

# Utah Climate and Water Report

June 1, 2020



**Cave Valley SCAN site**

**Photo by Troy Brosten**

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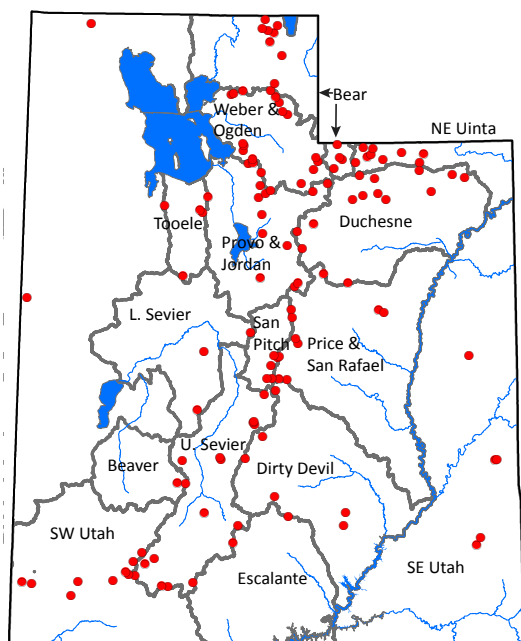
## Utah Climate and Water Report

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



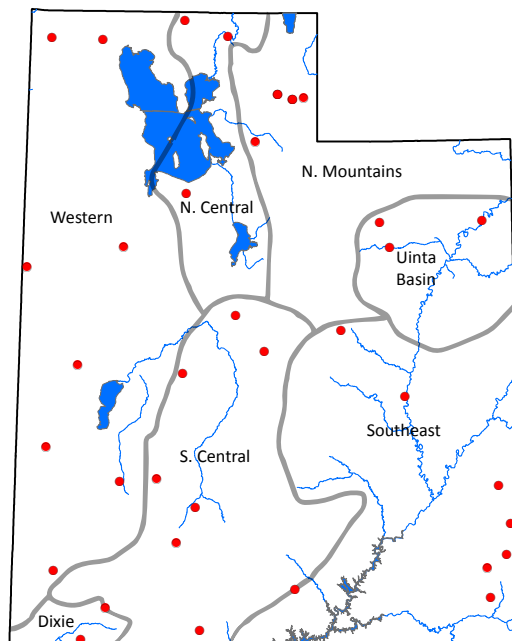
### SNOTEL

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



### SCAN

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



## Utah General Summary

June 1, 2020

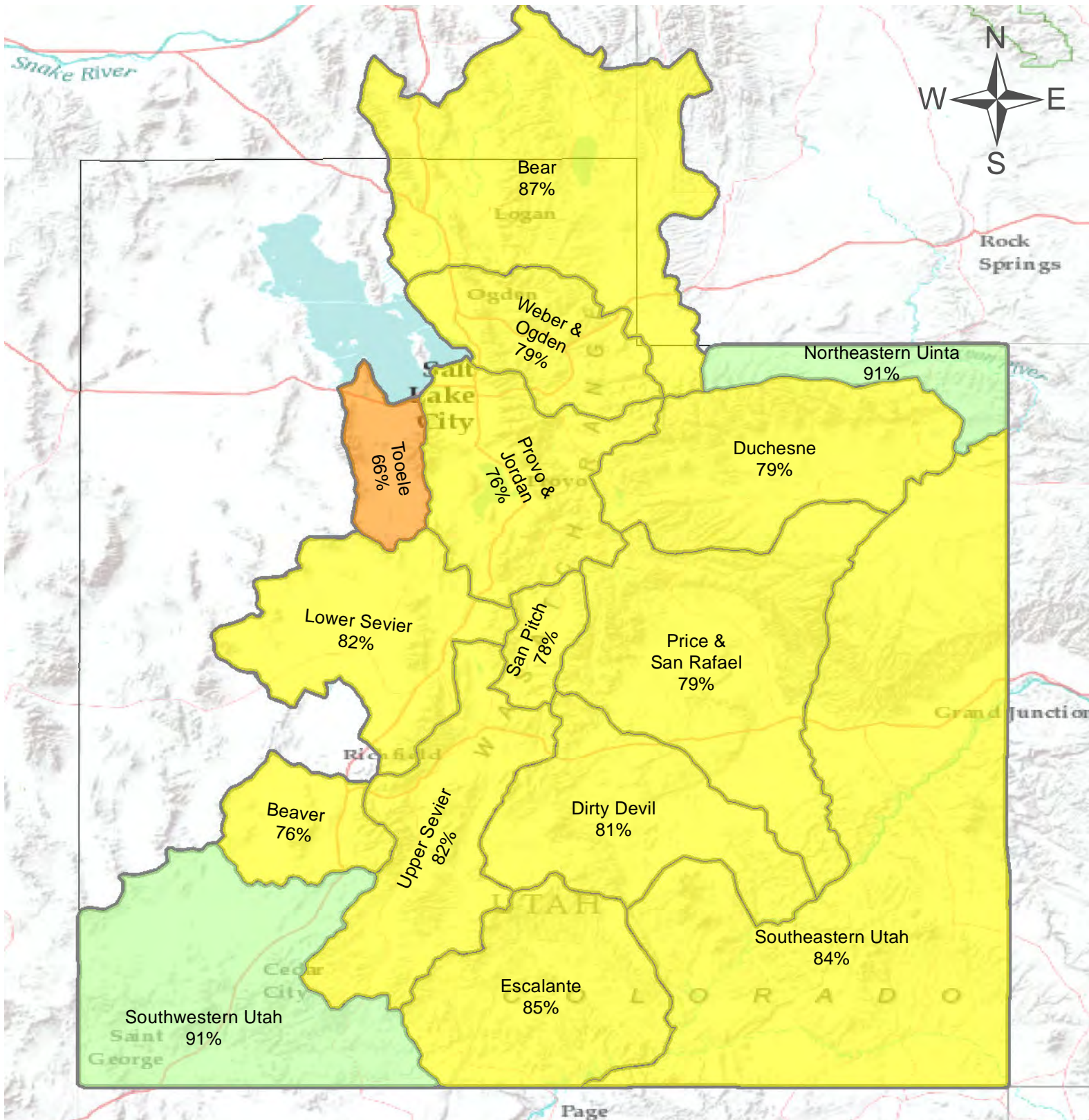
*This report has been reorganized to better reflect two distinct geographic areas being monitored – the low elevation valley sites (**Soil Climate Analysis Network**) that are critical for agricultural production and operations, and the high elevation mountainous areas where water supply is generated (**SNOWTElemetry**). Most of the graphs have been updated to utilize daily data versus the old monthly bar charts so that the timing and distribution of precipitation and other events can be seen. The timing distribution of precipitation can be as important as the overall amount in an agricultural context. These graphs are hyperlinked so that the user can simply click on the graph and be taken to the most recent version on the Snow Survey web page. Questions, comments and suggestions are welcome and should be directed to [jordan.clayton@usda.gov](mailto:jordan.clayton@usda.gov).*

### Current Valley Conditions (SCAN)

May was another rough month for precipitation in Utah's valley locations, where the statewide average precipitation ticked up just 0.3 inches. The water year total for Utah's lower elevations now stands at just 6 inches. This, coupled with very high temperatures, has caused a further deterioration in drought conditions and subsequent increase in fire danger. Specifically, the percentage of Utah under drought conditions (D0-D4) increased to about 90% of the state in May. Furthermore, the area of Severe Drought (D2) increased to about 15% of the state, encompassing almost all of Juab County. On average, soil moisture conditions are significantly below normal and soil temperatures are very high.

### Current Mountain Conditions (SNOTEL)

Utah's mountain locations have received below average precipitation this water year. As of June 1<sup>st</sup>, the water-year-to-date (October through May) precipitation is 81% of average. The last couple months have been particularly dry—precipitation at SNOTEL sites during May was only 31% of average. This has led to early melting of the snowpack and subsequent early drying of soil moisture conditions in Utah's mountains. Currently, the statewide mountain soil moisture is at 65% of saturation, compared to 84% last year at this time. The dry soils have been accompanied by above-average air temperatures, resulting in soil temperatures that are well above normal. In several regions of the state, soil temperatures are higher than any previous observations for this time of year. These warm, dry soils are a concern as we head into the summer fire hazard season. Still, Utah's reservoirs are in good condition: statewide reservoir storage is at 89% of capacity, compared to 82% last year. Much of this has to do with excellent carryover from last year's outstanding snowpack and runoff.



# Statewide Precipitation

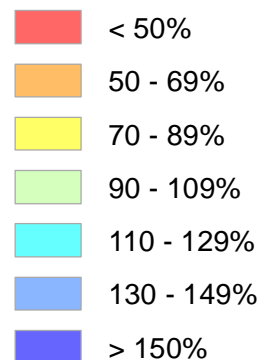
As of June 1, 2020:

81% of Normal Precipitation

31% of Normal Precipitation Last Month

0 10 20 40 60 80 100 Miles

## % of Normal



June 1, 2020

## Water Availability Index

Basin or Region	May EOM* Storage	May Flow	Storage + Flow	Percentile	WAI#	Years with similar WAI
	KAF^	KAF^	KAF^	%		
<b>Bear River</b>	<b>1122</b>	<b>46.9</b>	<b>1169</b>	<b>85</b>	<b>3.0</b>	<b>97, 99, 98, 83</b>
<b>Woodruff Narrows</b>	<b>46.8</b>	<b>46.9</b>	<b>93.7</b>	<b>61</b>	<b>0.9</b>	<b>08, 14, 16, 07</b>
<b>Little Bear</b>	<b>14.6</b>	<b>8.2</b>	<b>22.8</b>	<b>38</b>	<b>-1.0</b>	<b>94, 14, 02, 18</b>
<b>Ogden</b>	<b>108.0</b>	<b>15.8</b>	<b>123.8</b>	<b>37</b>	<b>-1.1</b>	<b>04, 91, 18, 89</b>
<b>Weber</b>	<b>200.1</b>	<b>61.4</b>	<b>261.6</b>	<b>65</b>	<b>1.2</b>	<b>07, 95, 99, 08</b>
<b>Provo River</b>	<b>455.5</b>	<b>48.8</b>	<b>504.3</b>	<b>88</b>	<b>3.2</b>	<b>18, 17, 06, 09</b>
<b>Western Uinta</b>	<b>220.2</b>	<b>22.8</b>	<b>243.0</b>	<b>88</b>	<b>3.2</b>	<b>93, 00, 09, 01</b>
<b>Eastern Uinta</b>	<b>39.2</b>	<b>25.2</b>	<b>64.4</b>	<b>20</b>	<b>-2.5</b>	<b>90, 13, 81, 15</b>
<b>Blacks Fork</b>	<b>28.1</b>	<b>40.4</b>	<b>68.6</b>	<b>87</b>	<b>3.1</b>	<b>09, 17, 87, 14</b>
<b>Price</b>	<b>58.9</b>	<b>9.7</b>	<b>68.6</b>	<b>63</b>	<b>1.1</b>	<b>88, 87, 09, 11</b>
<b>Smiths Creek</b>	<b>14.3</b>	<b>14.2</b>	<b>28.5</b>	<b>95</b>	<b>3.7</b>	<b>17, 87, 01, 14</b>
<b>Joes Valley</b>	<b>55.8</b>	<b>20.4</b>	<b>76.2</b>	<b>66</b>	<b>1.3</b>	<b>14, 07, 99, 87</b>
<b>Moab</b>	<b>1.7</b>	<b>0.8</b>	<b>2.5</b>	<b>26</b>	<b>-2.0</b>	<b>10, 15, 04, 14</b>
<b>Upper Sevier River</b>	<b>110.4</b>	<b>12.1</b>	<b>122.6</b>	<b>68</b>	<b>1.5</b>	<b>87, 86, 99, 88</b>
<b>San Pitch</b>	<b>6.7</b>	<b>6.2</b>	<b>12.8</b>	<b>32</b>	<b>-1.5</b>	<b>92, 05, 03, 89</b>
<b>Lower Sevier</b>	<b>104.2</b>	<b>3.8</b>	<b>108.0</b>	<b>24</b>	<b>-2.1</b>	<b>02, 15, 14, 09</b>
<b>Beaver</b>	<b>17.5</b>	<b>7.9</b>	<b>25.4</b>	<b>56</b>	<b>0.5</b>	<b>12, 96, 87, 99</b>
<b>Virgin River</b>	<b>40.4</b>	<b>16.0</b>	<b>56.4</b>	<b>50</b>	<b>0.0</b>	<b>16, 08, 09, 99</b>

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

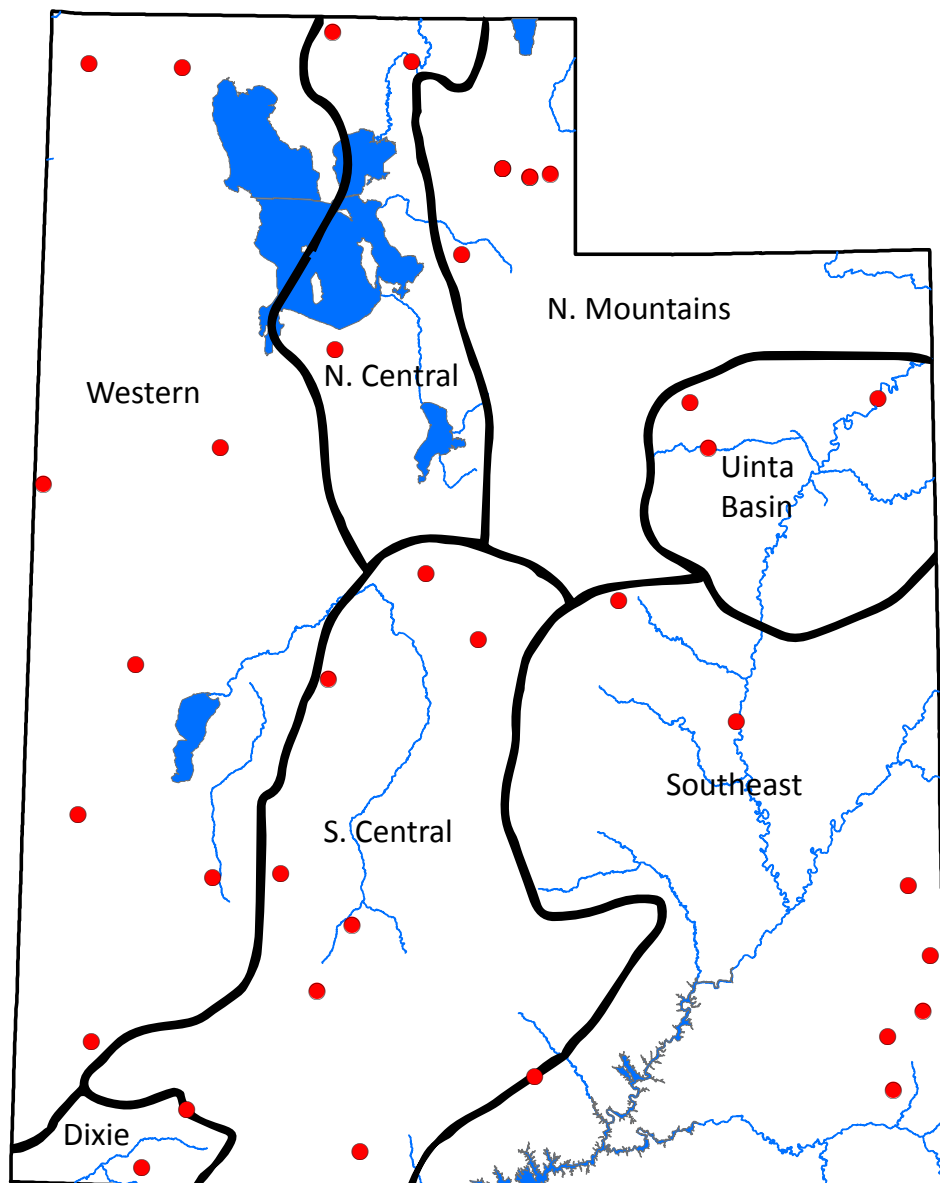
### What is a Water Availability Index?

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/](http://www.ut.nrcs.usda.gov/snow/) on the water supply page. The entire period of historical record for reservoir storage and streamflow is available.

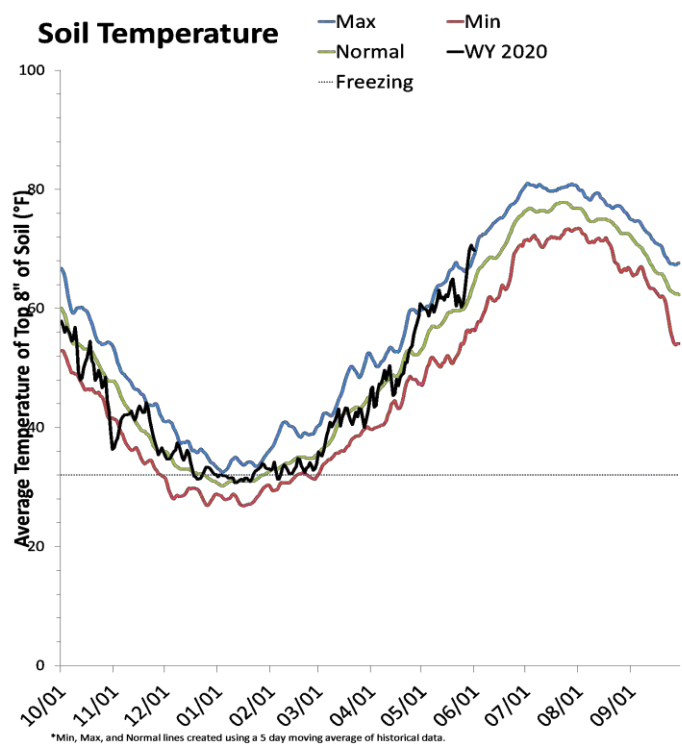
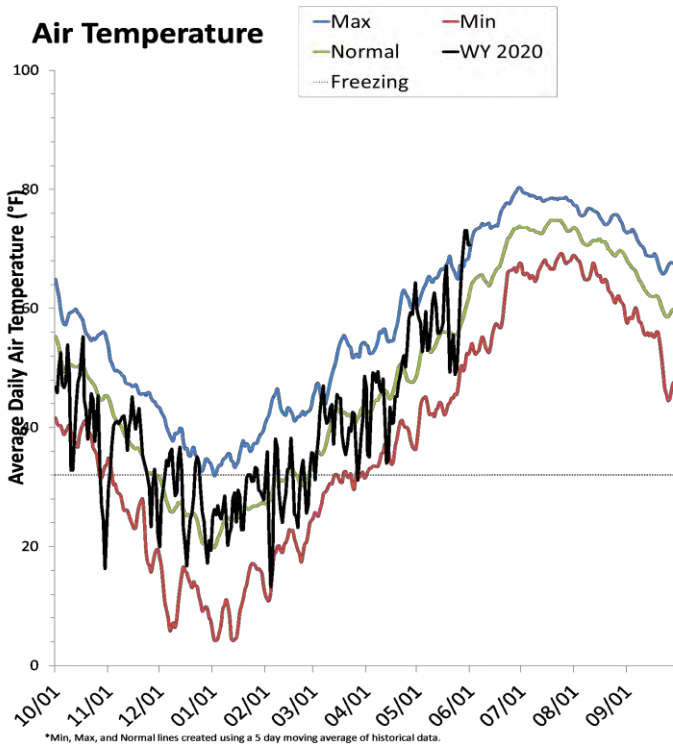
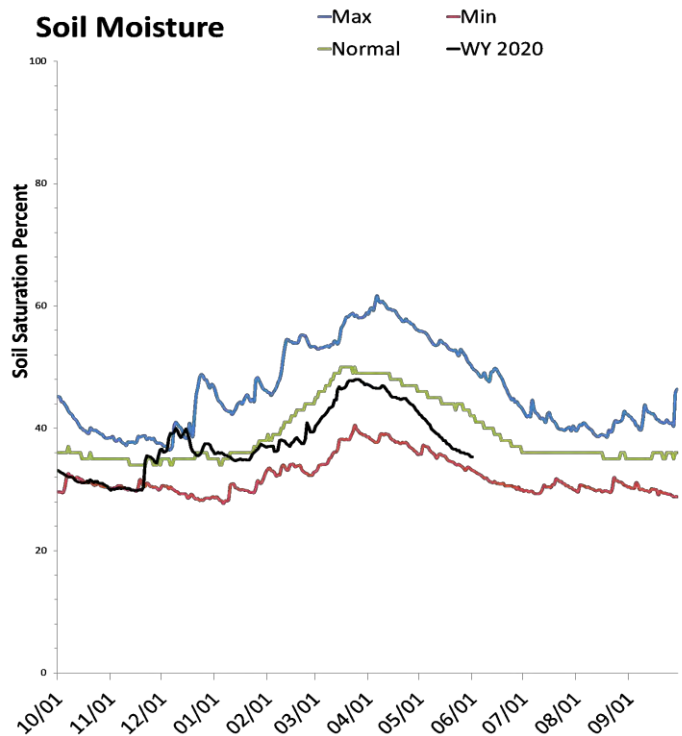
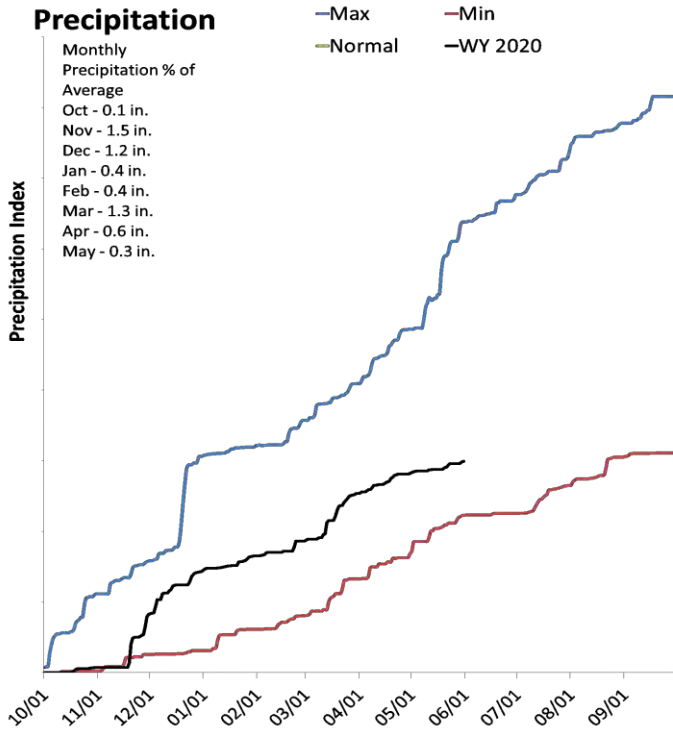
## SCAN portion of report



# Statewide SCAN

June 1, 2020

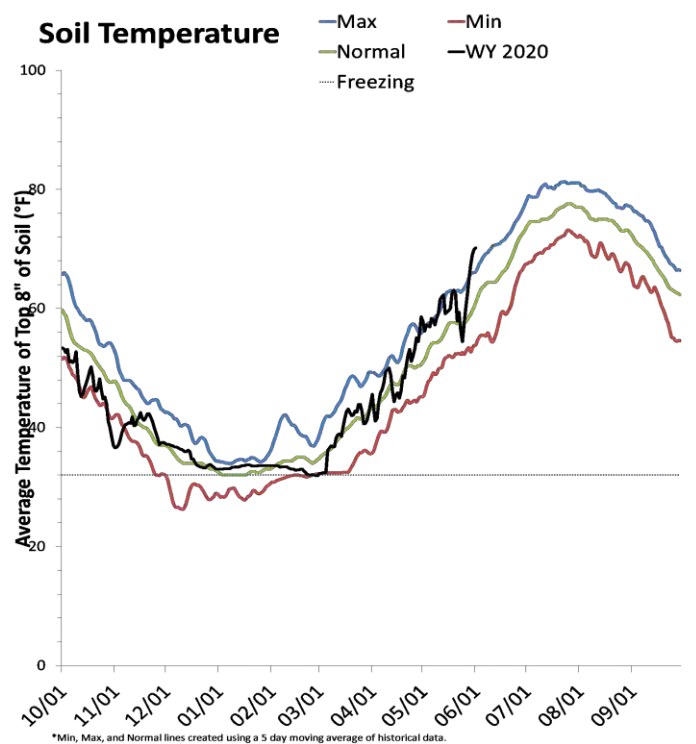
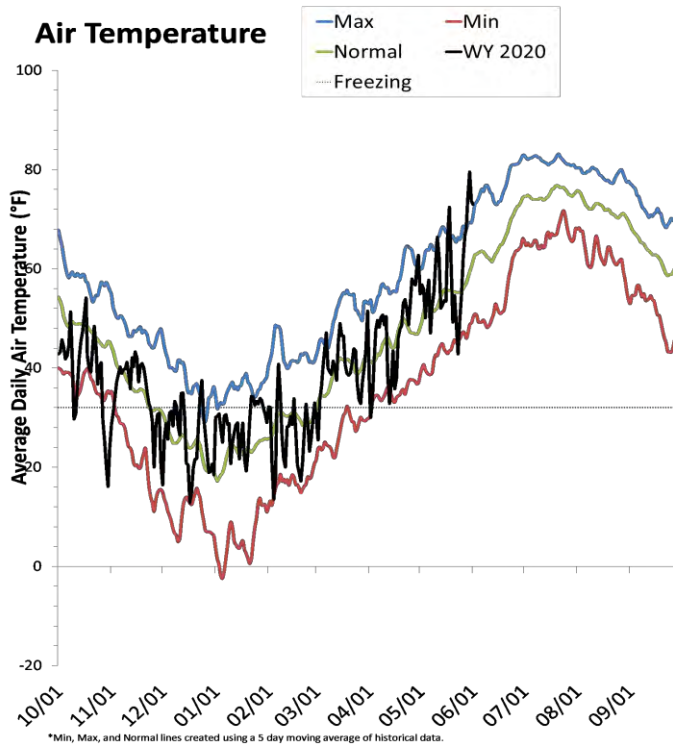
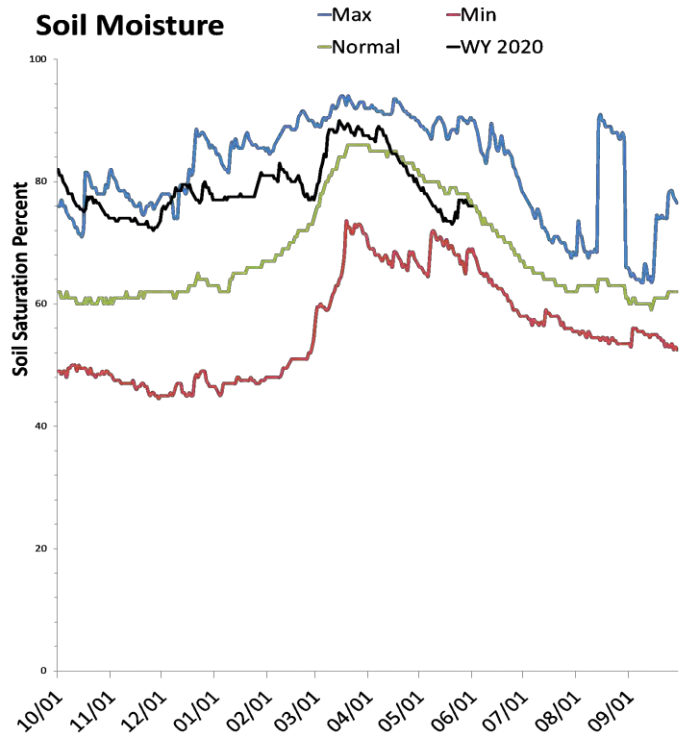
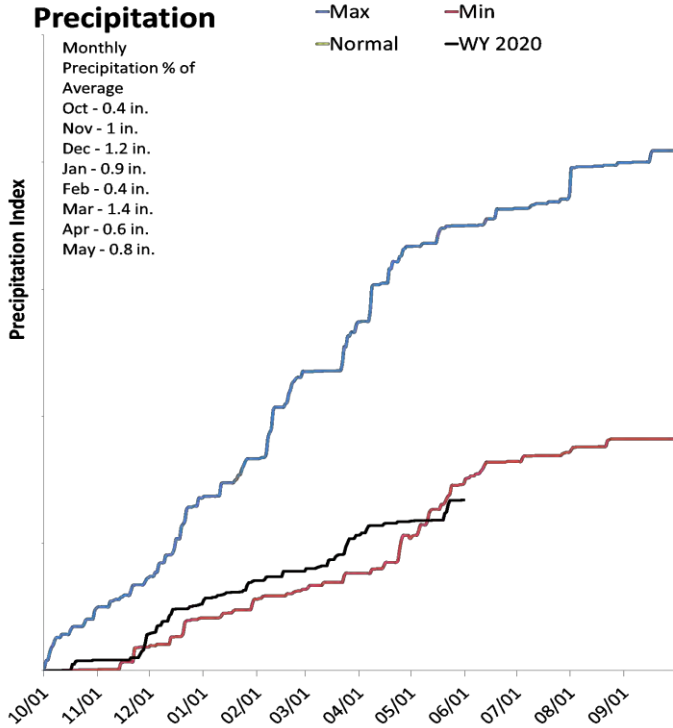
The average precipitation at SCAN sites within Utah was 0.3 inches in May, which brings the seasonal accumulation (Oct-May) to 6 inches. Soil moisture is at 35% compared to 50% last year.



