123%
Utah Lake	614.6	846.7	864.9	870.9	71%	97%	99%	71%	98%
Willard Bay	136.0	192.4	164.5	215.0	63%	89%	77%	83%	117%
Woodruff Creek	1.7	4.0	3.8	4.0	42%	100%	95%	45%	105%
Woodruff Narrows Reservoir	12.8	46.8	44.8	57.3	22%	82%	78%	29%	104%
Meeks Cabin Reservoir	16.6	28.1	25.2	32.5	51%	87%	78%	66%	112%
Bear Lake	804.3	1122.4	710.6	1302.0	62%	86%	55%	113%	158%
Basin-wide Total	3531.0	4767.6	4007.0	5373.1	66%	89%	75%	88%	119%
# 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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