# North Central

June 1, 2020

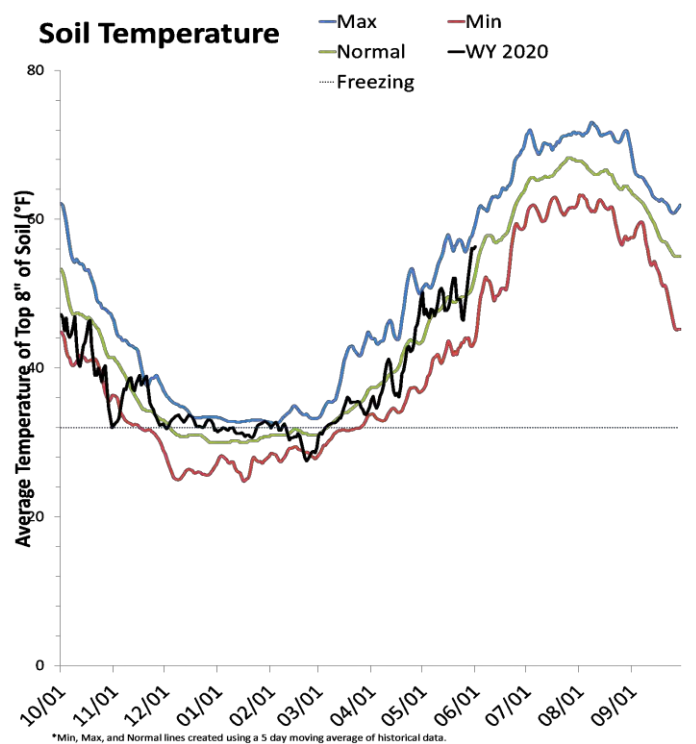
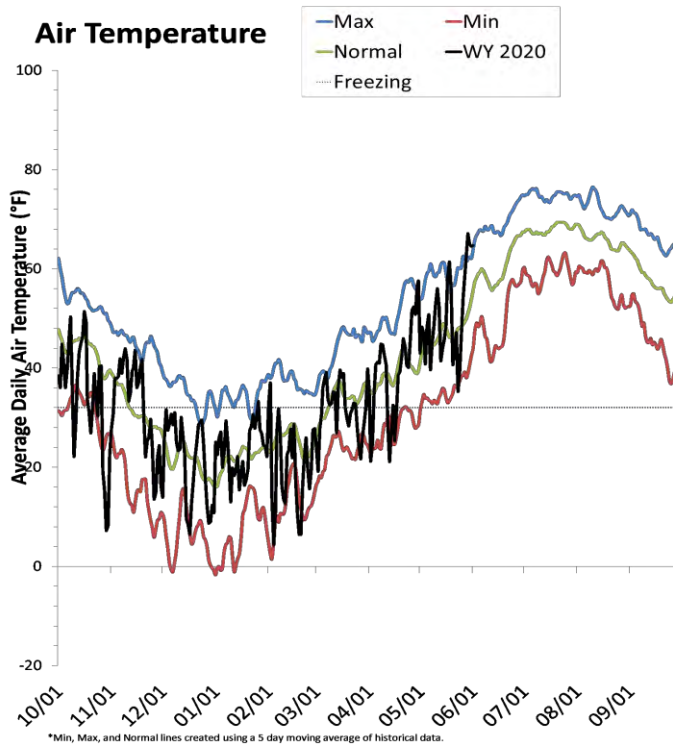
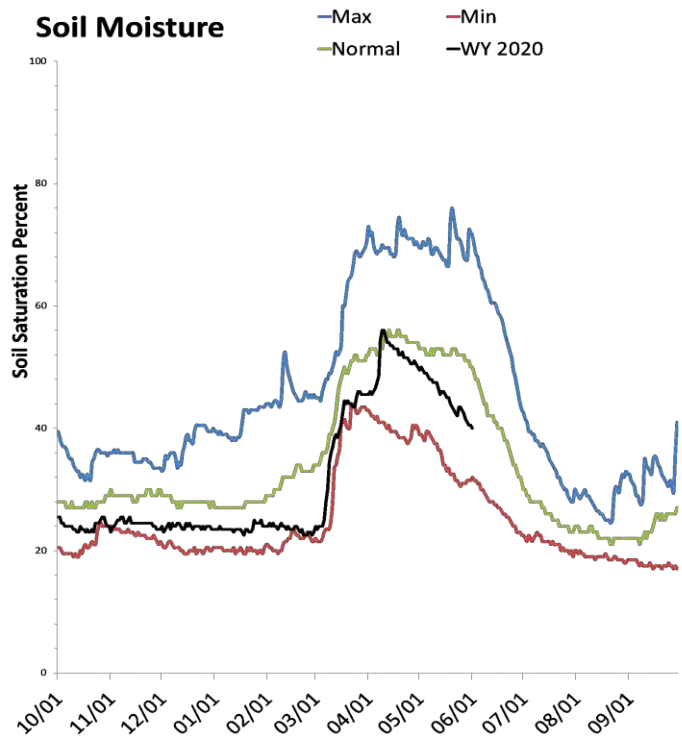
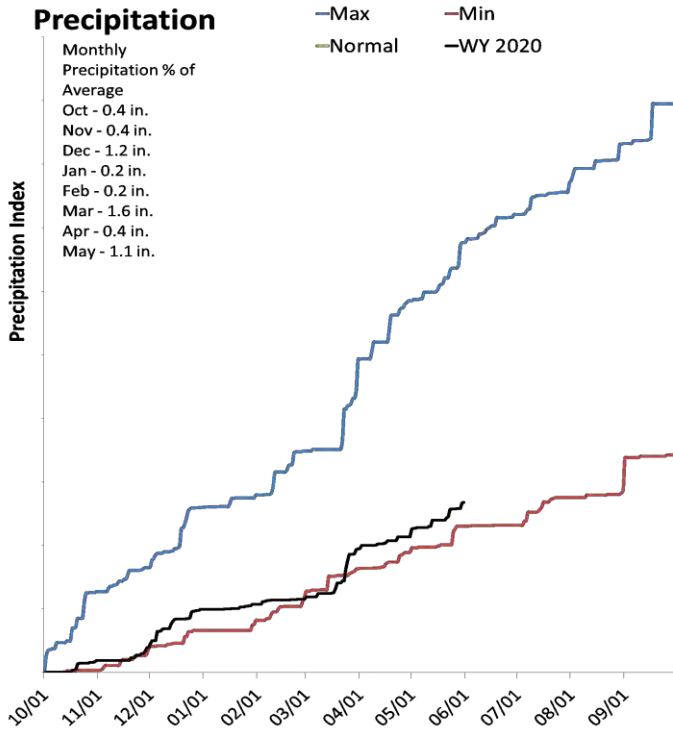
The average precipitation in May at SCAN sites within the basin was 0.8 inches, which brings the seasonal accumulation (Oct-May) to 6.7 inches. Soil moisture is at 76% compared to 84% last year.



# Northern Mountains

June 1, 2020

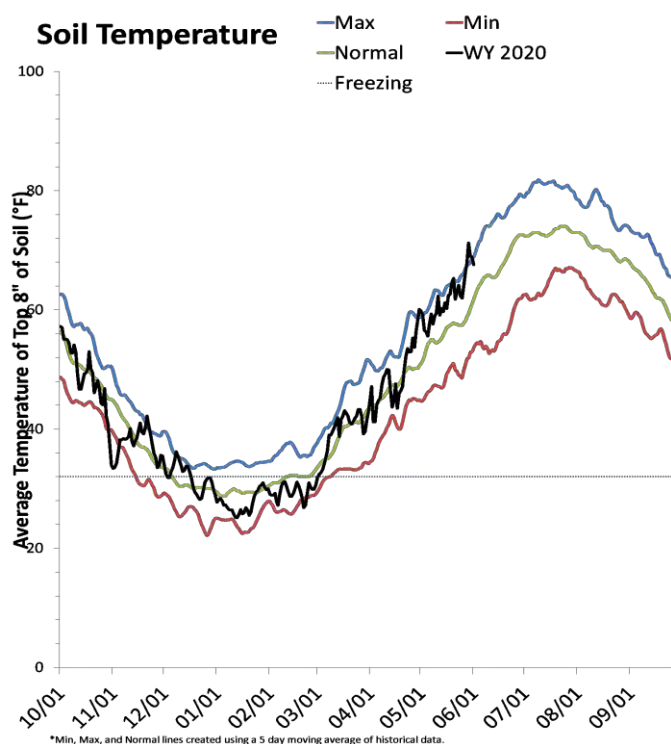
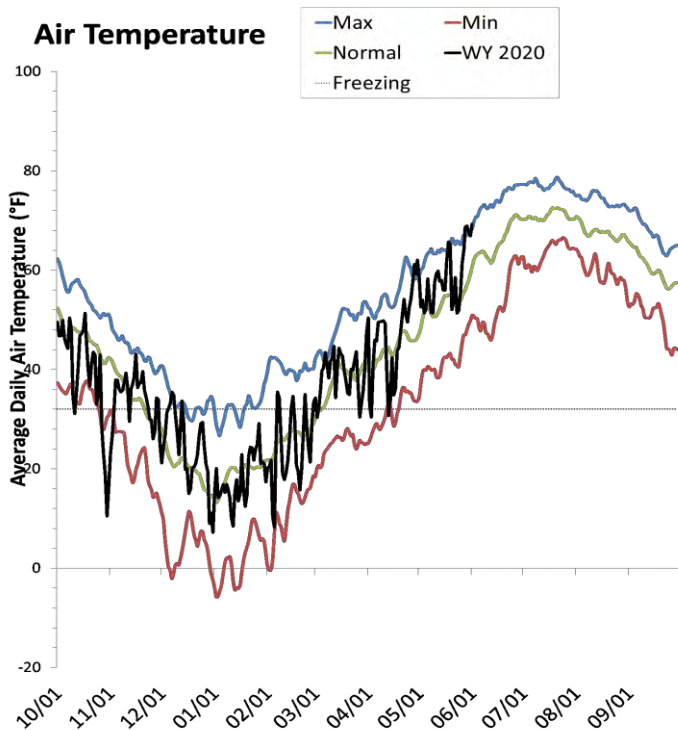
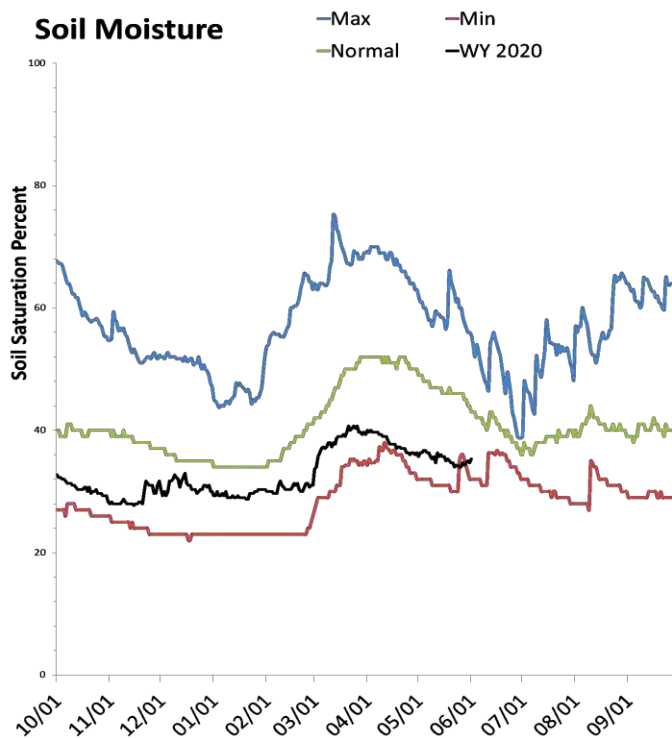
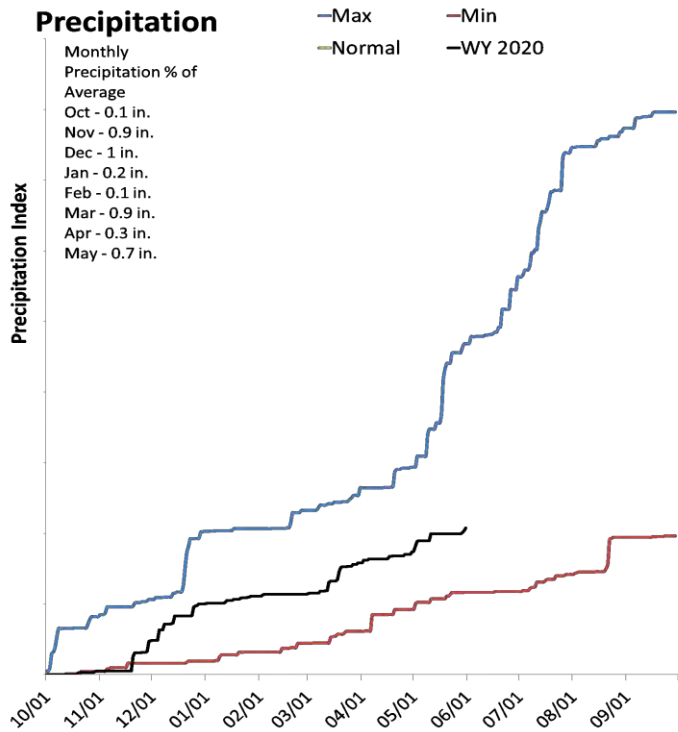
The average precipitation in May at SCAN sites within the basin was 1.1 inches, which brings the seasonal accumulation (Oct-May) to 5.4 inches. Soil moisture is at 40% compared to 65% last year.



# Uinta Basin

June 1, 2020

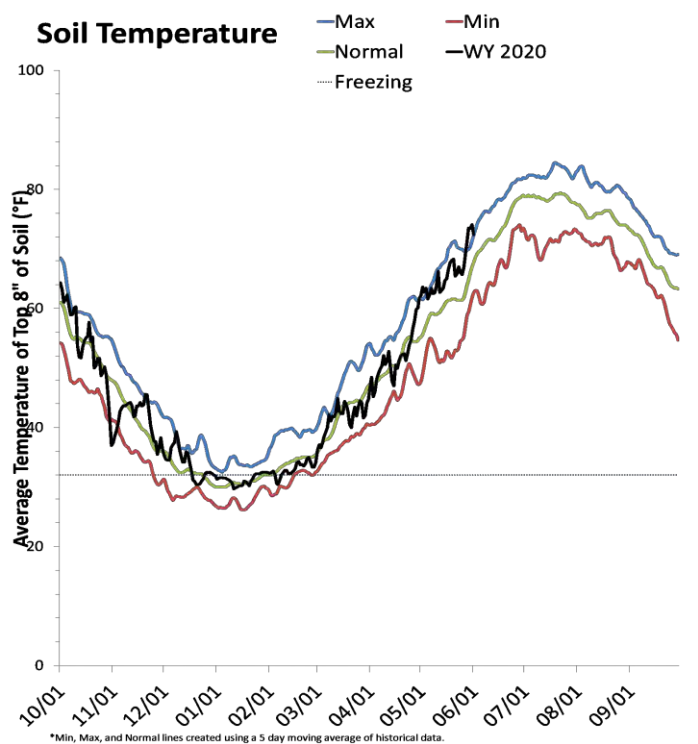
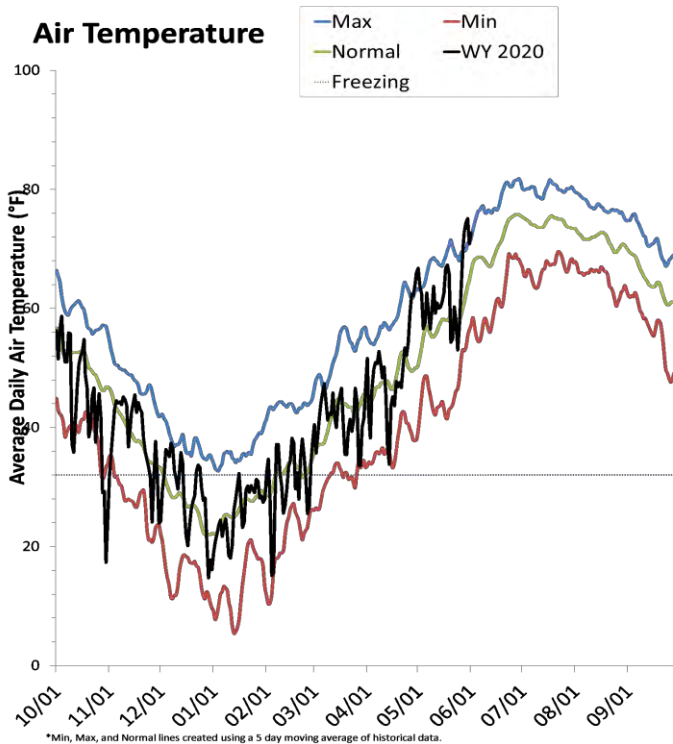
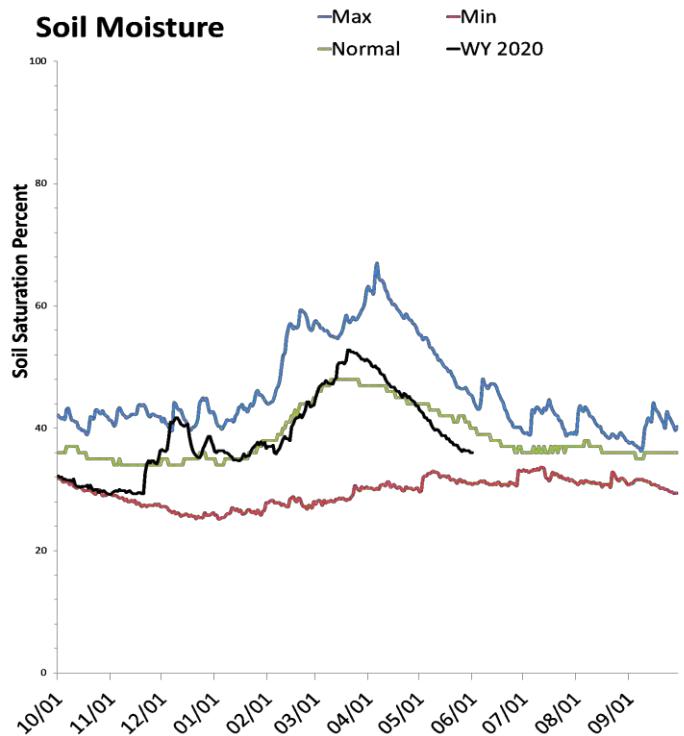
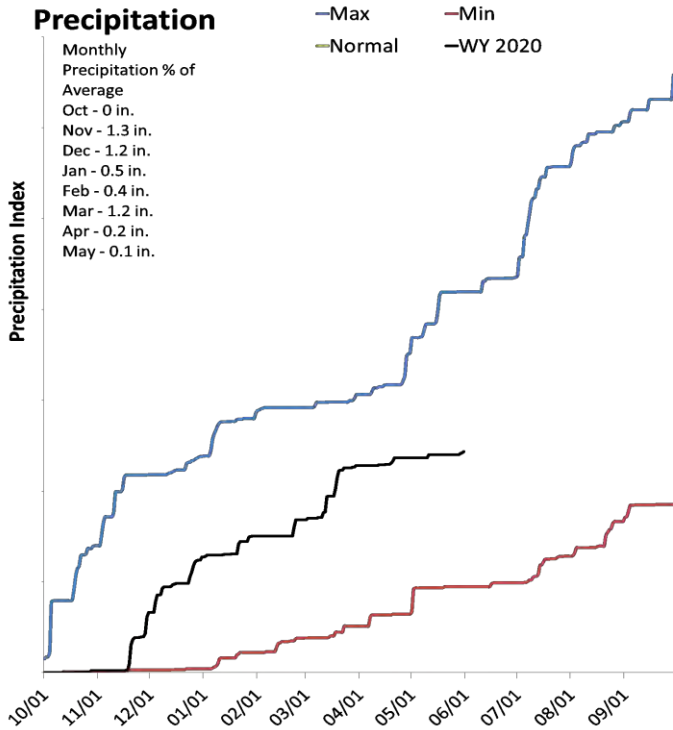
The average precipitation in May at SCAN sites within the basin was 0.7 inches, which brings the seasonal accumulation (Oct-May) to 4.2 inches. Soil moisture is at 35% compared to 67% last year.



# Southeast

June 1, 2020

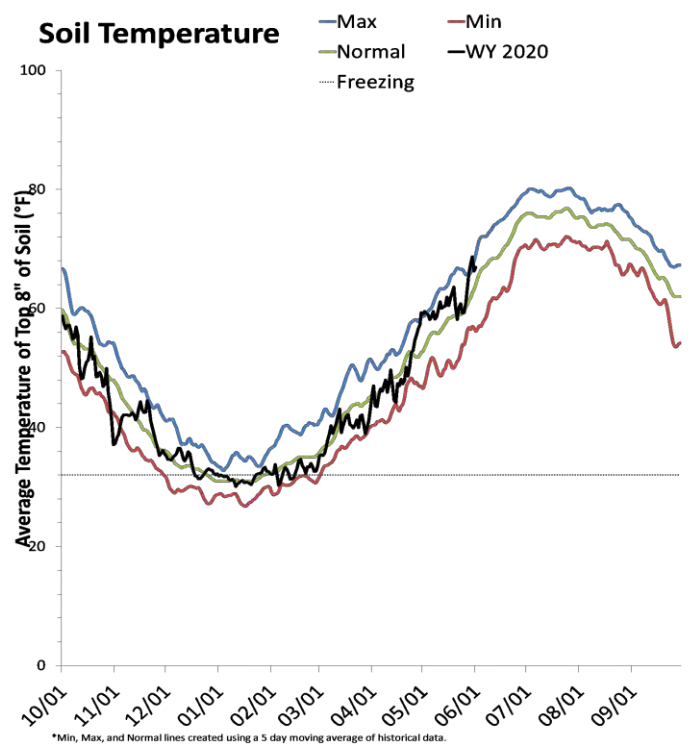
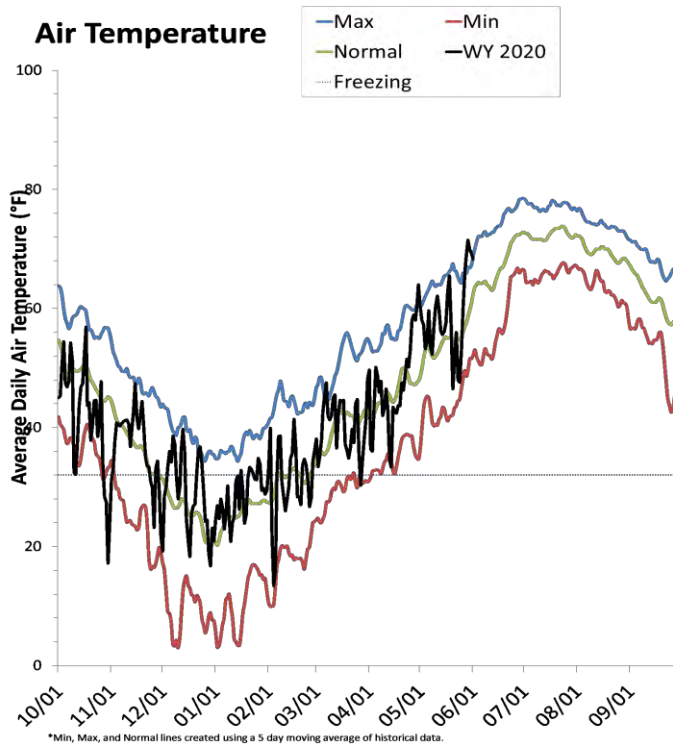
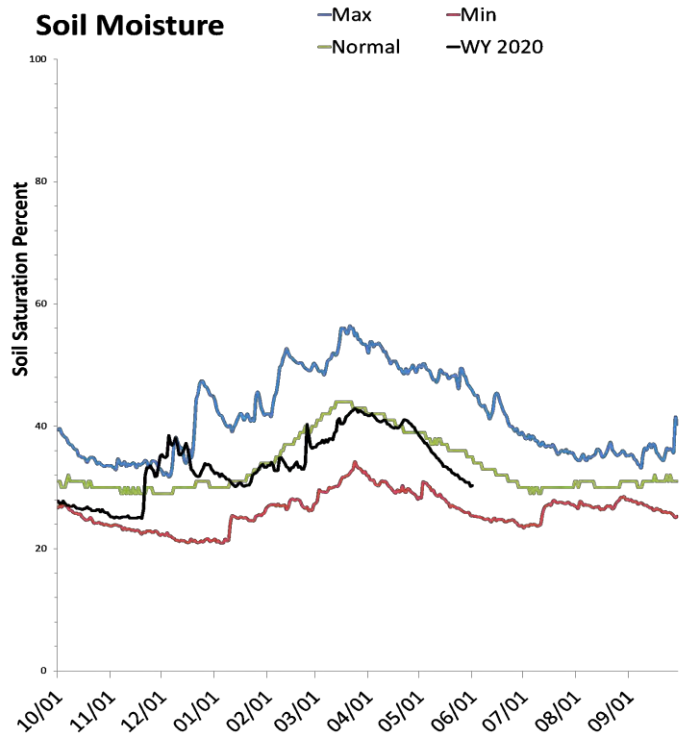
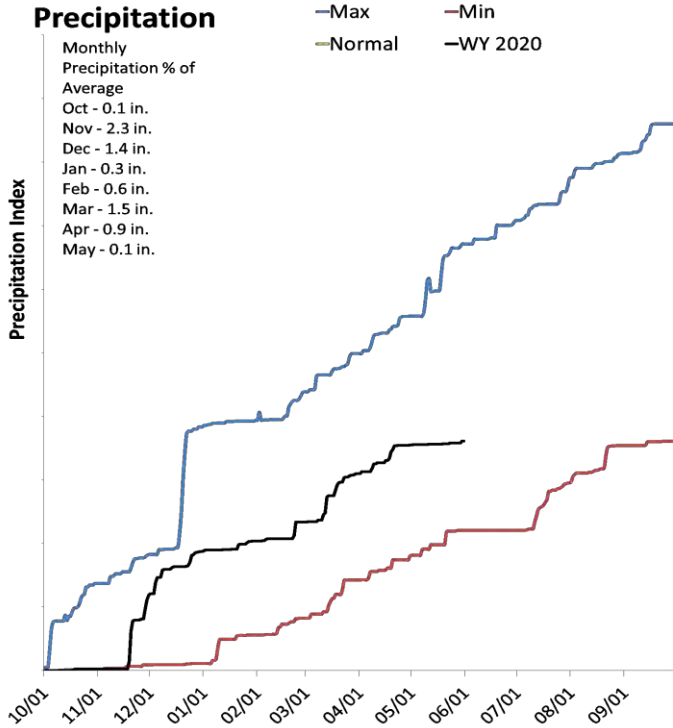
The average precipitation in May at SCAN sites within the basin was 0.1 inches, which brings the seasonal accumulation (Oct-May) to 4.9 inches. Soil moisture is at 37% compared to 54% last year.



# South Central

June 1, 2020

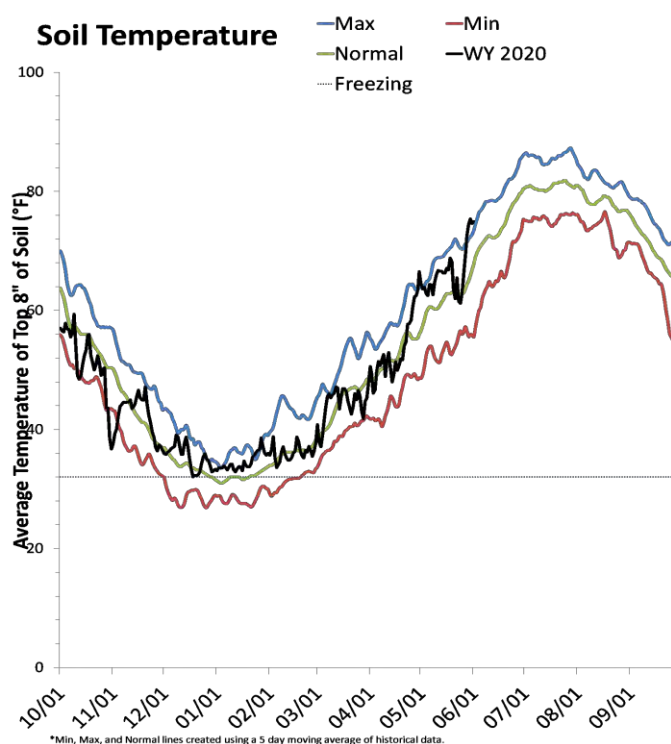
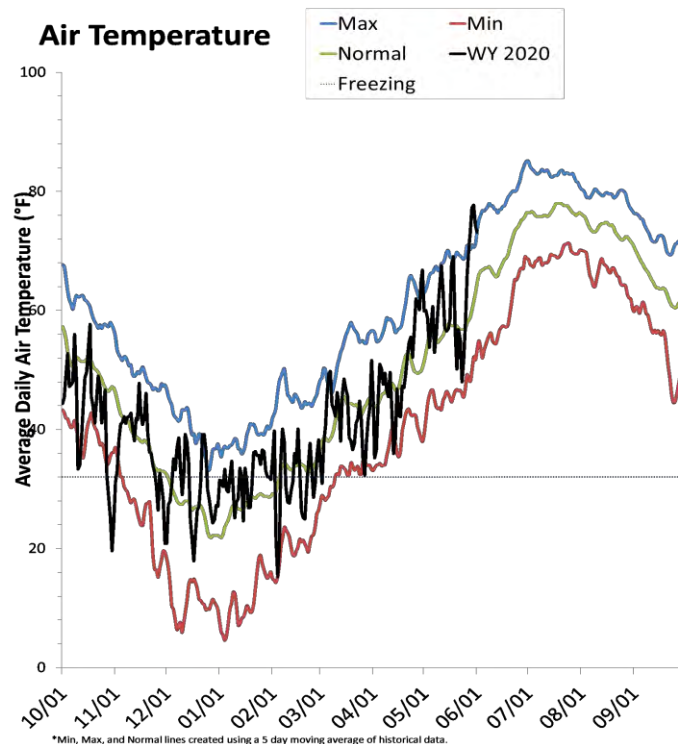
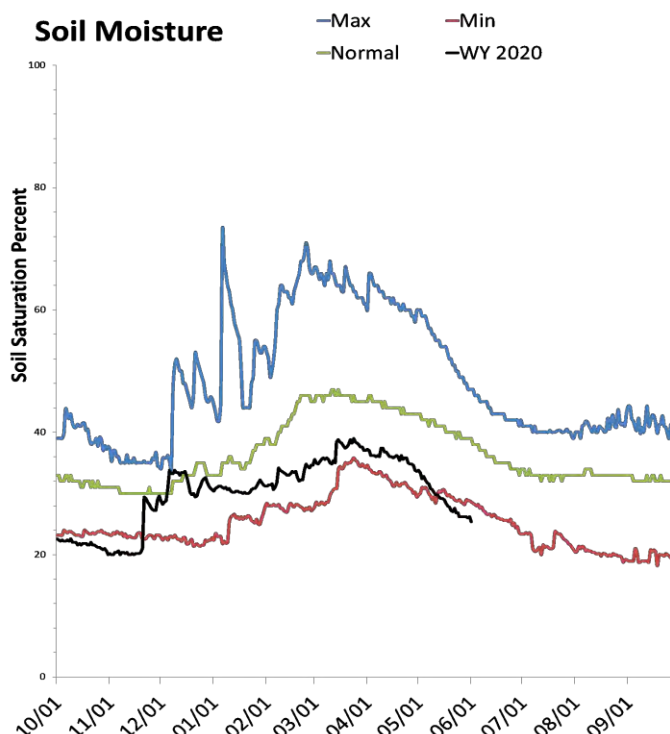
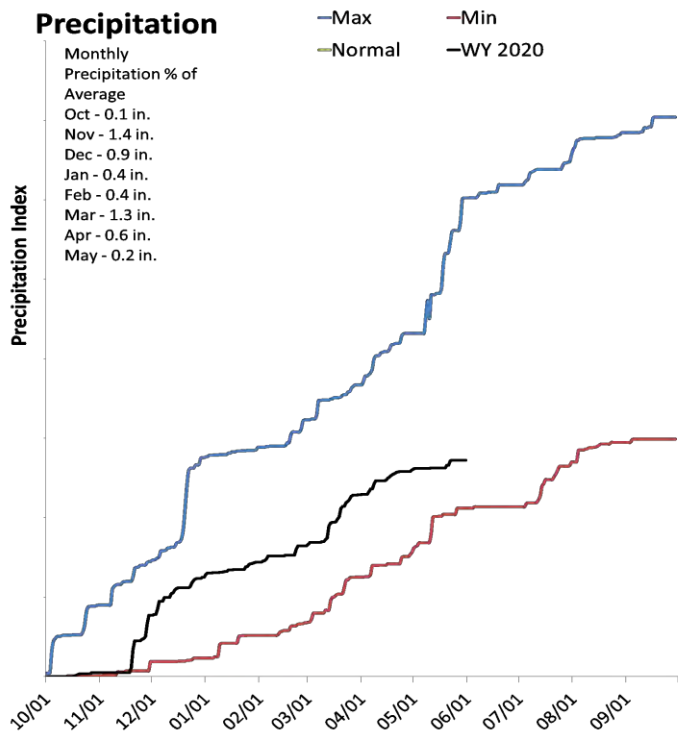
The average precipitation in May at SCAN sites within the basin was 0.1 inches, which brings the seasonal accumulation (Oct-May) to 7.2 inches. Soil moisture is at 30% compared to 39% last year.



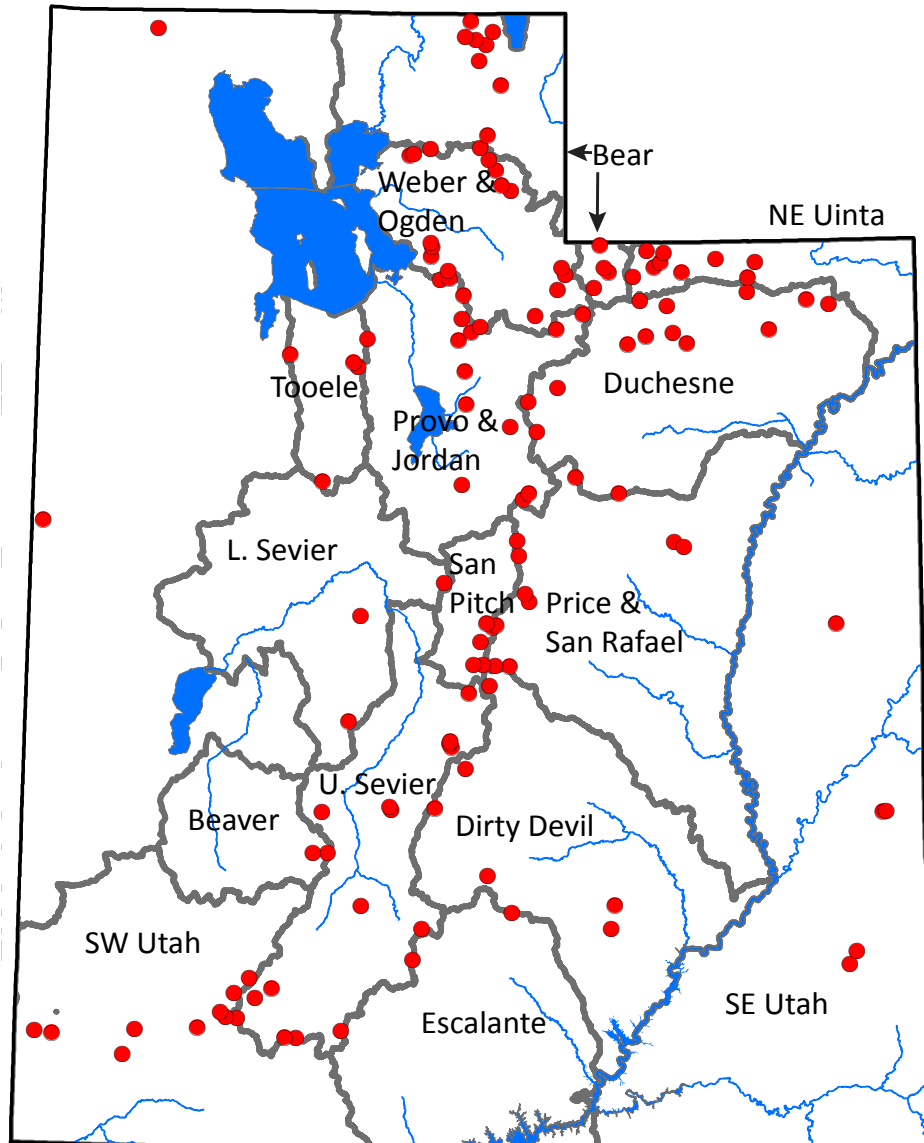
# Western and Dixie

June 1, 2020

The average precipitation in May at SCAN sites within the basin was 0.2 inches, which brings the seasonal accumulation (Oct-May) to 5.4 inches. Soil moisture is at 26% compared to 35% last year.



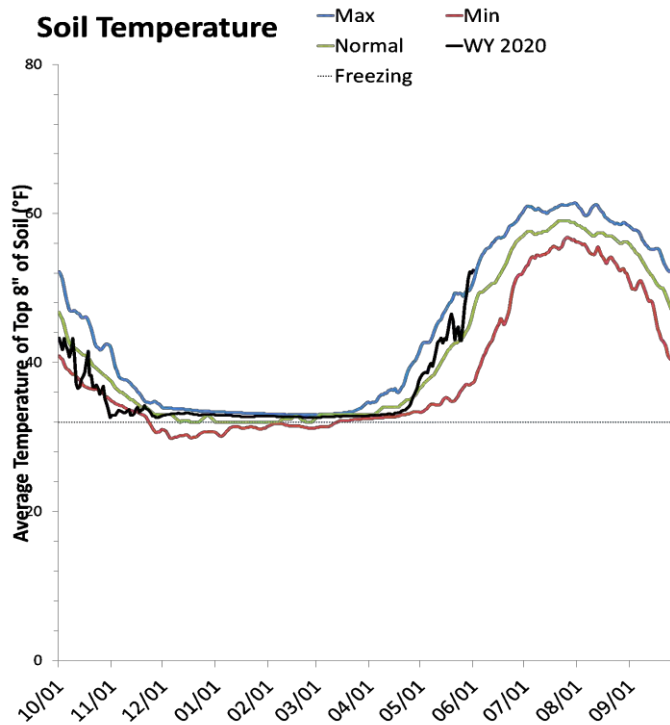
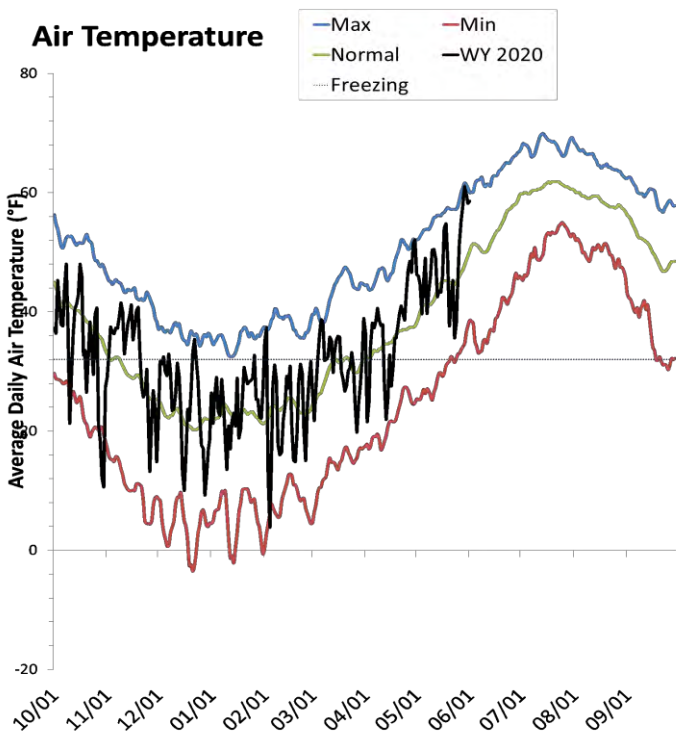
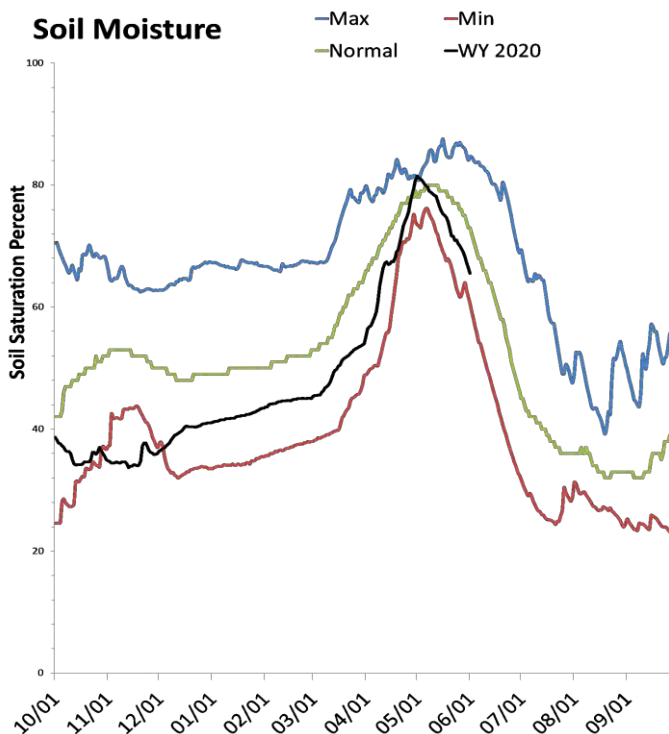
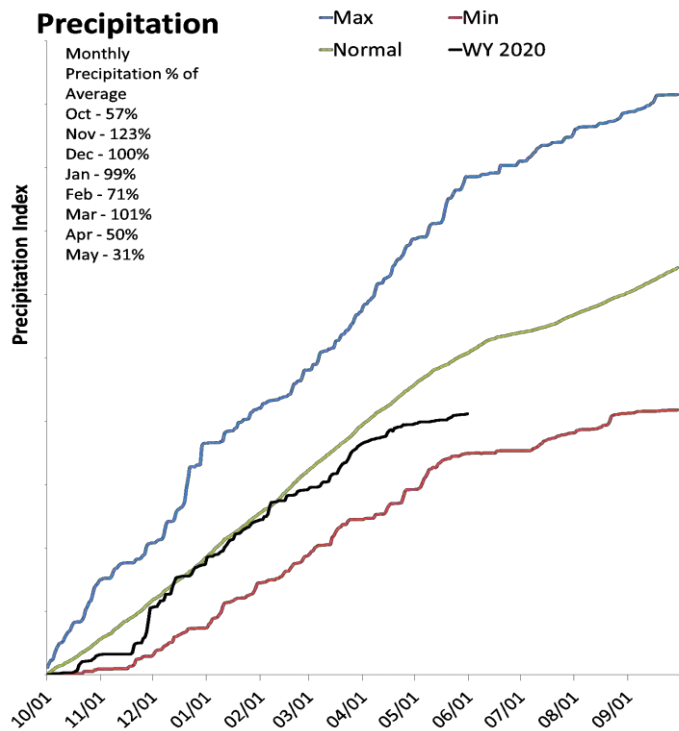
## SNOTEL portion of report



# Statewide SNOTEL

June 1, 2020

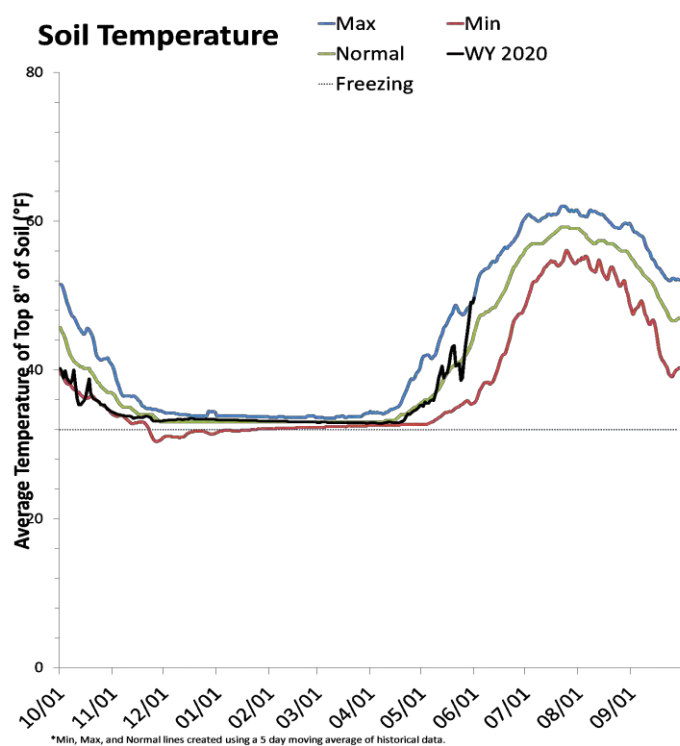
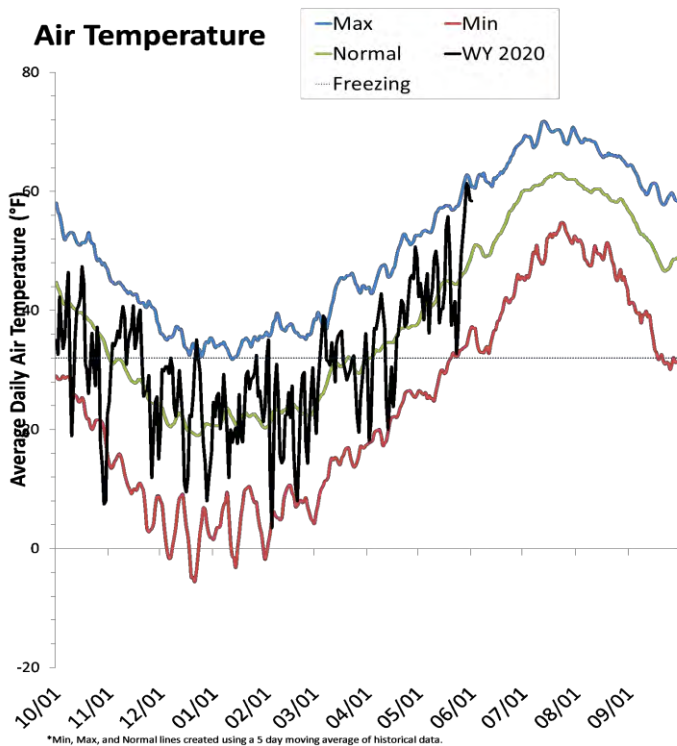
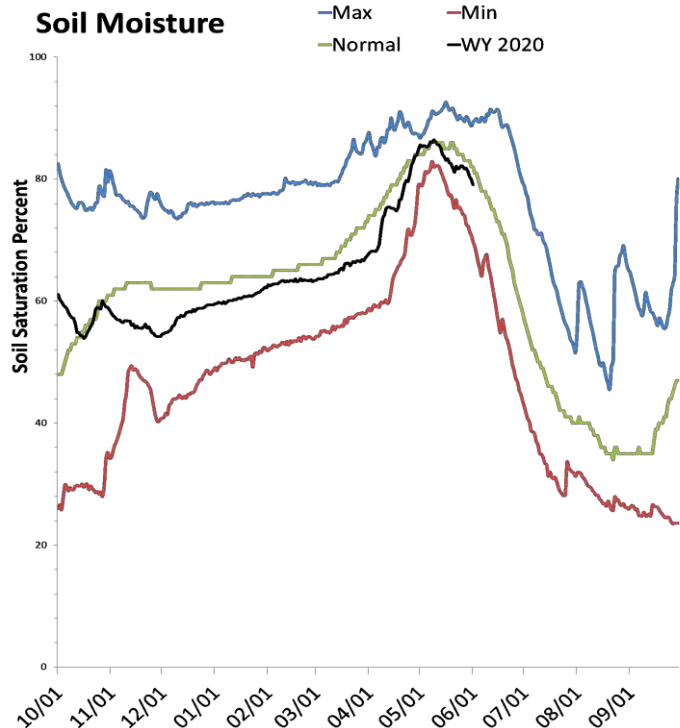
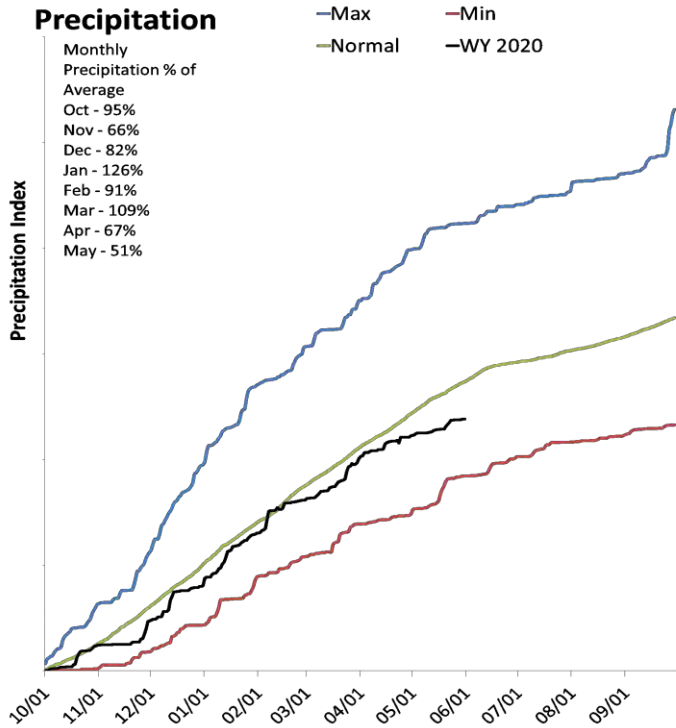
Precipitation at SNOTEL sites during May was much below average at 31%, which brings the seasonal accumulation (Oct-May) to 81% of average. Soil moisture is at 65% compared to 84% last year. Reservoir storage is at 89% of capacity, compared to 82% last year.



# Bear River Basin

June 1, 2020

Precipitation in May was much below average at 51%, which brings the seasonal accumulation (Oct-May) to 87% of average. Soil moisture is at 79% compared to 85% last year. Reservoir storage is at 86% of capacity, compared to 77% last year. The water availability index for the Bear River is 85%, 61% for Woodruff Narrows and 38% for the Little Bear.

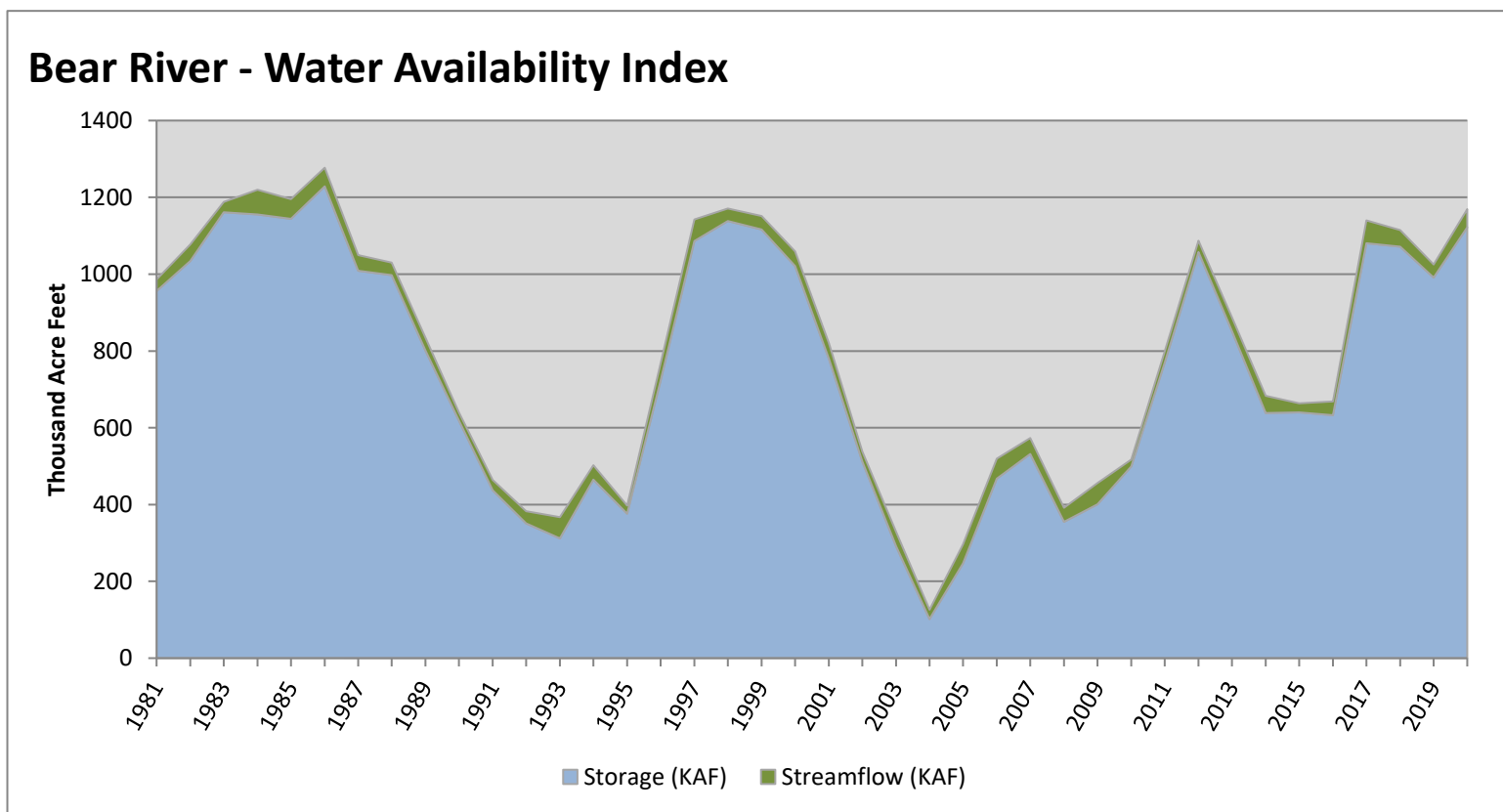


June 1, 2020

## Water Availability Index

Basin or Region	May EOM <sup>*</sup> Storage	May Flow	Storage + Flow	Percentile	WAI <sup>#</sup>	Years with similar WAI
	KAF <sup>^</sup>	KAF <sup>^</sup>	KAF <sup>^</sup>	%		
<b>Bear River</b>	<b>1122.43</b>	<b>46.90</b>	<b>1169.33</b>	<b>85</b>	<b>2.95</b>	<b>97, 99, 98, 83</b>

<sup>\*</sup>EOM, end of month; <sup>#</sup>WAI, Water Availability Index; <sup>^</sup>KAF, thousand acre-feet.

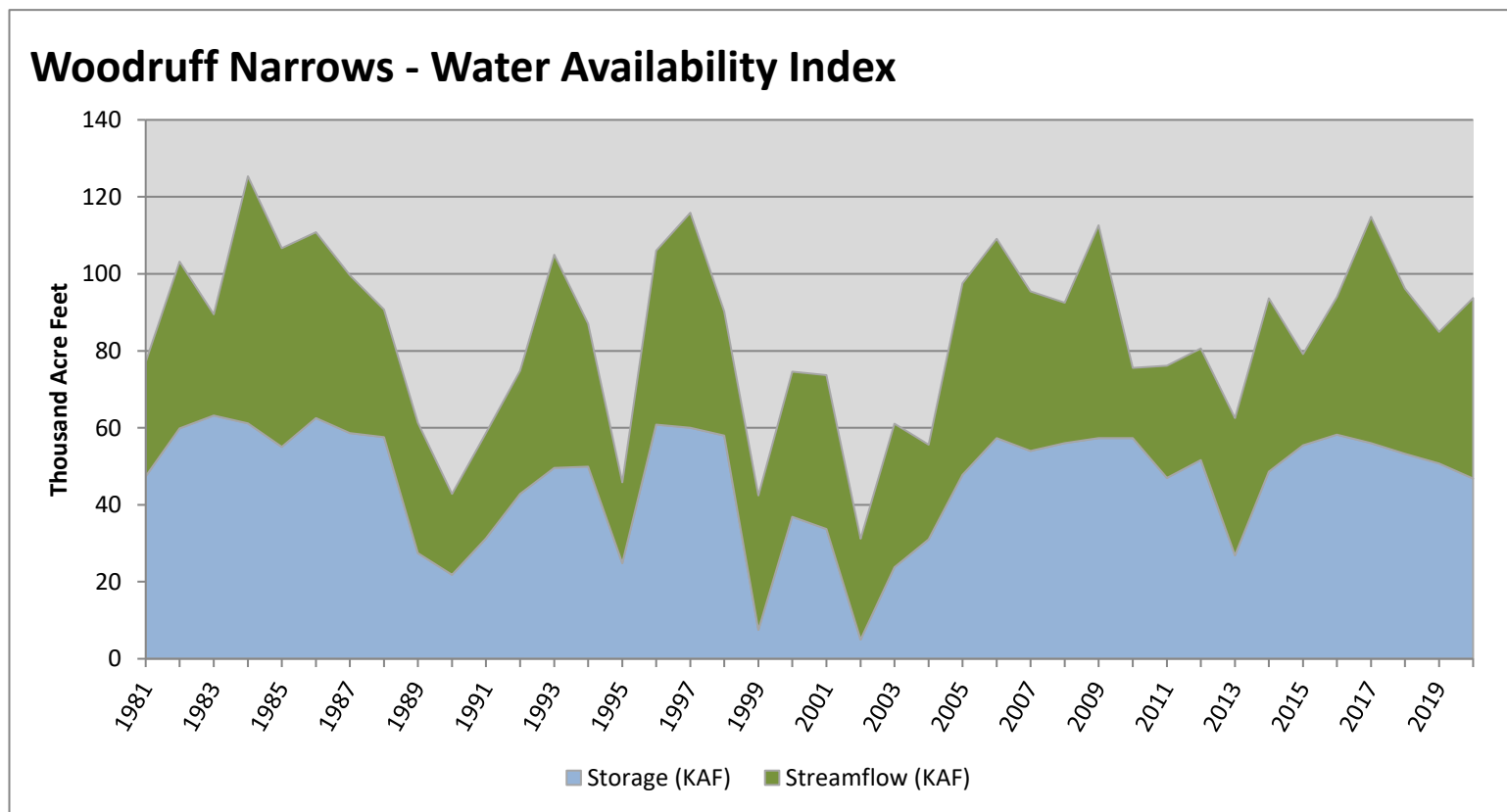


June 1, 2020

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	KAF <sup>^</sup>	KAF <sup>^</sup>	KAF <sup>^</sup>	%		
<b>Woodruff Narrows</b>	<b>46.80</b>	<b>46.90</b>	<b>93.70</b>	<b>61</b>	<b>0.91</b>	<b>08, 14, 16, 07</b>

<sup>\*</sup>EOM, end of month; <sup>#</sup>WAI, Water Availability Index; <sup>^</sup>KAF, thousand acre-feet.

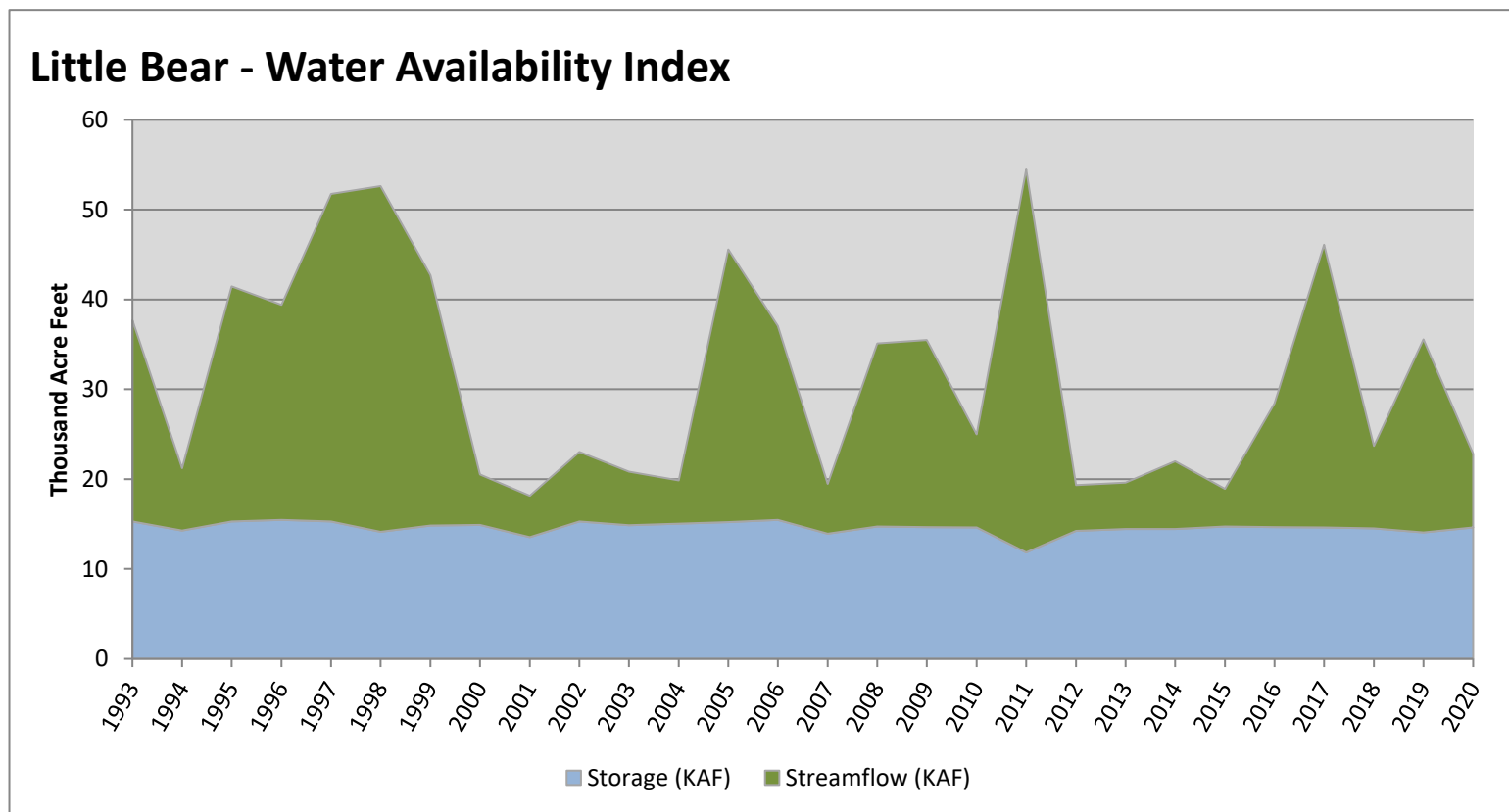


June 1, 2020

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Basin or Region	May EOM <sup>*</sup> Storage	May Flow	Storage + Flow	Percentile	WAI <sup>#</sup>	Years with similar WAI
	KAF <sup>^</sup>	KAF <sup>^</sup>	KAF <sup>^</sup>	%		
<b>Little Bear</b>	<b>14.62</b>	<b>8.20</b>	<b>22.82</b>	<b>38</b>	<b>-1.01</b>	<b>94, 14, 02, 18</b>

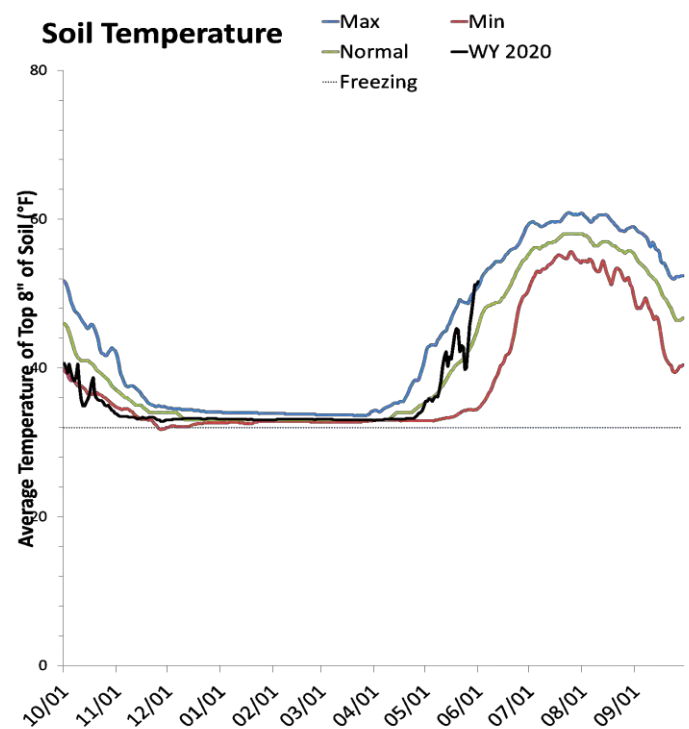
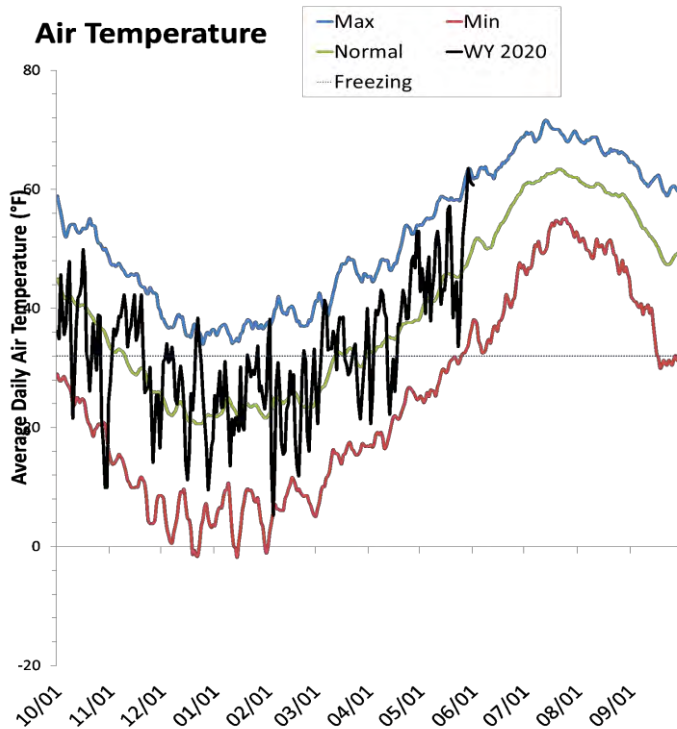
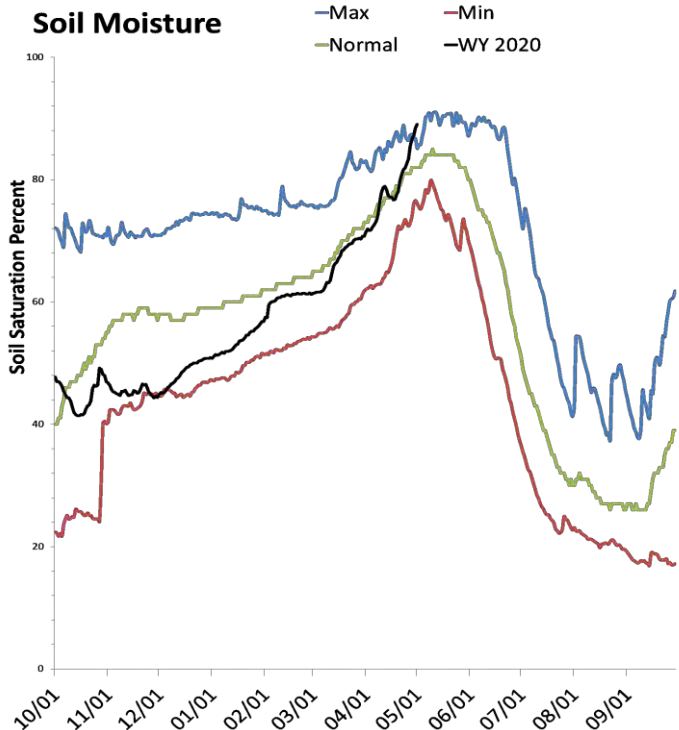
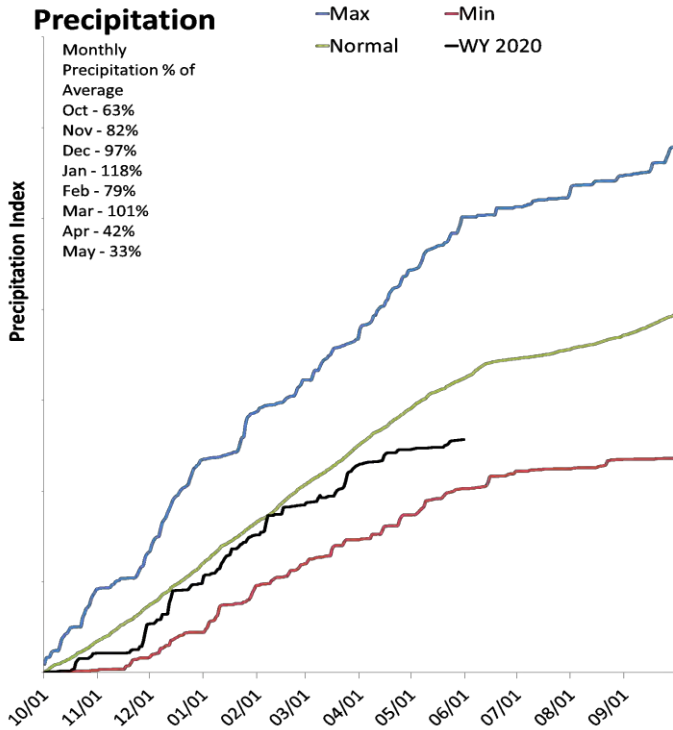
<sup>\*</sup>EOM, end of month; <sup>#</sup>WAI, Water Availability Index; <sup>^</sup>KAF, thousand acre-feet.



# Weber & Ogden River Basins

June 1, 2020

Precipitation in May was much below average at 33%, which brings the seasonal accumulation (Oct-May) to 79% of average. Soil moisture is at 74% compared to 85% last year. Reservoir storage is at 91% of capacity, compared to 96% last year. The water availability index for the Ogden River is 37% and 65% for the Weber River.



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

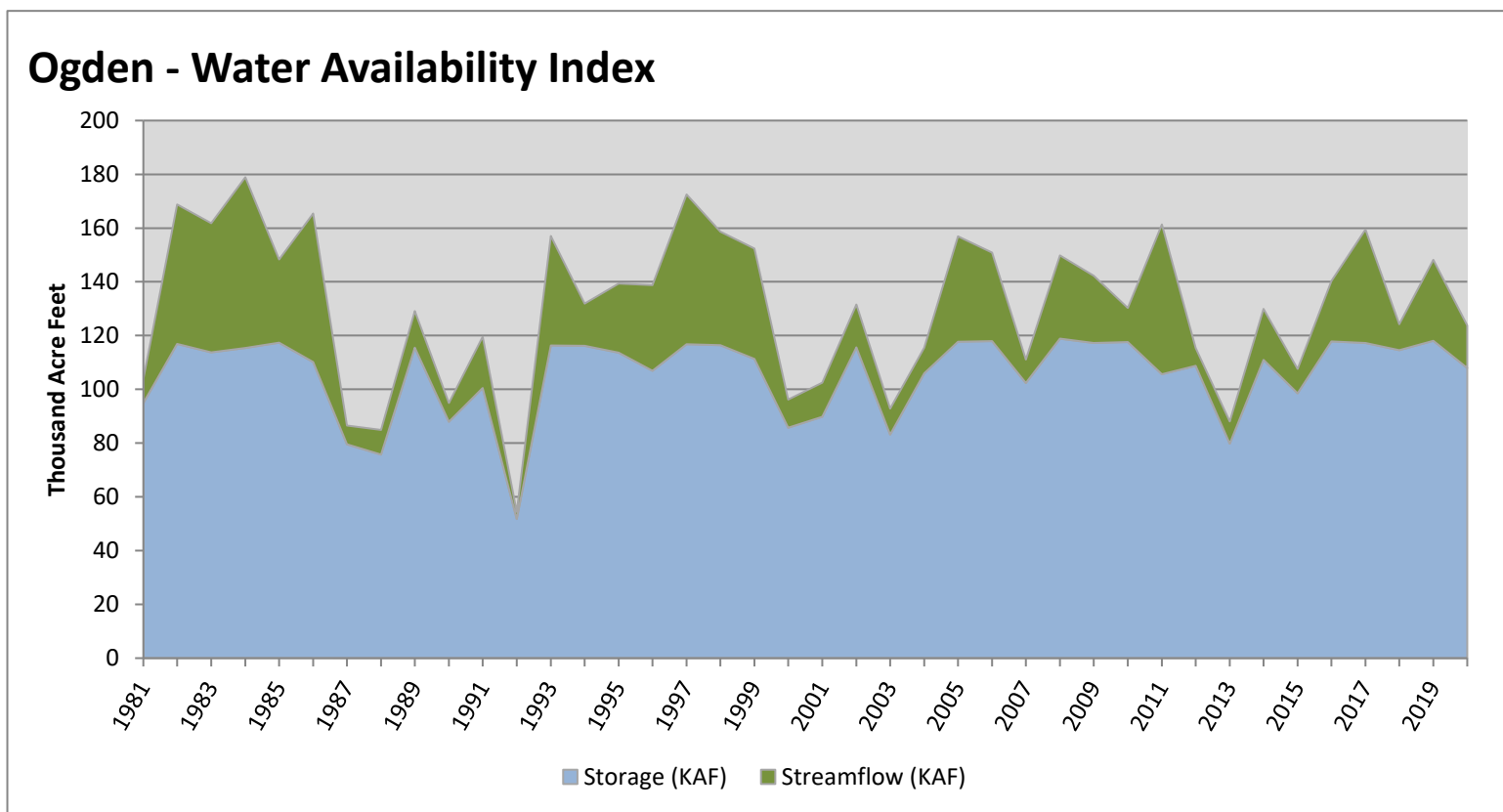
\*Min, Max, and Normal lines created using a 5 day moving average of historical data.

June 1, 2020

## Water Availability Index

Basin or Region	May EOM <sup>*</sup> Storage	May Flow	Storage + Flow	Percentile	WAI <sup>#</sup>	Years with similar WAI
	KAF <sup>^</sup>	KAF <sup>^</sup>	KAF <sup>^</sup>	%		
<b>Ogden</b>	<b>107.97</b>	<b>15.84</b>	<b>123.81</b>	<b>37</b>	<b>-1.12</b>	<b>04, 91, 18, 89</b>

<sup>\*</sup>EOM, end of month; <sup>#</sup>WAI, Water Availability Index; <sup>^</sup>KAF, thousand acre-feet.

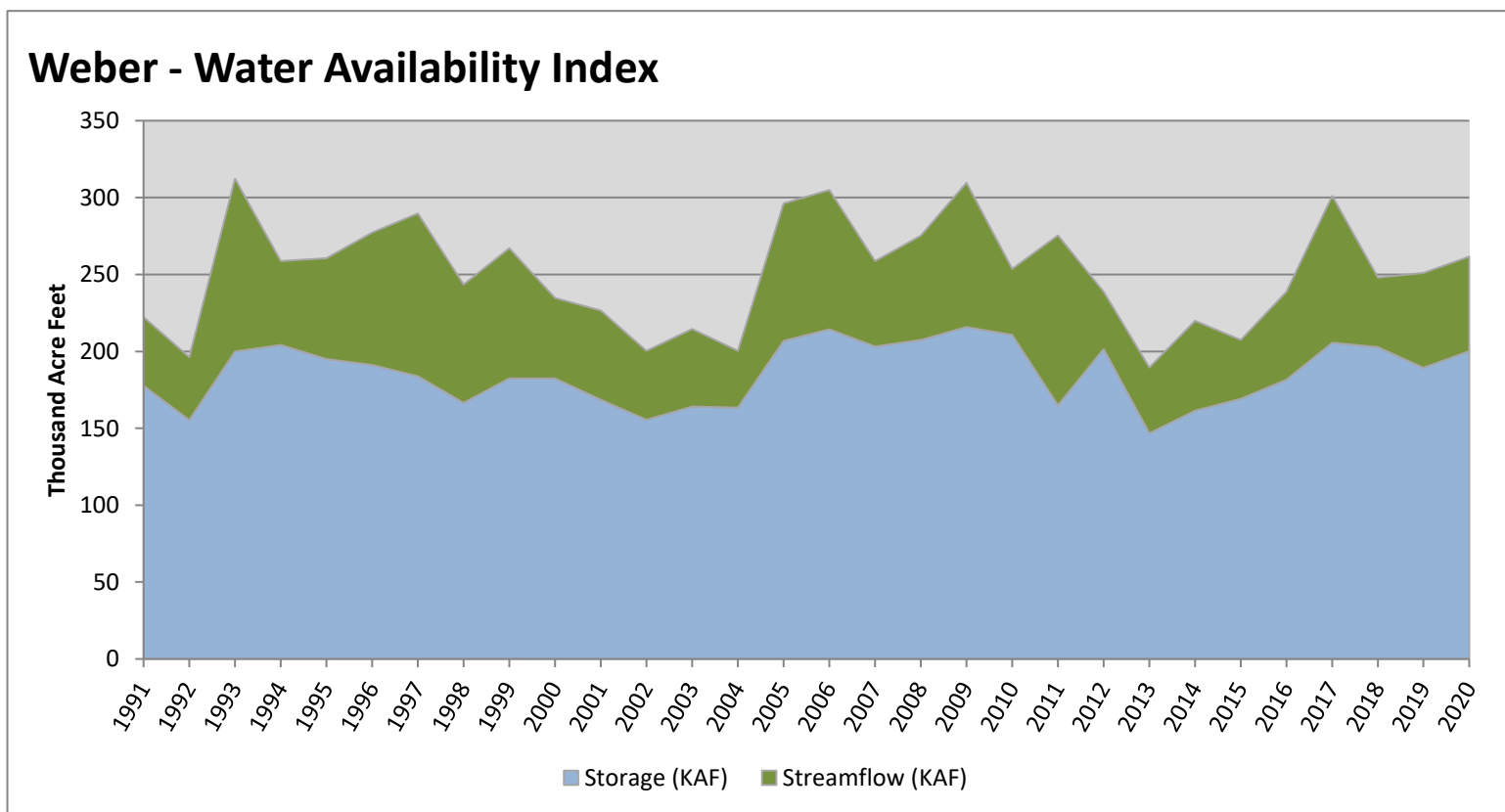


June 1, 2020

## Water Availability Index

Basin or Region	May EOM <sup>*</sup> Storage	May Flow	Storage + Flow	Percentile	WAI <sup>#</sup>	Years with similar WAI
	KAF <sup>^</sup>	KAF <sup>^</sup>	KAF <sup>^</sup>	%		
<b>Weber</b>	<b>200.13</b>	<b>61.42</b>	<b>261.55</b>	<b>65</b>	<b>1.21</b>	<b>07, 95, 99, 08</b>

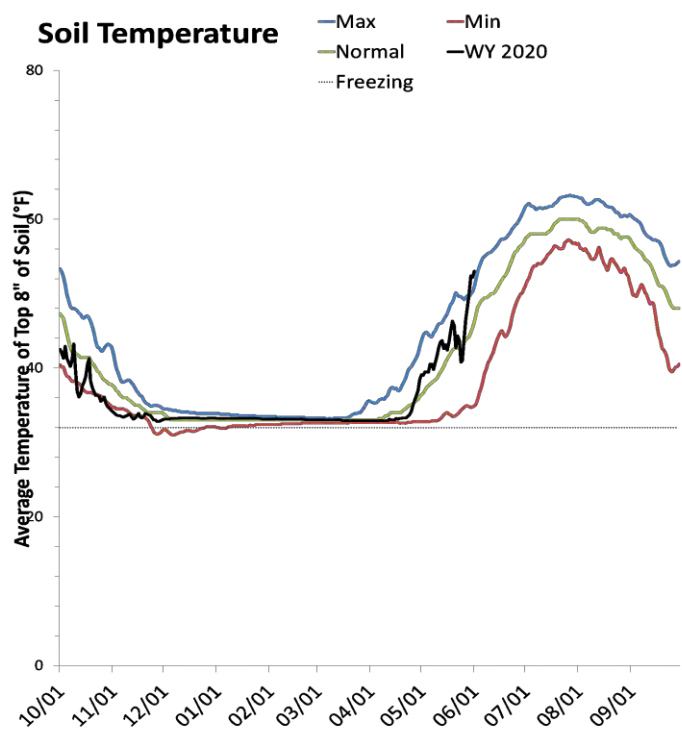
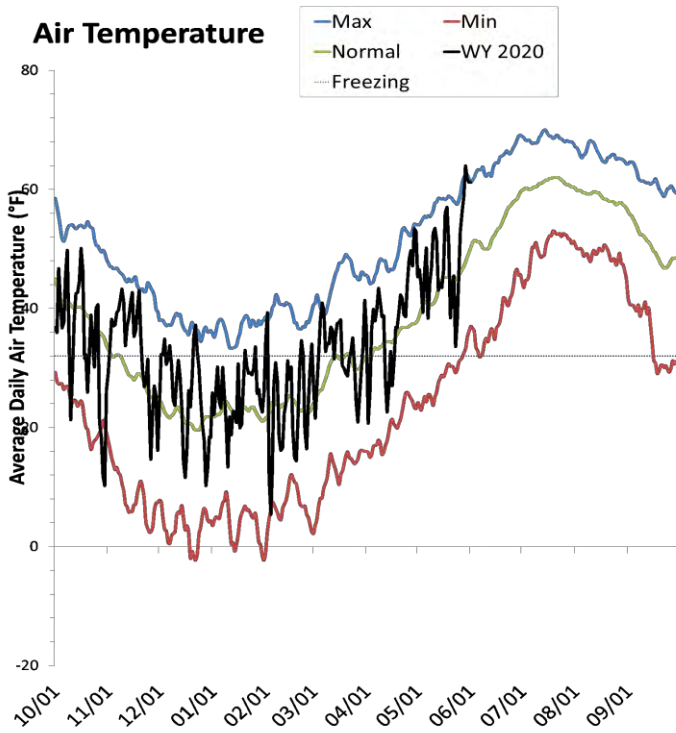
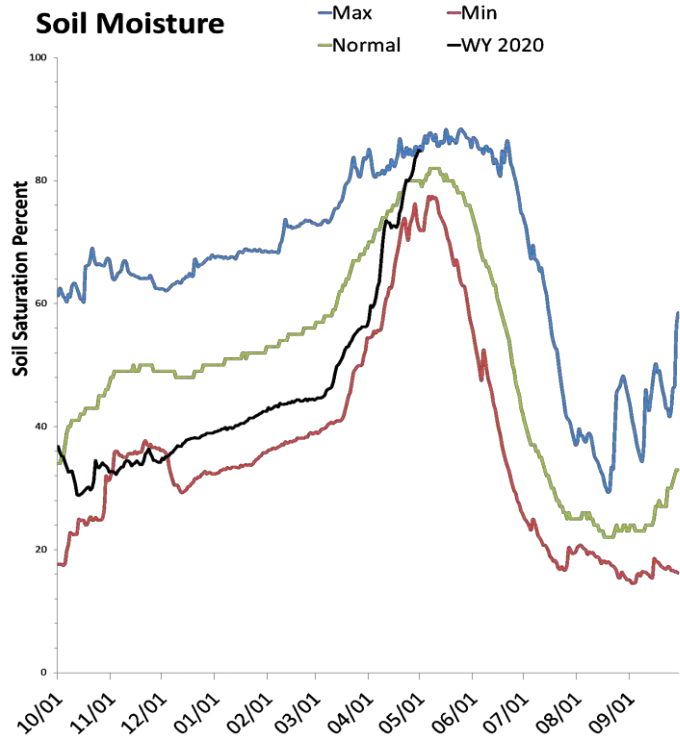
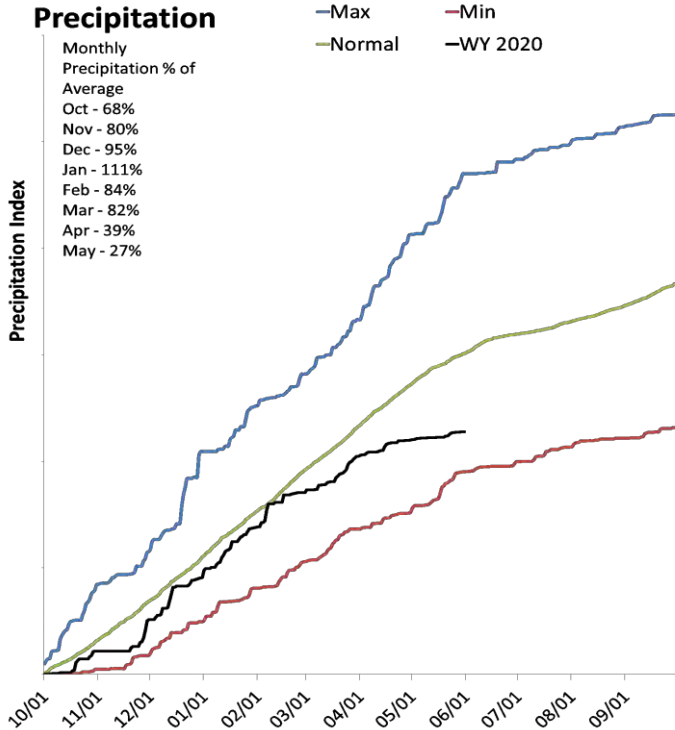
<sup>\*</sup>EOM, end of month; <sup>#</sup>WAI, Water Availability Index; <sup>^</sup>KAF, thousand acre-feet.



# Provo & Jordan River Basins

June 1, 2020

Precipitation in May was much below average at 27%, which brings the seasonal accumulation (Oct-May) to 76% of average. Soil moisture is at 62% compared to 87% last year. Reservoir storage is at 94% of capacity, compared to 88% last year. The water availability index for the Provo River is 88%.



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

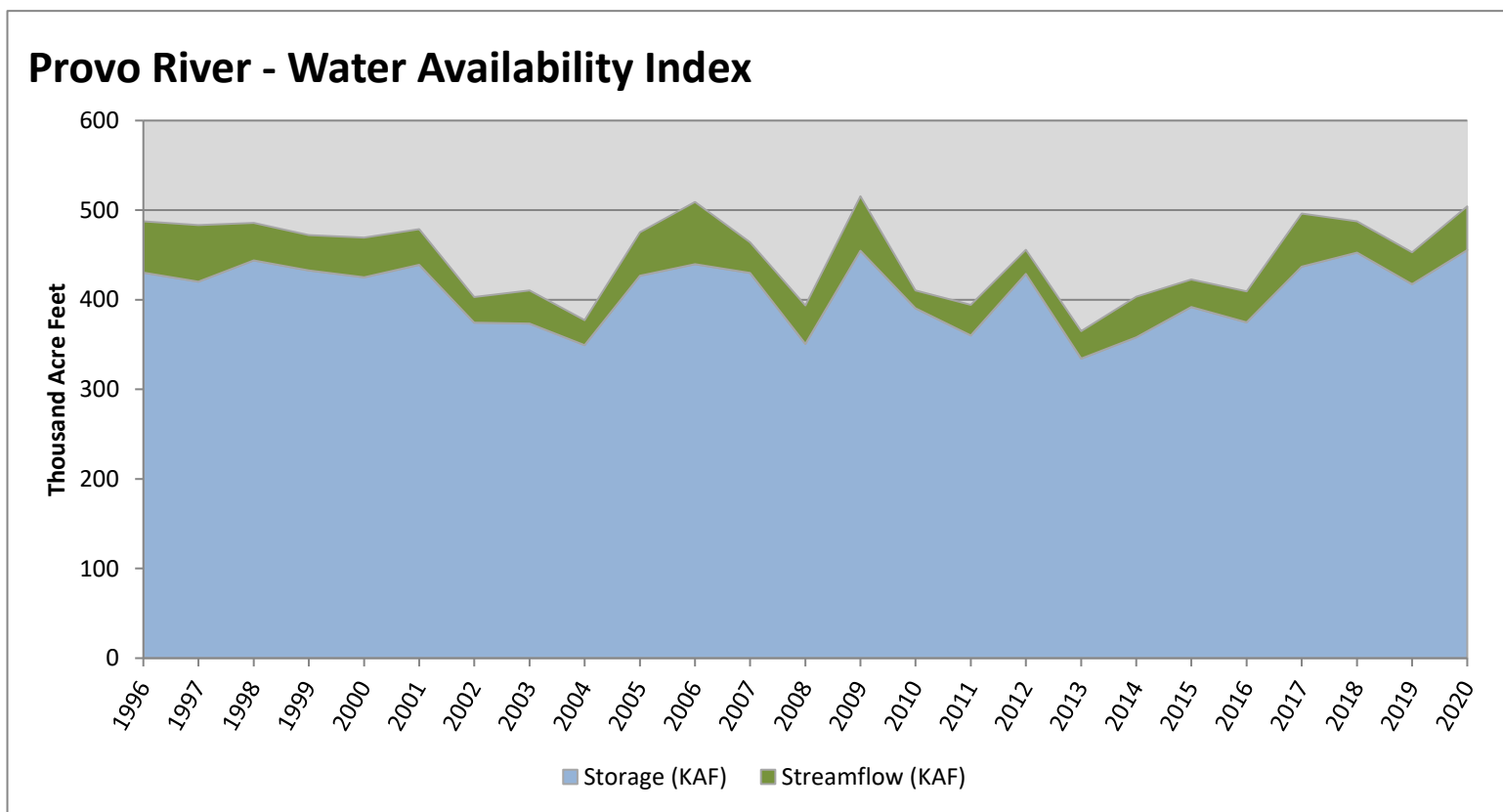
\*Min, Max, and Normal lines created using a 5 day moving average of historical data.

June 1, 2020

## Water Availability Index

Basin or Region	May EOM <sup>*</sup> Storage	May Flow	Storage + Flow	Percentile	WAI <sup>#</sup>	Years with similar WAI
	KAF <sup>^</sup>	KAF <sup>^</sup>	KAF <sup>^</sup>	%		
<b>Provo River</b>	<b>455.54</b>	<b>48.77</b>	<b>504.31</b>	<b>88</b>	<b>3.21</b>	<b>18, 17, 06, 09</b>

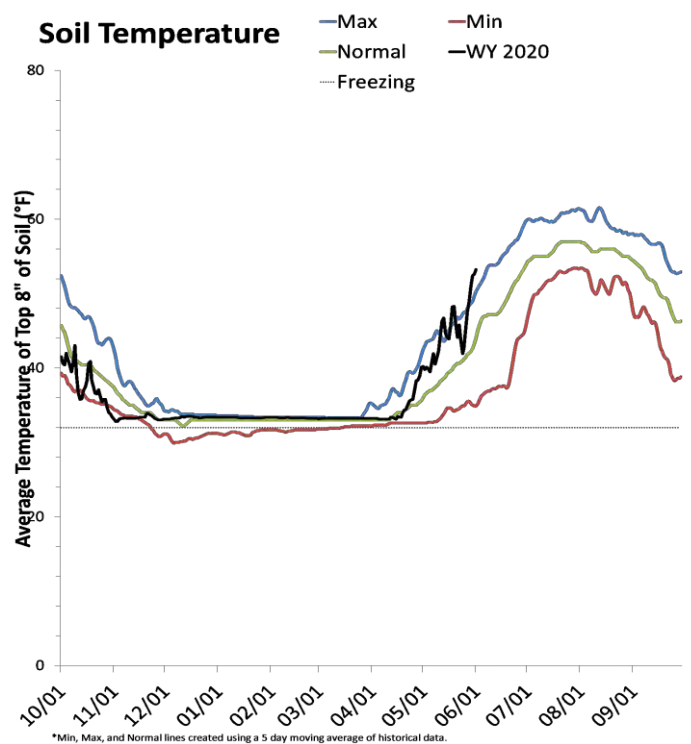
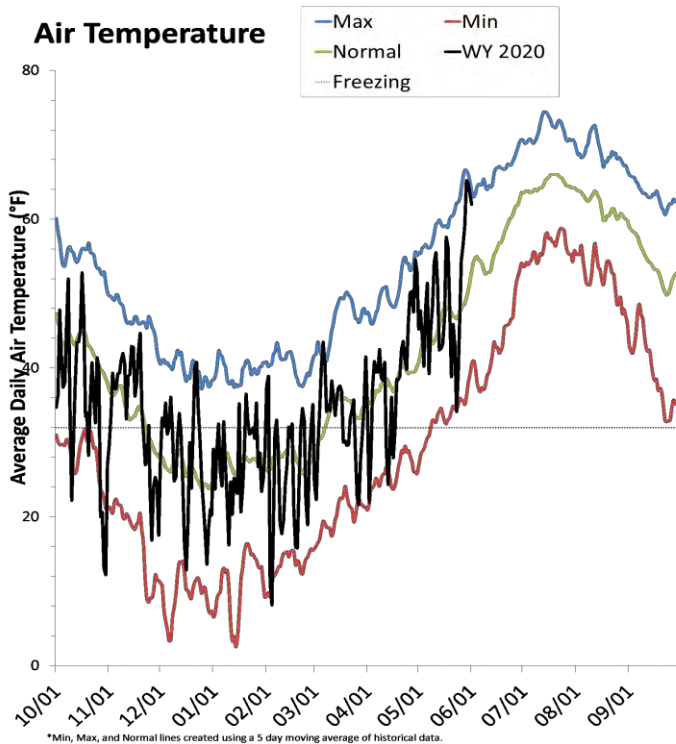
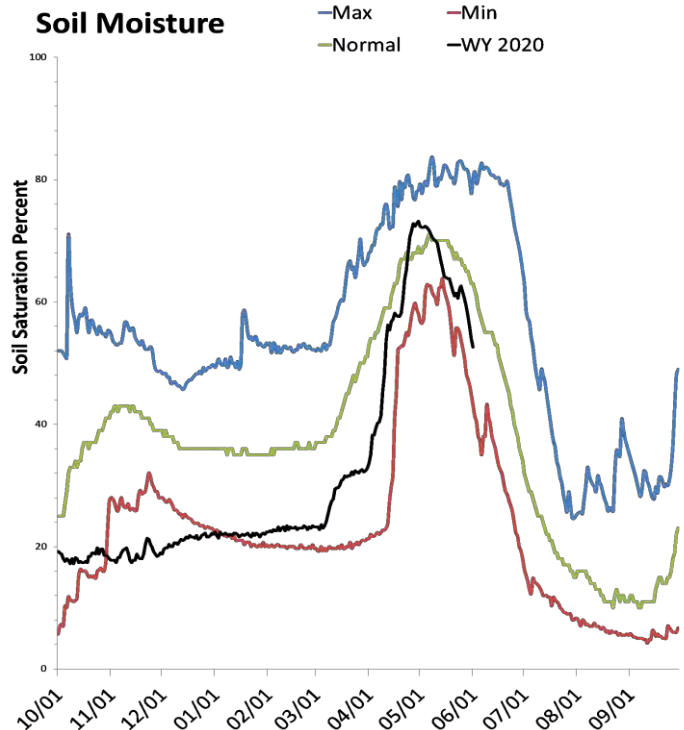
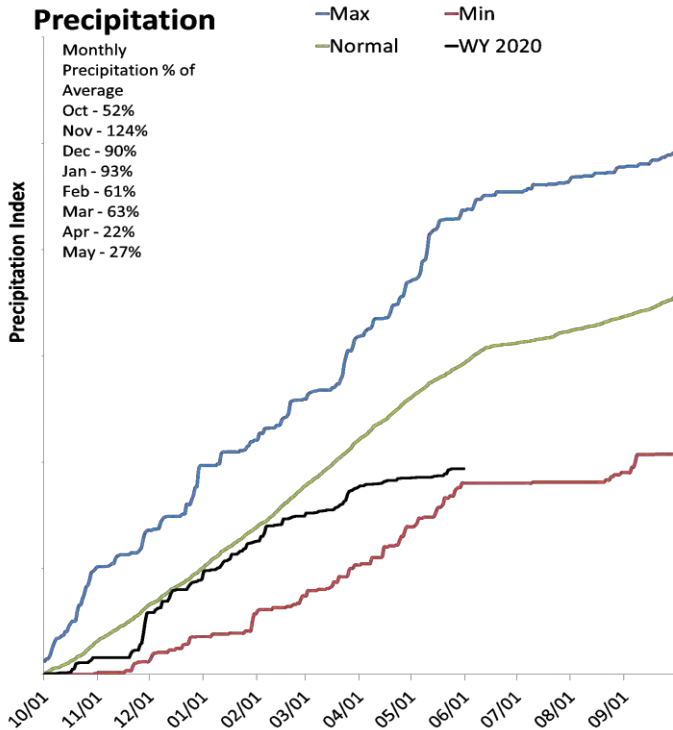
<sup>\*</sup>EOM, end of month; <sup>#</sup>WAI, Water Availability Index; <sup>^</sup>KAF, thousand acre-feet.



# Tooele Valley & West Desert Basins

June 1, 2020

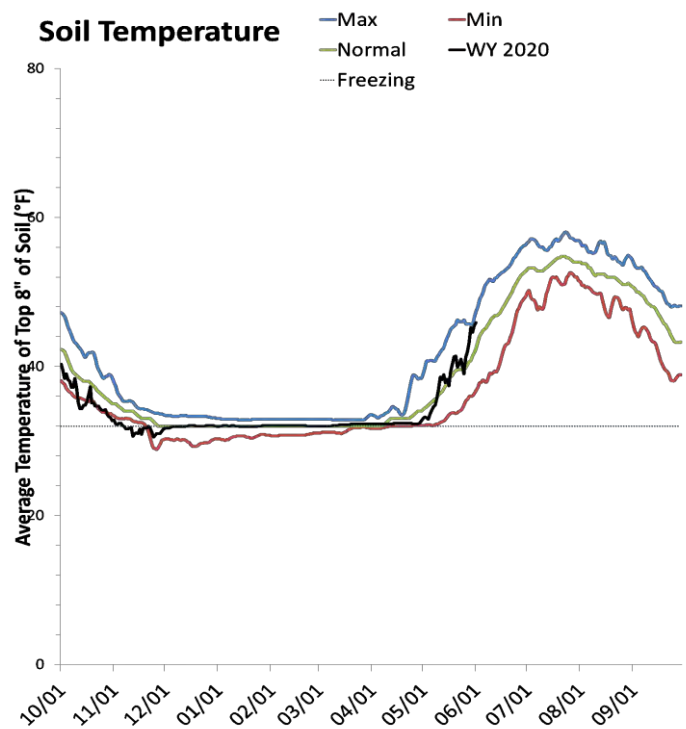
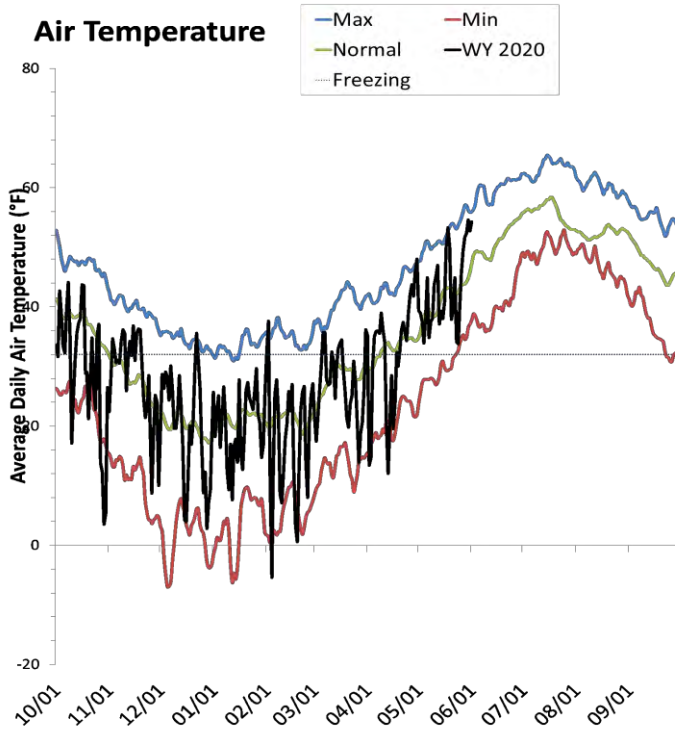
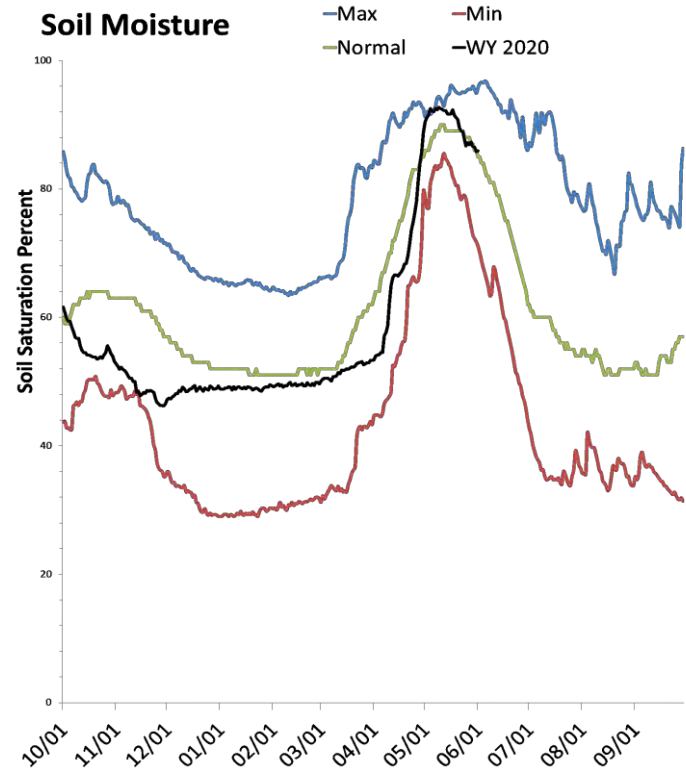
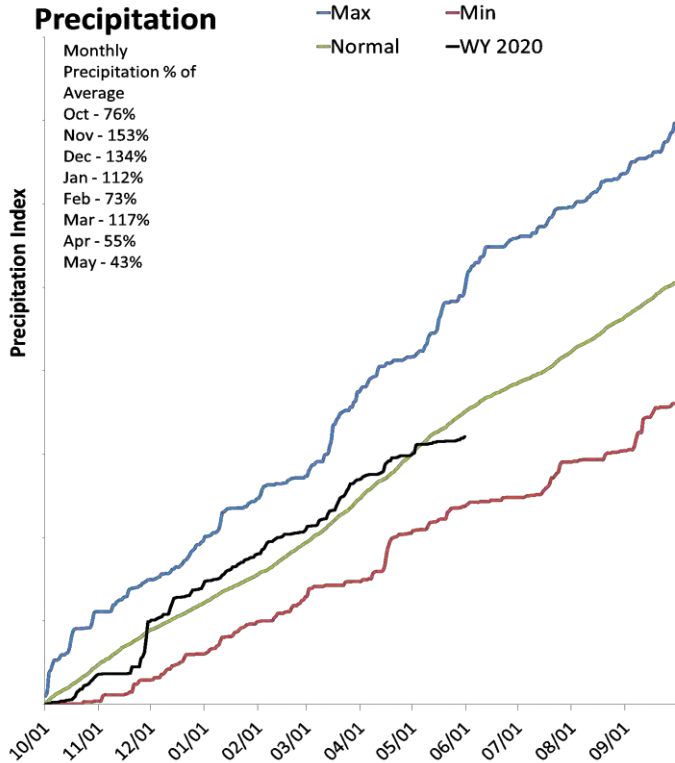
Precipitation in May was much below average at 27%, which brings the seasonal accumulation (Oct-May) to 66% of average. Soil moisture is at 54% compared to 76% last year. Reservoir storage is at 64% of capacity, compared to 104% last year.



# Northeastern Uinta Basin

June 1, 2020

Precipitation in May was much below average at 43%, which brings the seasonal accumulation (Oct-May) to 91% of average. Soil moisture is at 85% compared to 91% last year. Reservoir storage is at 86% of capacity, compared to 90% last year. The water availability index for Blacks Fork is 87% and 95% for Smiths Creek.

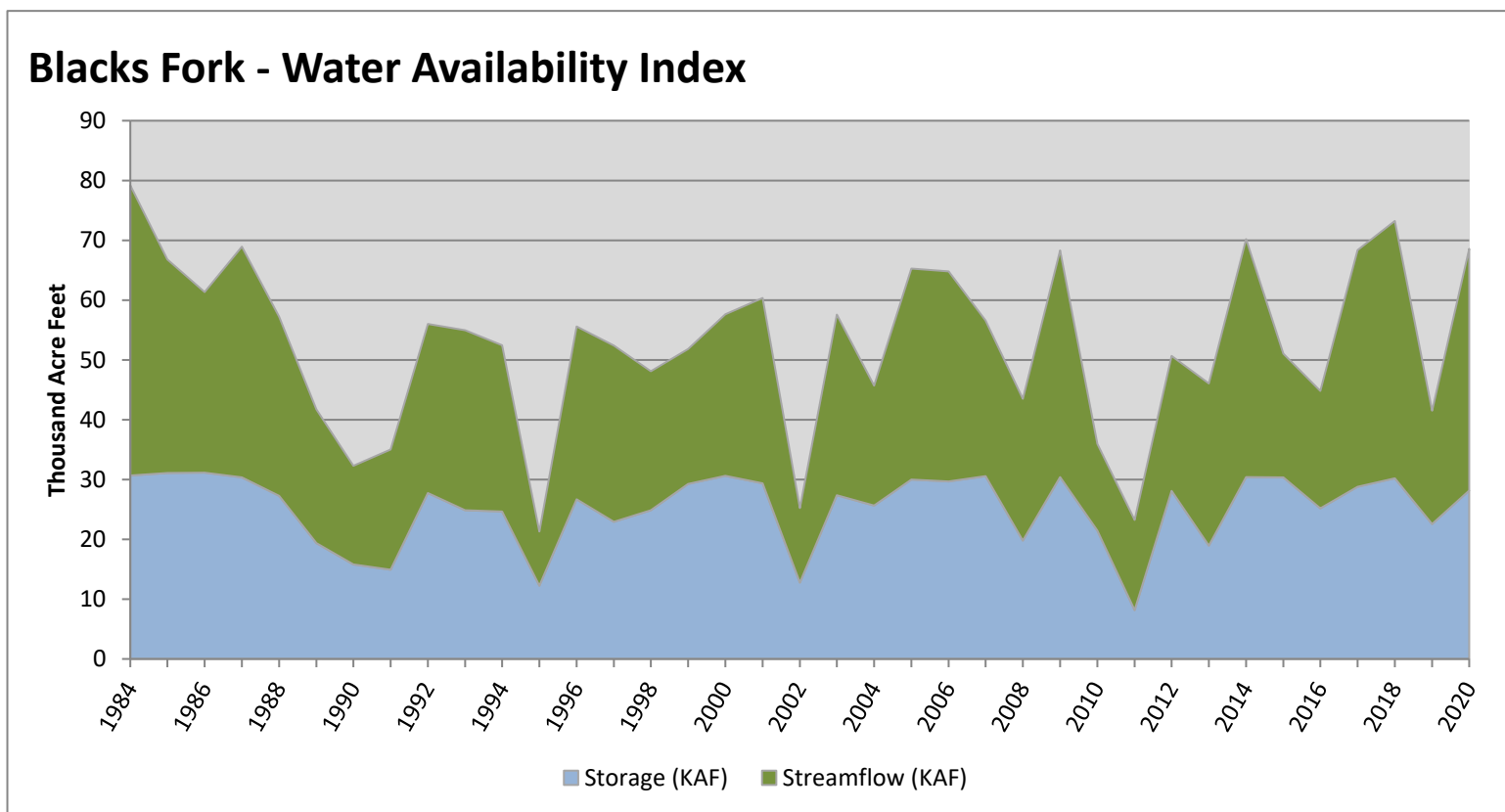


June 1, 2020

## Water Availability Index

Basin or Region	May EOM <sup>*</sup> Storage	May Flow	Storage + Flow	Percentile	WAI <sup>#</sup>	Years with similar WAI
	KAF <sup>^</sup>	KAF <sup>^</sup>	KAF <sup>^</sup>	%		
<b>Blacks Fork</b>	<b>28.14</b>	<b>40.41</b>	<b>68.55</b>	<b>87</b>	<b>3.07</b>	<b>09, 17, 87, 14</b>

<sup>\*</sup>EOM, end of month; <sup>#</sup>WAI, Water Availability Index; <sup>^</sup>KAF, thousand acre-feet.

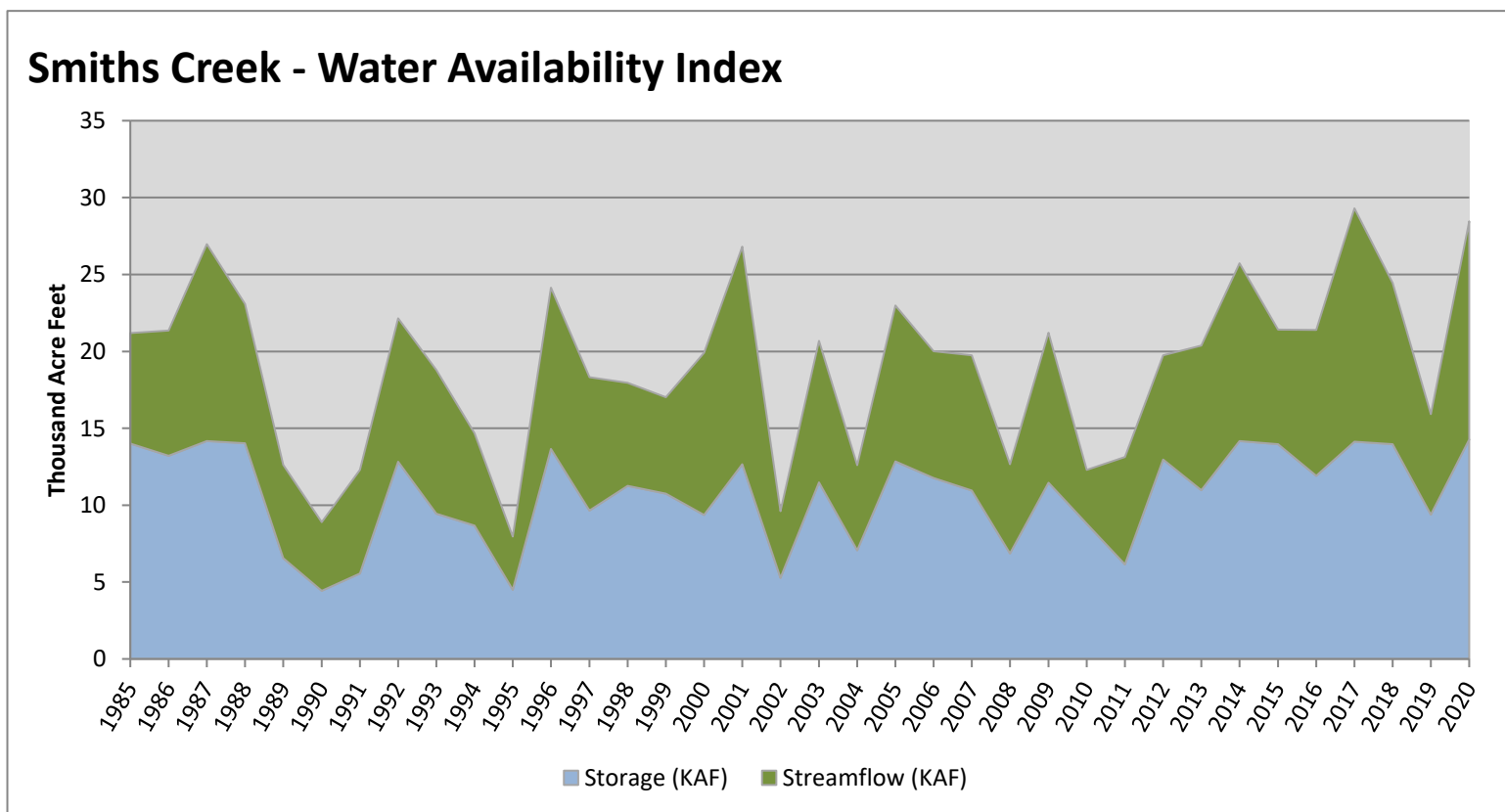


June 1, 2020

## Water Availability Index

Basin or Region	May EOM <sup>*</sup> Storage	May Flow	Storage + Flow	Percentile	WAI <sup>#</sup>	Years with similar WAI
	KAF <sup>^</sup>	KAF <sup>^</sup>	KAF <sup>^</sup>	%		
<b>Smiths Creek</b>	<b>14.28</b>	<b>14.18</b>	<b>28.46</b>	<b>95</b>	<b>3.72</b>	<b>17, 87, 01, 14</b>

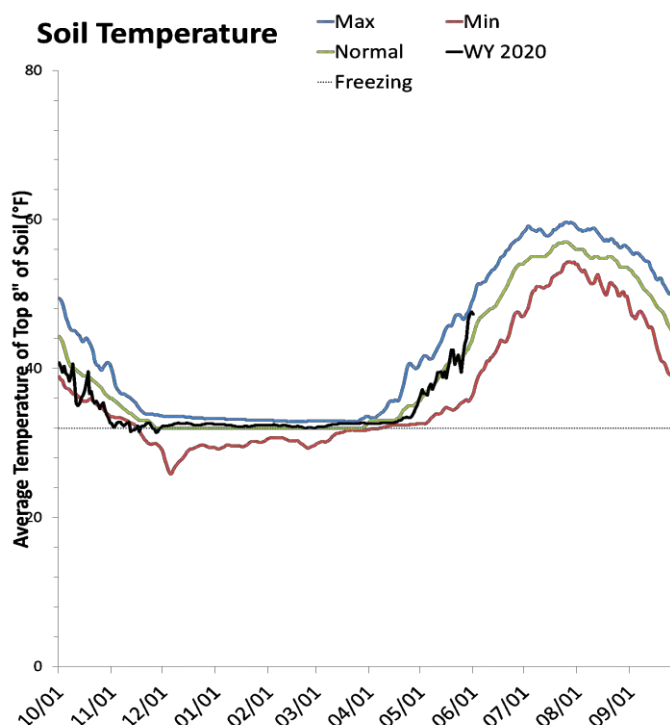
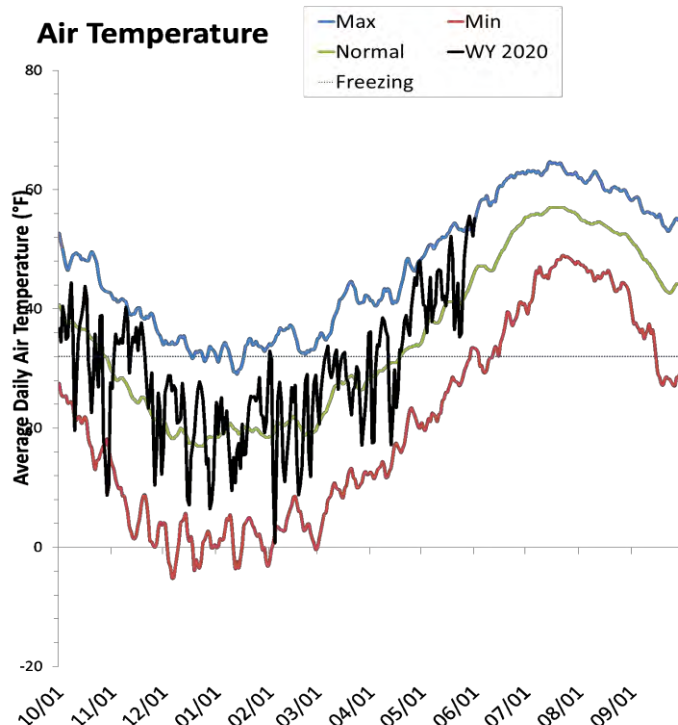
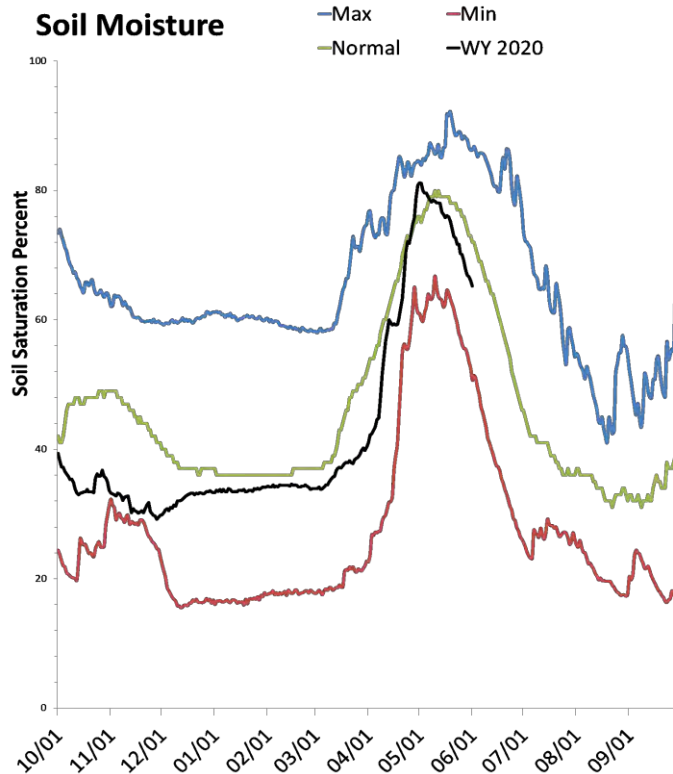
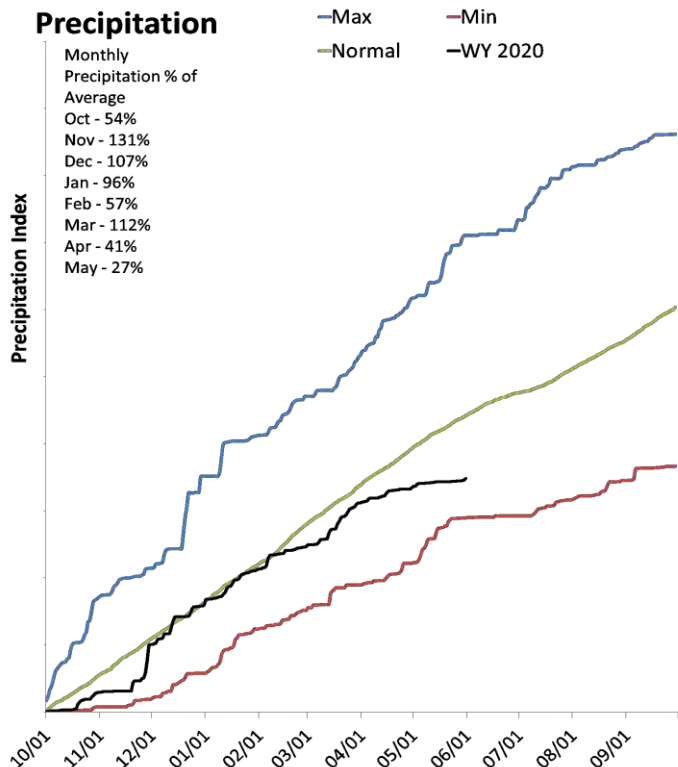
<sup>\*</sup>EOM, end of month; <sup>#</sup>WAI, Water Availability Index; <sup>^</sup>KAF, thousand acre-feet.



# Duchesne River Basin

June 1, 2020

Precipitation in May was much below average at 27%, which brings the seasonal accumulation (Oct-May) to 79% of average. Soil moisture is at 62% compared to 80% last year. Reservoir storage is at 91% of capacity, compared to 84% last year. The water availability index for the Western Uintas is 88% and 20% for the Eastern Uintas.



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

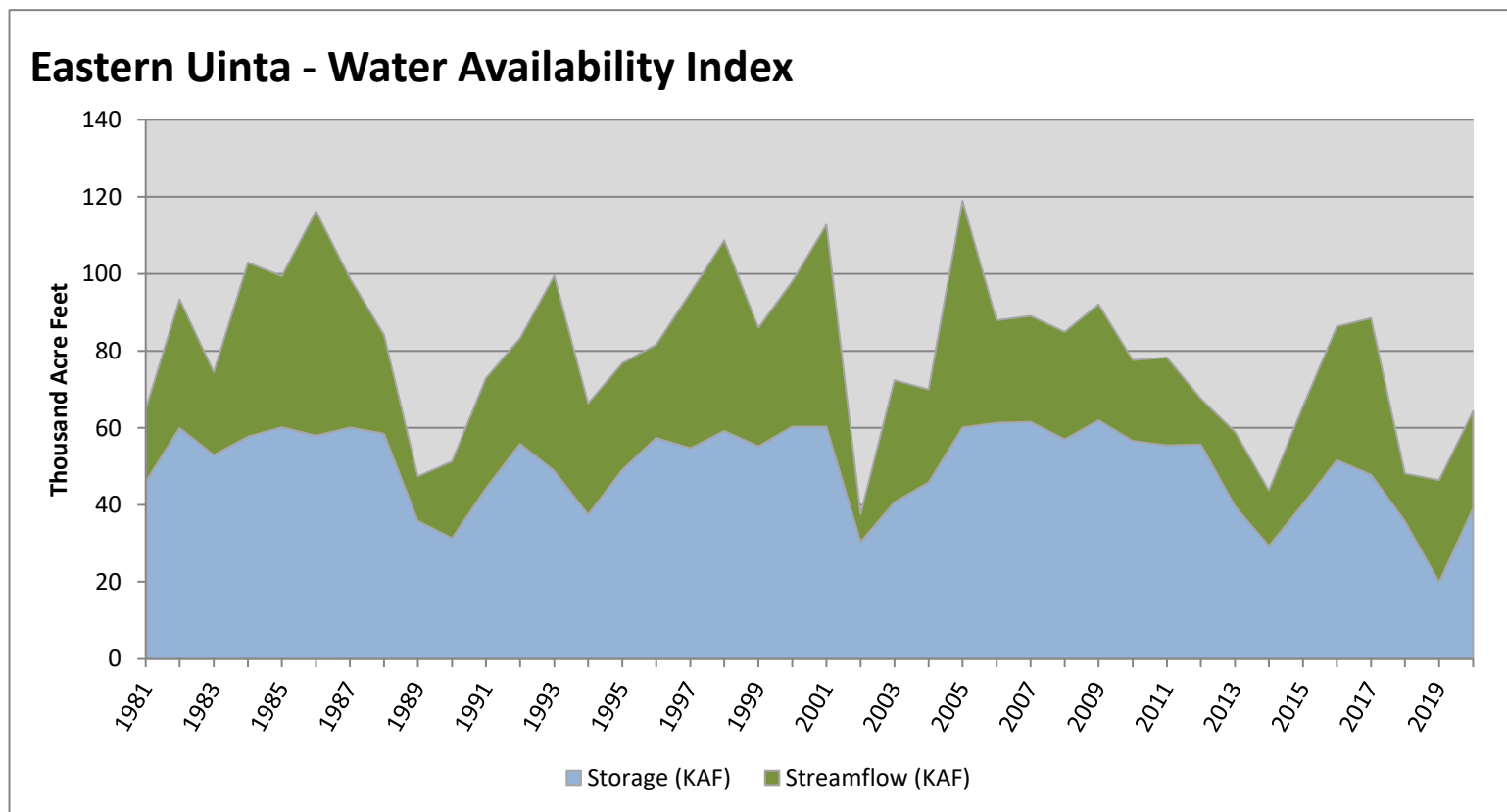
\*Min, Max, and Normal lines created using a 5 day moving average of historical data.

June 1, 2020

## Water Availability Index

Basin or Region	May EOM <sup>*</sup> Storage	May Flow	Storage + Flow	Percentile	WAI <sup>#</sup>	Years with similar WAI
	KAF <sup>^</sup>	KAF <sup>^</sup>	KAF <sup>^</sup>	%		
<b>Eastern Uinta</b>	<b>39.18</b>	<b>25.18</b>	<b>64.36</b>	<b>20</b>	<b>-2.54</b>	<b>90, 13, 81, 15</b>

<sup>\*</sup>EOM, end of month; <sup>#</sup>WAI, Water Availability Index; <sup>^</sup>KAF, thousand acre-feet.

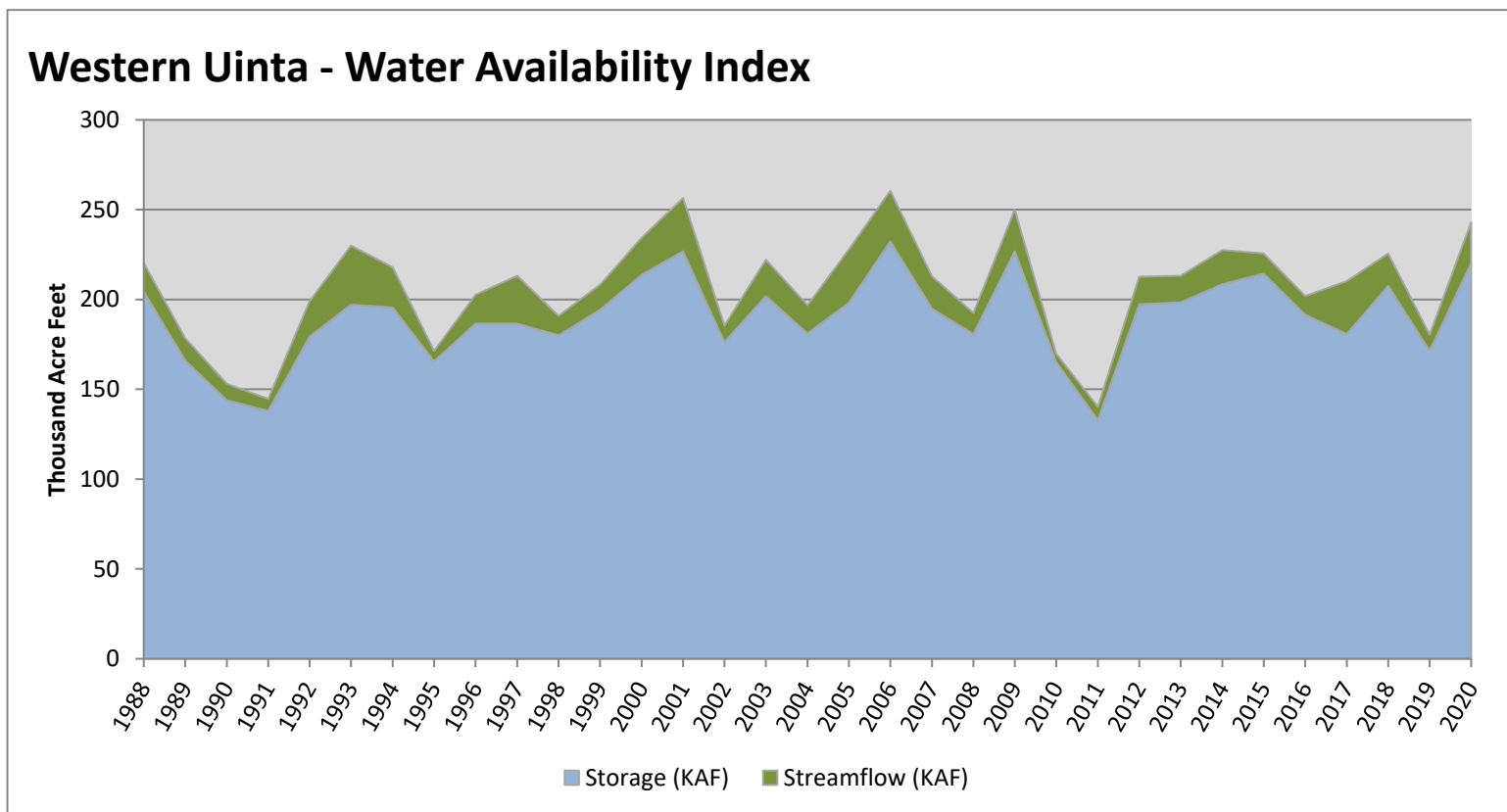


June 1, 2020

## Water Availability Index

Basin or Region	May EOM <sup>*</sup> Storage	May Flow	Storage + Flow	Percentile	WAI <sup>#</sup>	Years with similar WAI
	KAF <sup>^</sup>	KAF <sup>^</sup>	KAF <sup>^</sup>	%		
<b>Western Uinta</b>	<b>220.23</b>	<b>22.80</b>	<b>243.03</b>	<b>88</b>	<b>3.19</b>	<b>93, 00, 09, 01</b>

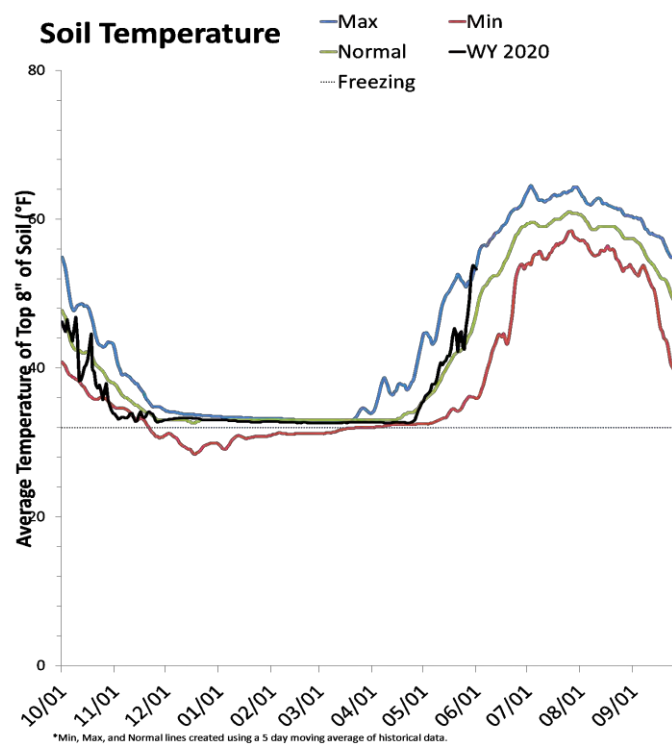
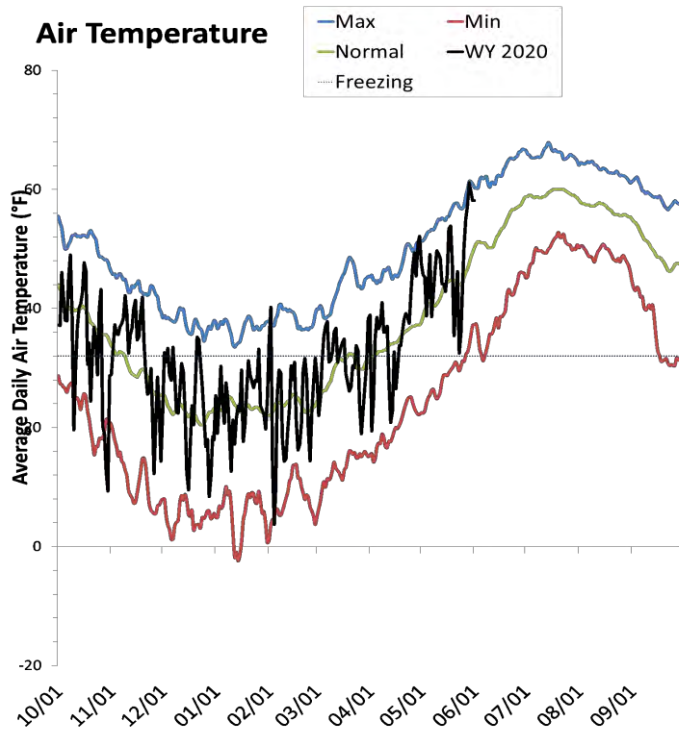
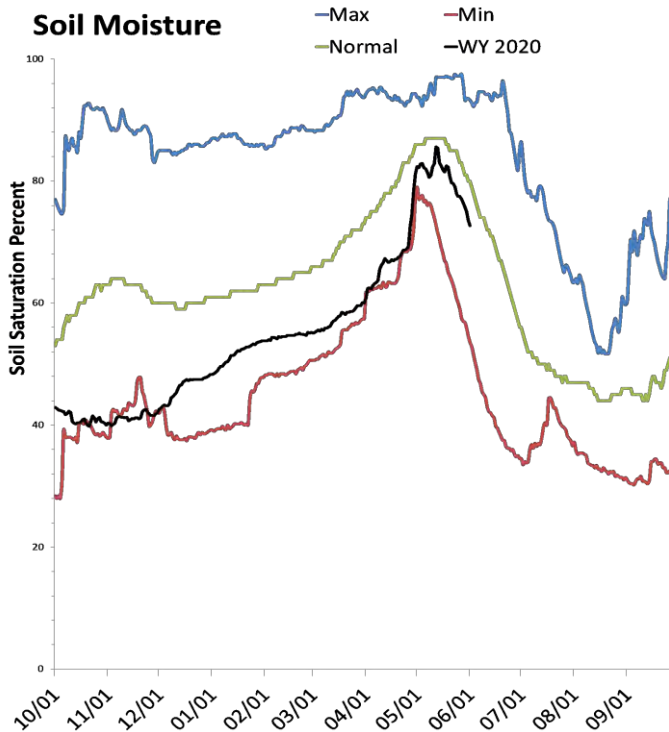
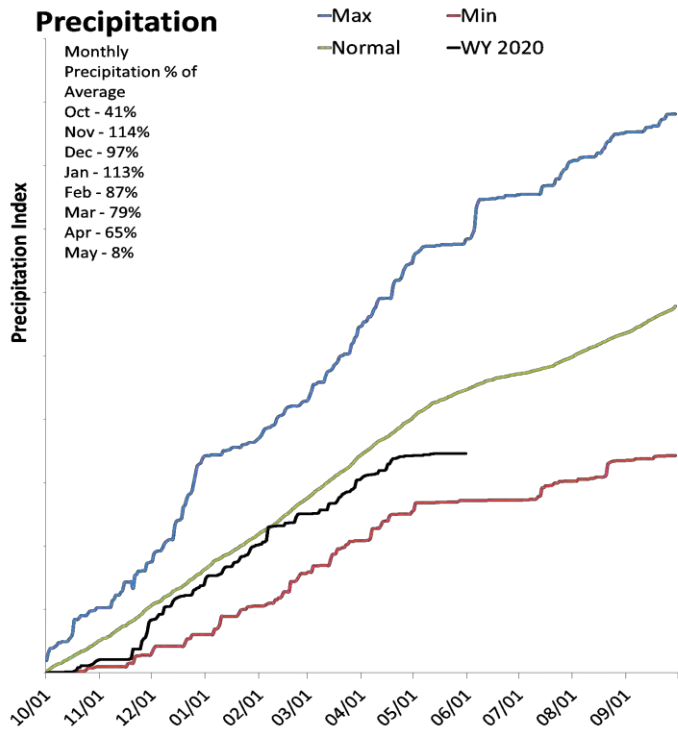
<sup>\*</sup>EOM, end of month; <sup>#</sup>WAI, Water Availability Index; <sup>^</sup>KAF, thousand acre-feet.



# San Pitch River Basin

June 1, 2020

Precipitation in May was much below average at 8%, which brings the seasonal accumulation (Oct-May) to 78% of average. Soil Moisture is at 73% compared to 86% last year. Reservoir storage is at 33% of capacity, compared to 26% last year. The water availability index for the San Pitch is 32%.

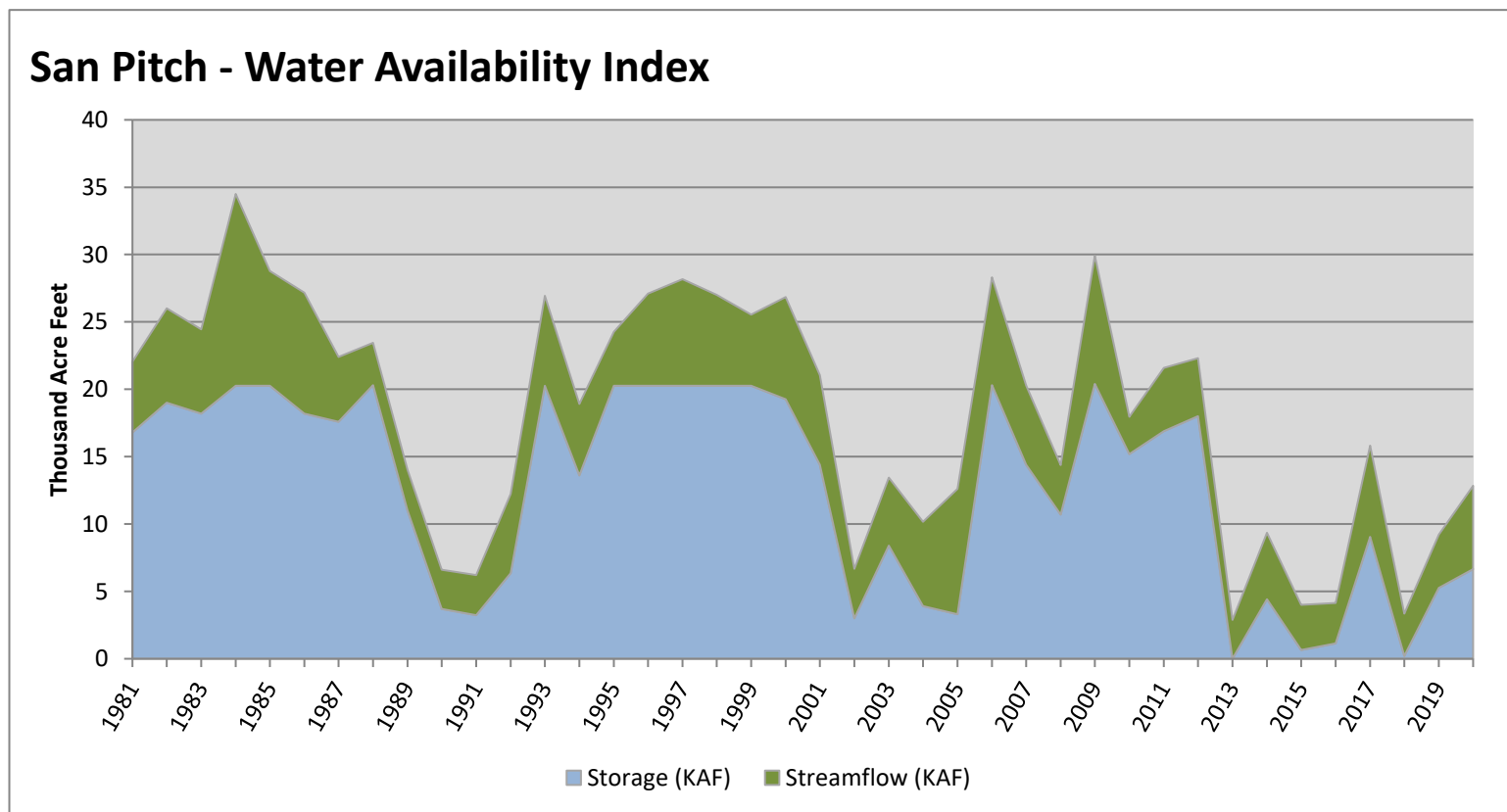


June 1, 2020

## Water Availability Index

Basin or Region	May EOM <sup>*</sup> Storage	May Flow	Storage + Flow	Percentile	WAI <sup>#</sup>	Years with similar WAI
	KAF <sup>^</sup>	KAF <sup>^</sup>	KAF <sup>^</sup>	%		
<b>San Pitch</b>	<b>6.65</b>	<b>6.19</b>	<b>12.84</b>	<b>32</b>	<b>-1.52</b>	<b>92, 05, 03, 89</b>

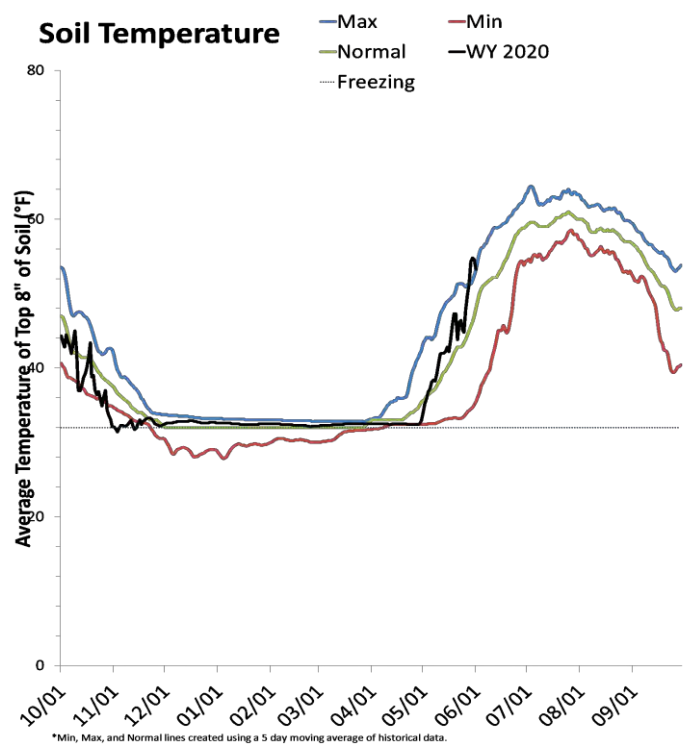
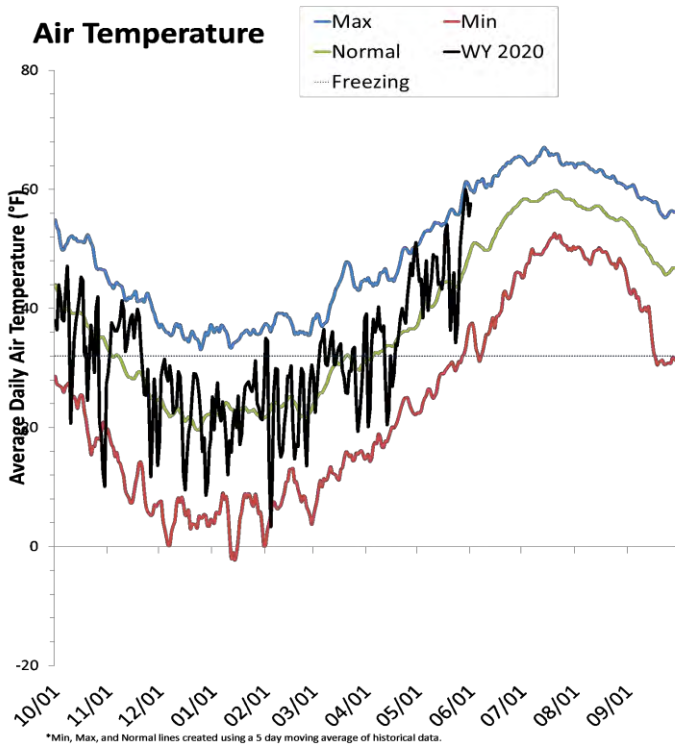
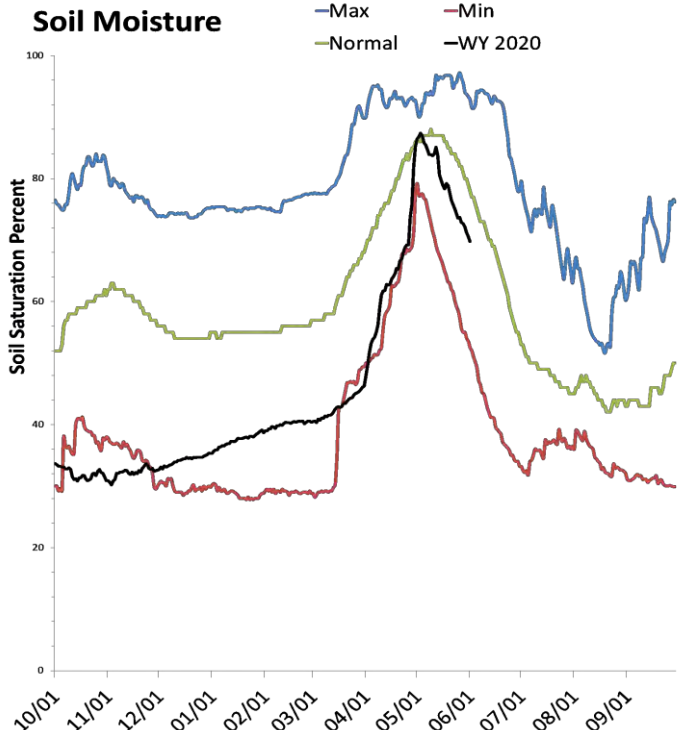
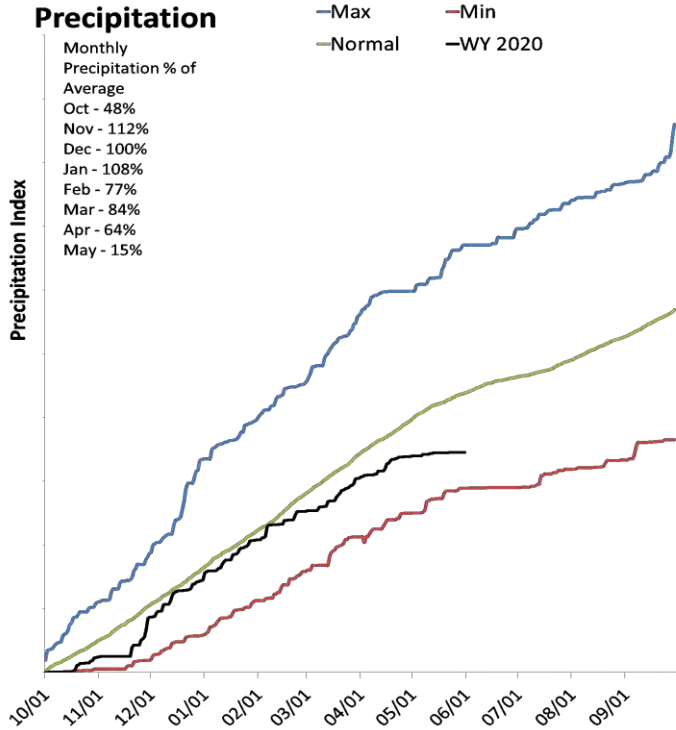
<sup>\*</sup>EOM, end of month; <sup>#</sup>WAI, Water Availability Index; <sup>^</sup>KAF, thousand acre-feet.



# Price & San Rafael Basins

June 1, 2020

Precipitation in May was much below average at 15%, which brings the seasonal accumulation (Oct-May) to 79% of average. Soil moisture is at 70% compared to 88% last year. Reservoir storage is at 88% of capacity, compared to 54% last year. The water availability index for the Price River is 63%, and 66% for Joe's Valley.

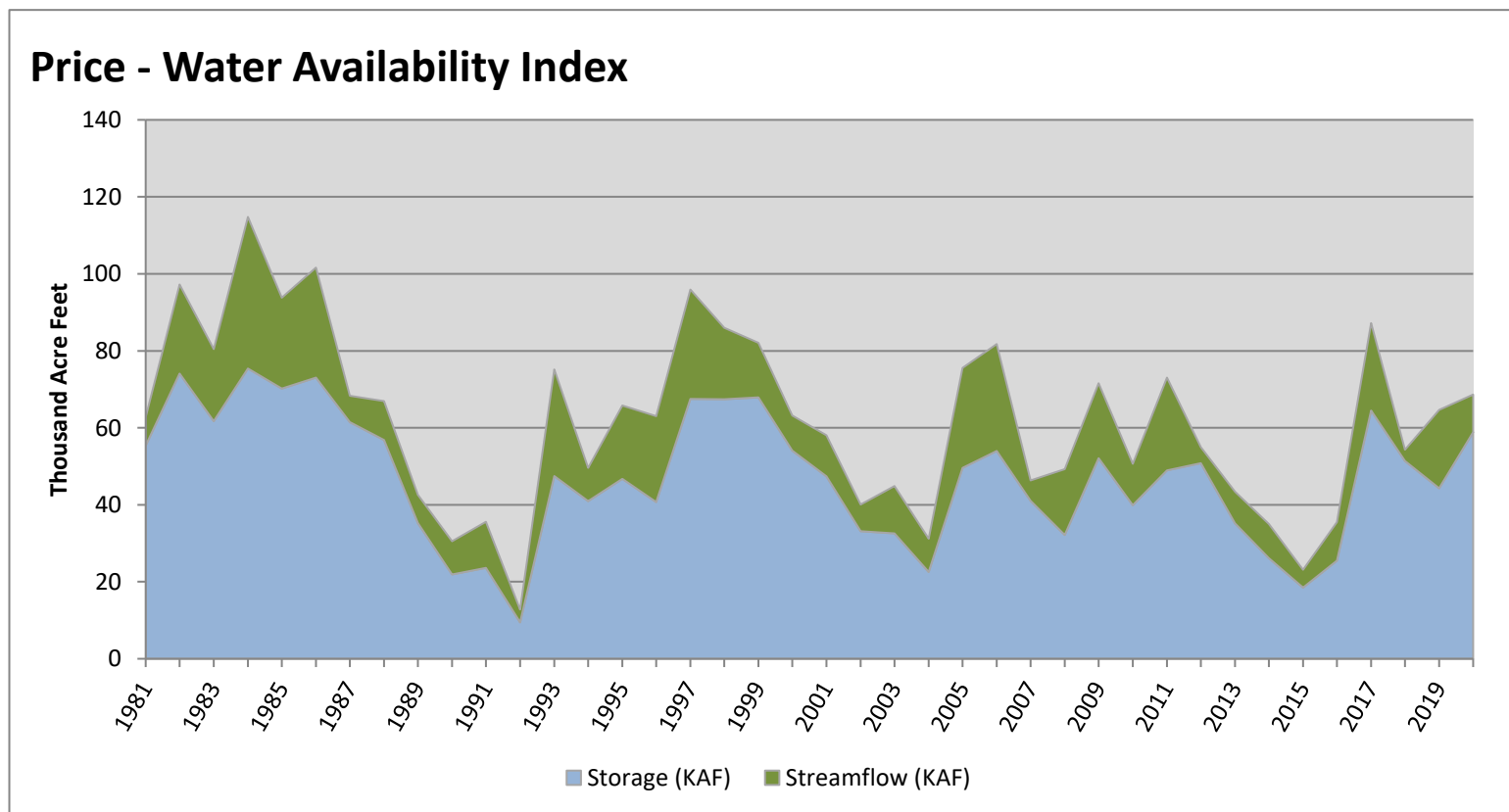


June 1, 2020

## Water Availability Index

Basin or Region	May EOM <sup>*</sup> Storage	May Flow	Storage + Flow	Percentile	WAI <sup>#</sup>	Years with similar WAI
	KAF <sup>^</sup>	KAF <sup>^</sup>	KAF <sup>^</sup>	%		
<b>Price</b>	<b>58.91</b>	<b>9.73</b>	<b>68.64</b>	<b>63</b>	<b>1.12</b>	<b>88, 87, 09, 11</b>

<sup>\*</sup>EOM, end of month; <sup>#</sup>WAI, Water Availability Index; <sup>^</sup>KAF, thousand acre-feet.

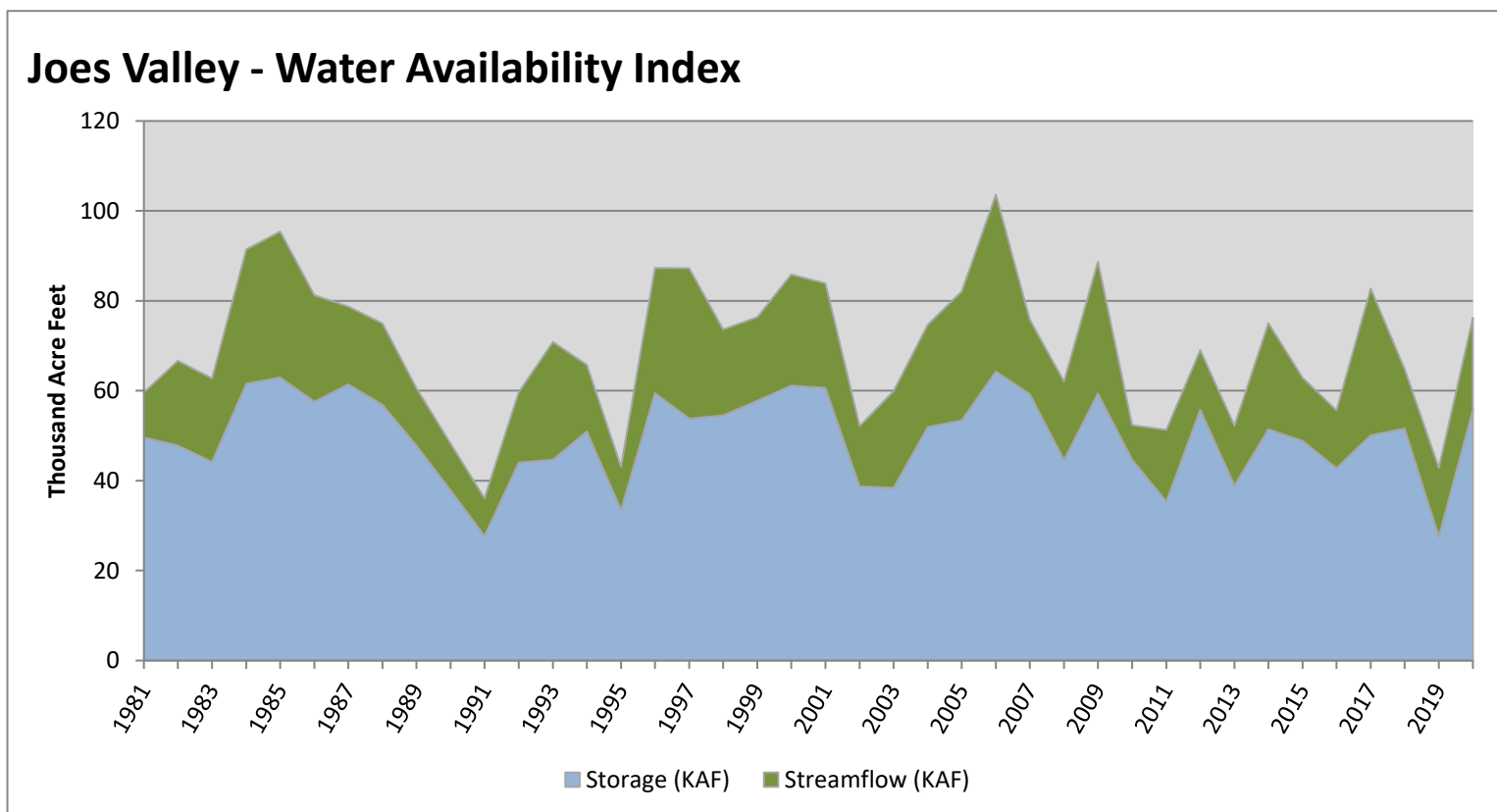


June 1, 2020

## Water Availability Index

Basin or Region	May EOM <sup>*</sup> Storage	May Flow	Storage + Flow	Percentile	WAI <sup>#</sup>	Years with similar WAI
	KAF <sup>^</sup>	KAF <sup>^</sup>	KAF <sup>^</sup>	%		
<b>Joes Valley</b>	<b>55.79</b>	<b>20.40</b>	<b>76.19</b>	<b>66</b>	<b>1.32</b>	<b>14, 07, 99, 87</b>

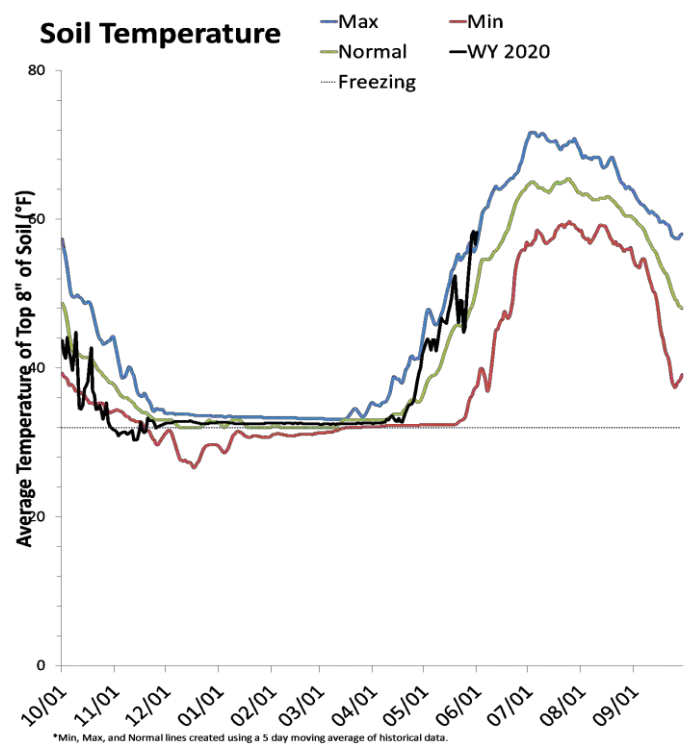
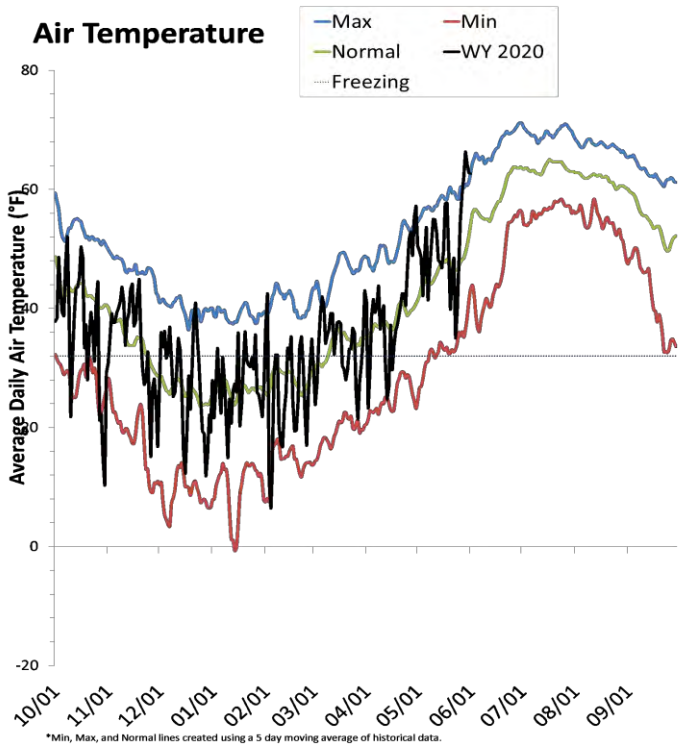
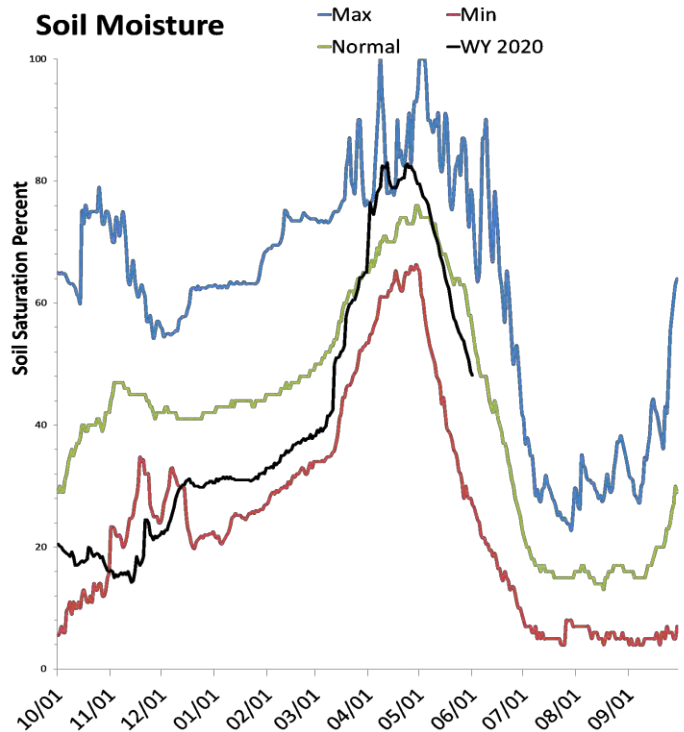
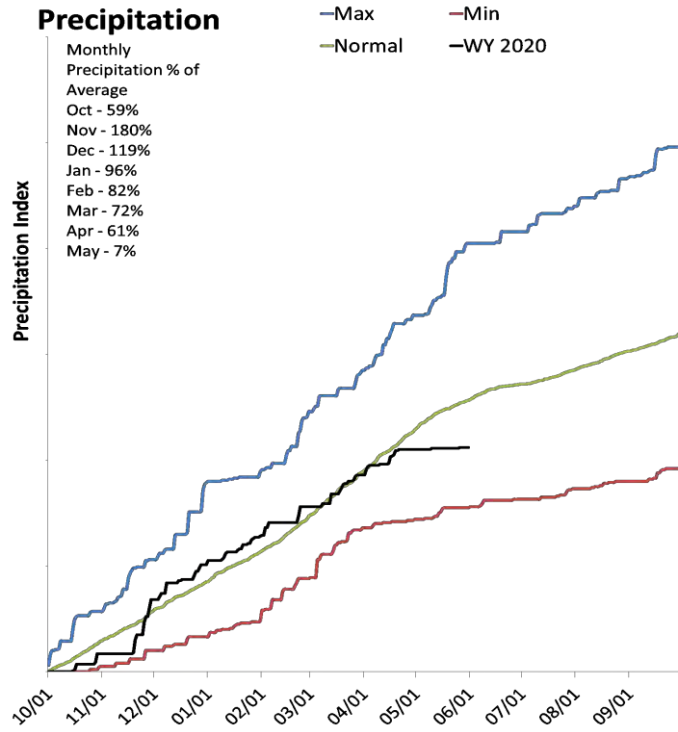
<sup>\*</sup>EOM, end of month; <sup>#</sup>WAI, Water Availability Index; <sup>^</sup>KAF, thousand acre-feet.



# Lower Sevier Basin

June 1, 2020

Precipitation in May was much below average at 7%, which brings the seasonal accumulation (Oct-May) to 82% of average. Soil moisture is at 49% compared to 71% last year. Reservoir storage is at 44% of capacity, compared to 34% last year. The water availability index for the Lower Sevier is 24%.

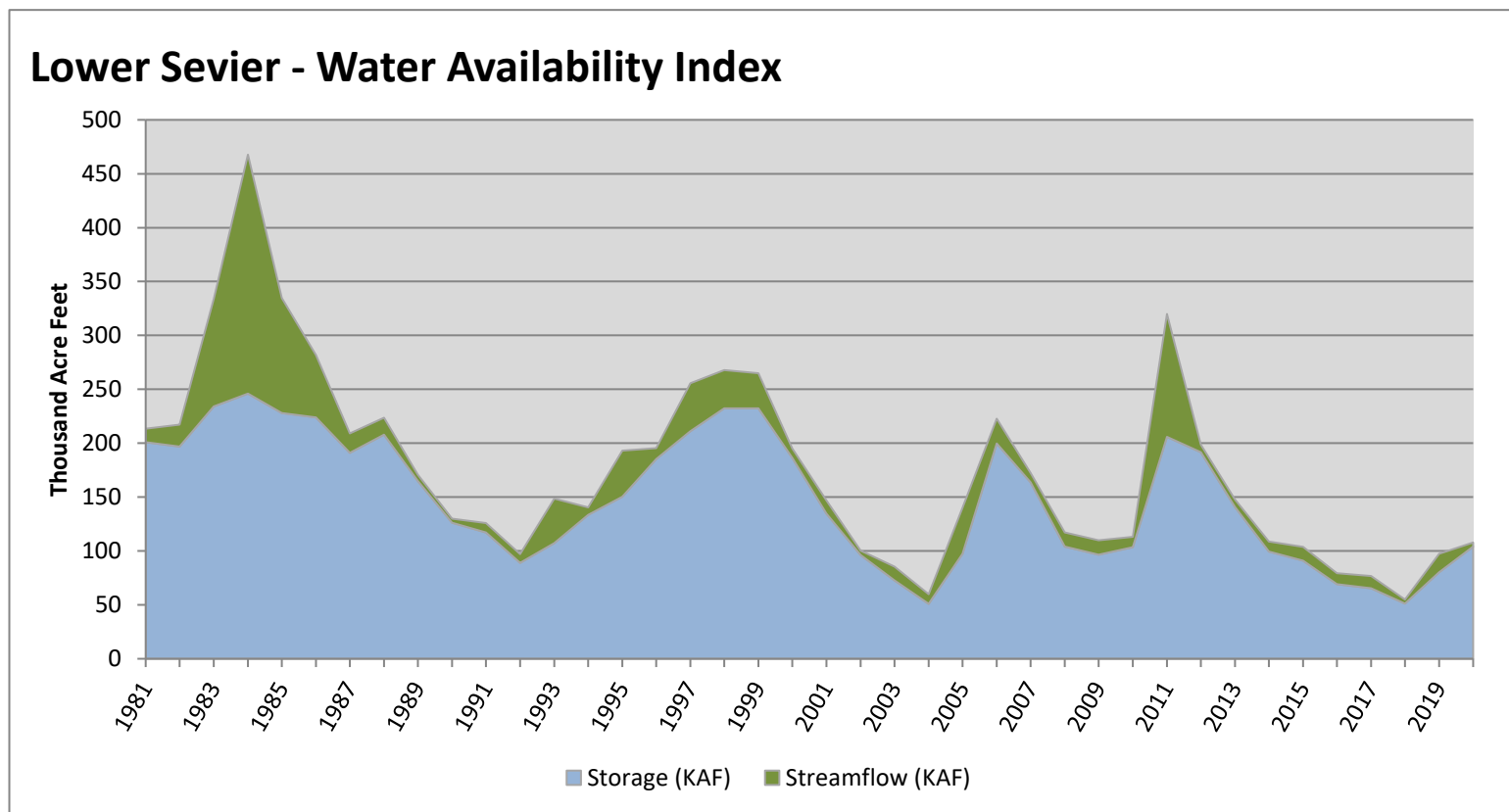


June 1, 2020

## Water Availability Index

Basin or Region	May EOM <sup>*</sup> Storage	May Flow	Storage + Flow	Percentile	WAI <sup>#</sup>	Years with similar WAI
	KAF <sup>^</sup>	KAF <sup>^</sup>	KAF <sup>^</sup>	%		
<b>Lower Sevier</b>	<b>104.23</b>	<b>3.76</b>	<b>107.99</b>	<b>24</b>	<b>-2.13</b>	<b>02, 15, 14, 09</b>

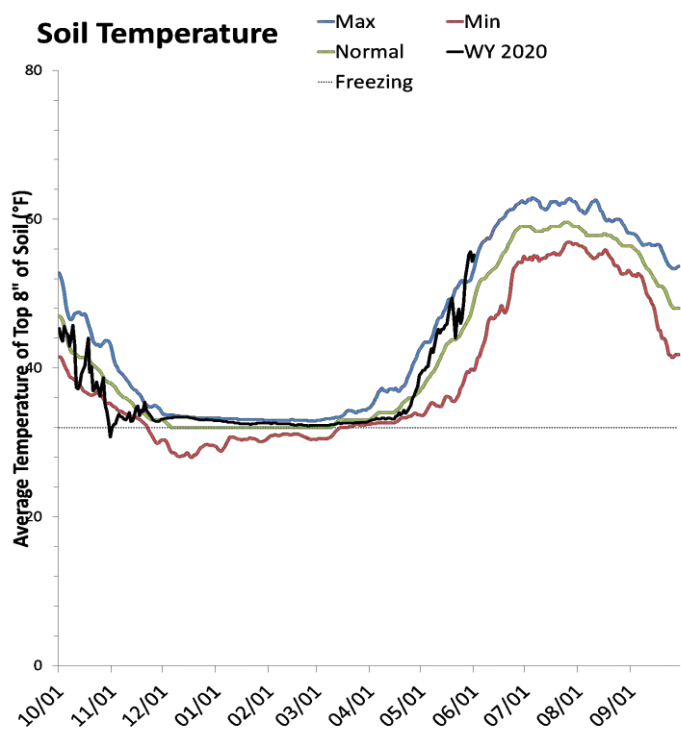
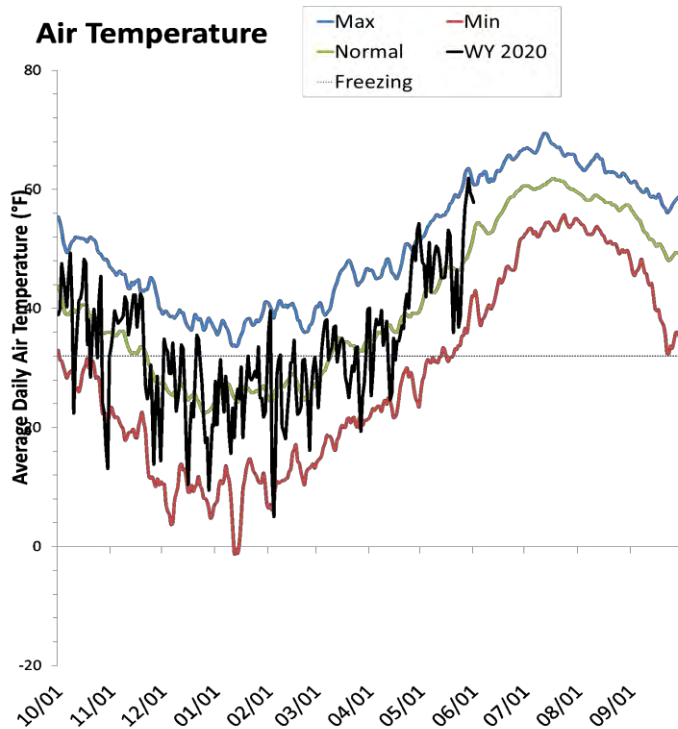
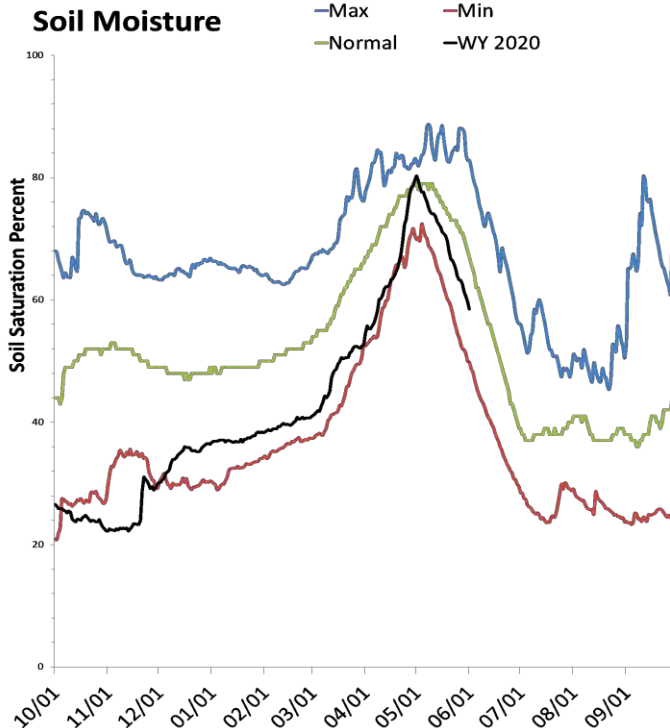
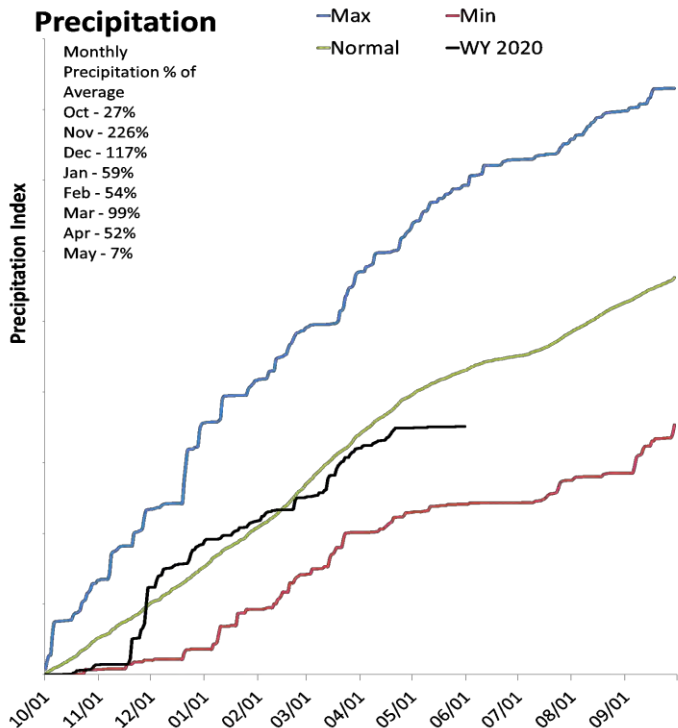
<sup>\*</sup>EOM, end of month; <sup>#</sup>WAI, Water Availability Index; <sup>^</sup>KAF, thousand acre-feet.



# Upper Sevier Basin

June 1, 2020

Precipitation in May was much below average at 7%, which brings the seasonal accumulation (Oct-May) to 82% of average. Soil moisture is at 59% compared to 82% last year. Reservoir storage is at 92% of capacity, compared to 92% last year. The water availability index for the Upper Sevier is 68%.



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

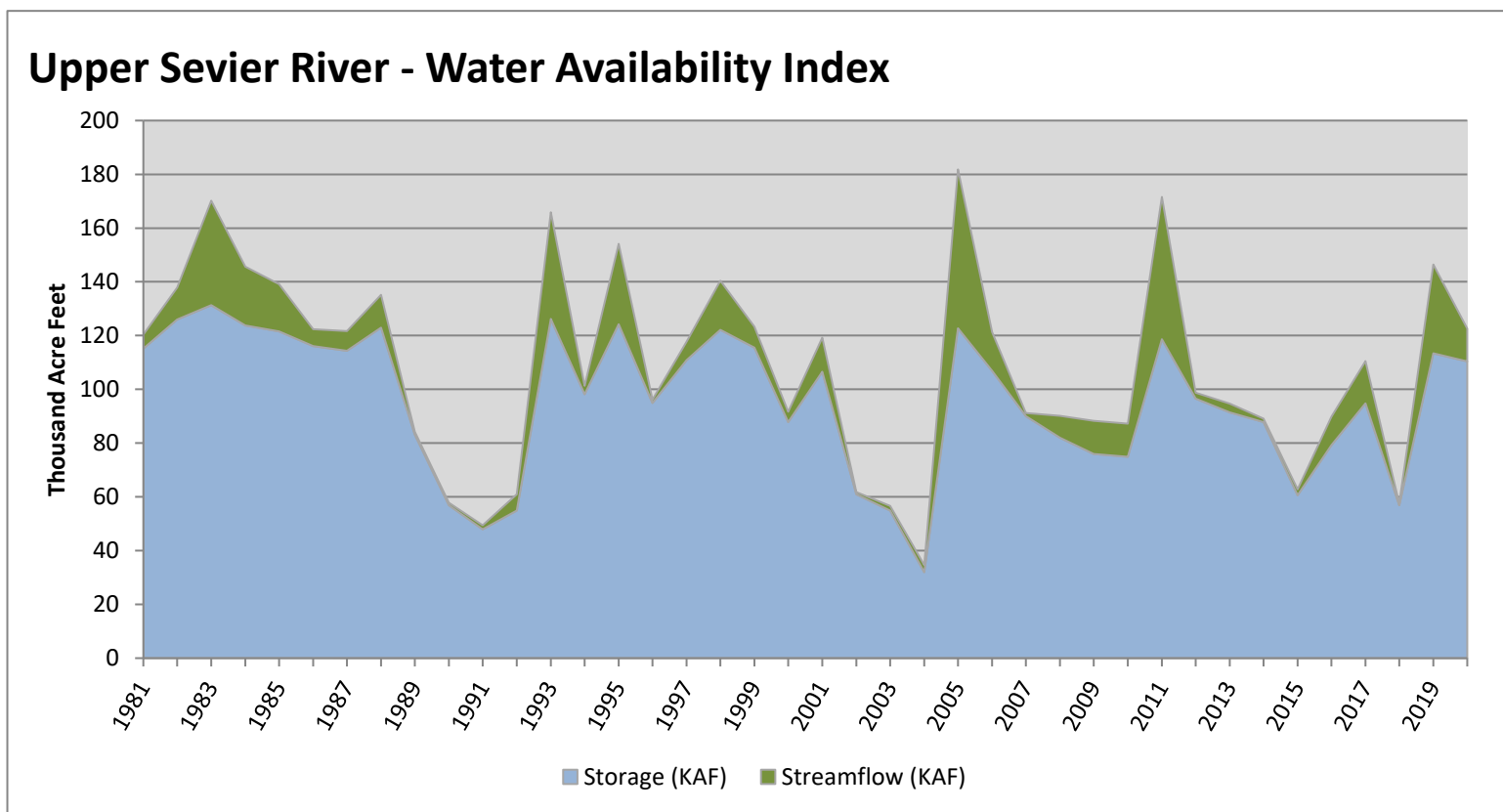
\*Min, Max, and Normal lines created using a 5 day moving average of historical data.

June 1, 2020

## Water Availability Index

Basin or Region	May EOM <sup>*</sup> Storage	May Flow	Storage + Flow	Percentile	WAI <sup>#</sup>	Years with similar WAI
	KAF <sup>^</sup>	KAF <sup>^</sup>	KAF <sup>^</sup>	%		
<b>Upper Sevier River</b>	<b>110.43</b>	<b>12.14</b>	<b>122.57</b>	<b>68</b>	<b>1.52</b>	<b>87, 86, 99, 88</b>

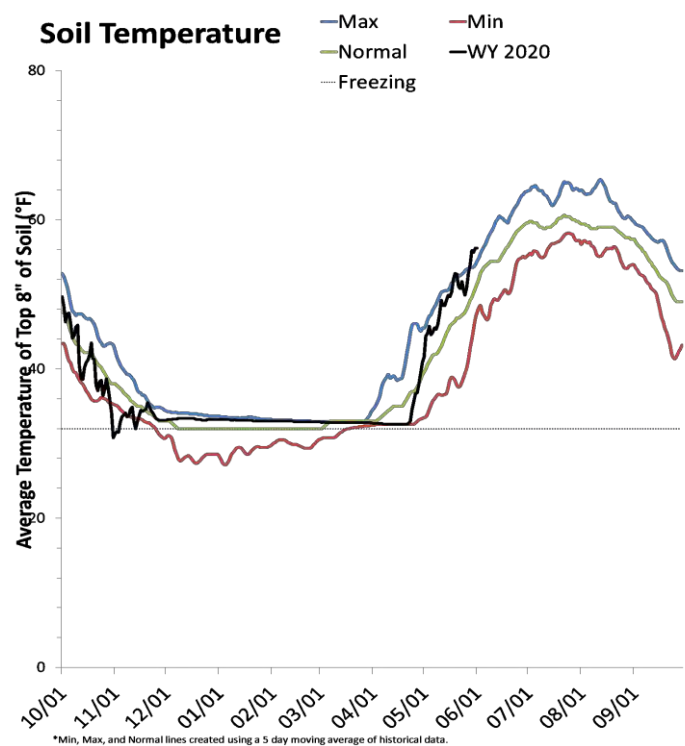
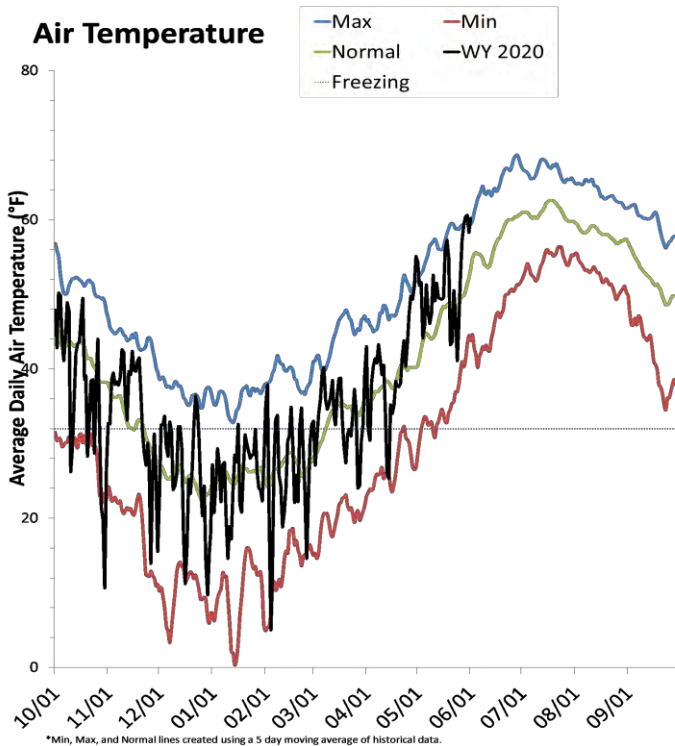
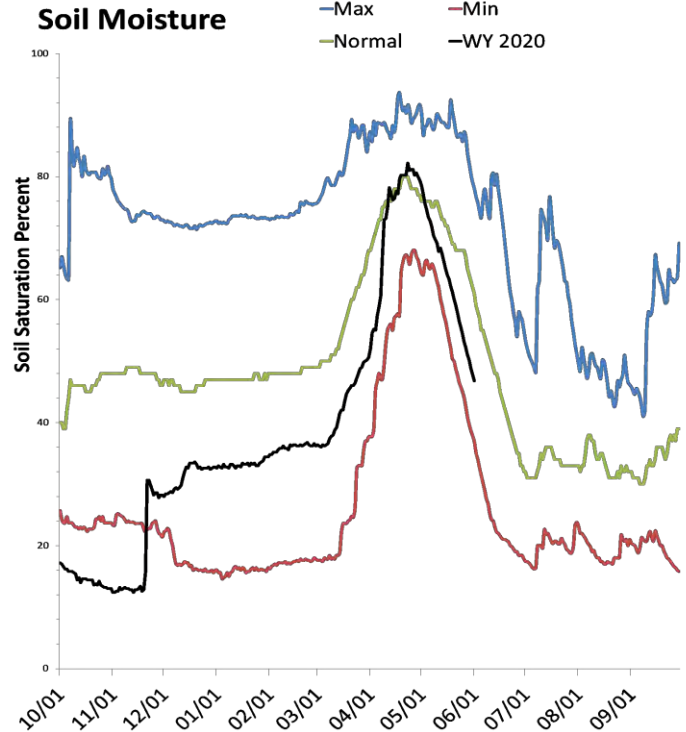
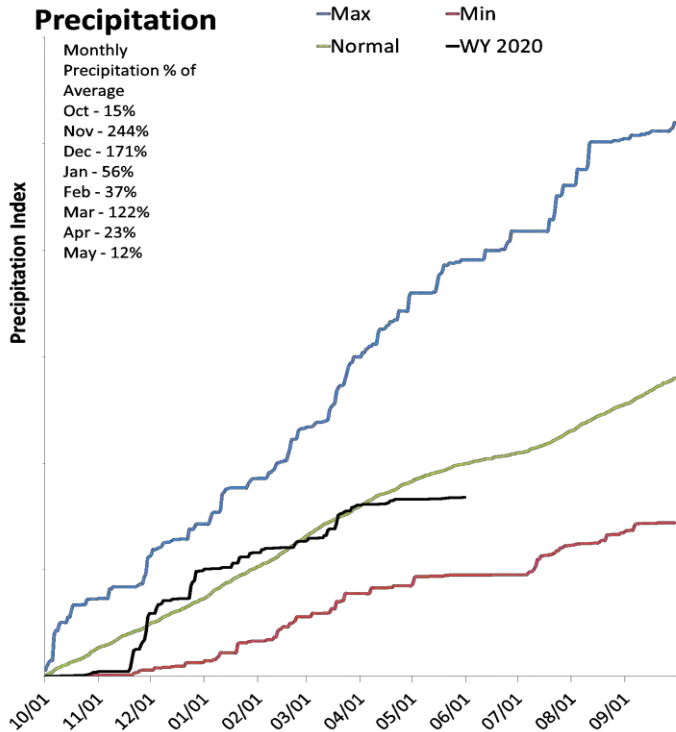
<sup>\*</sup>EOM, end of month; <sup>#</sup>WAI, Water Availability Index; <sup>^</sup>KAF, thousand acre-feet.



# Southeastern Utah

June 1, 2020

Precipitation in May was much below average at 12%, which brings the seasonal accumulation (Oct-May) to 84% of average. Soil moisture is at 47% compared to 87% last year. Reservoir storage is at 74% of capacity, compared to 110% last year. The water availability index for Moab is 26%.

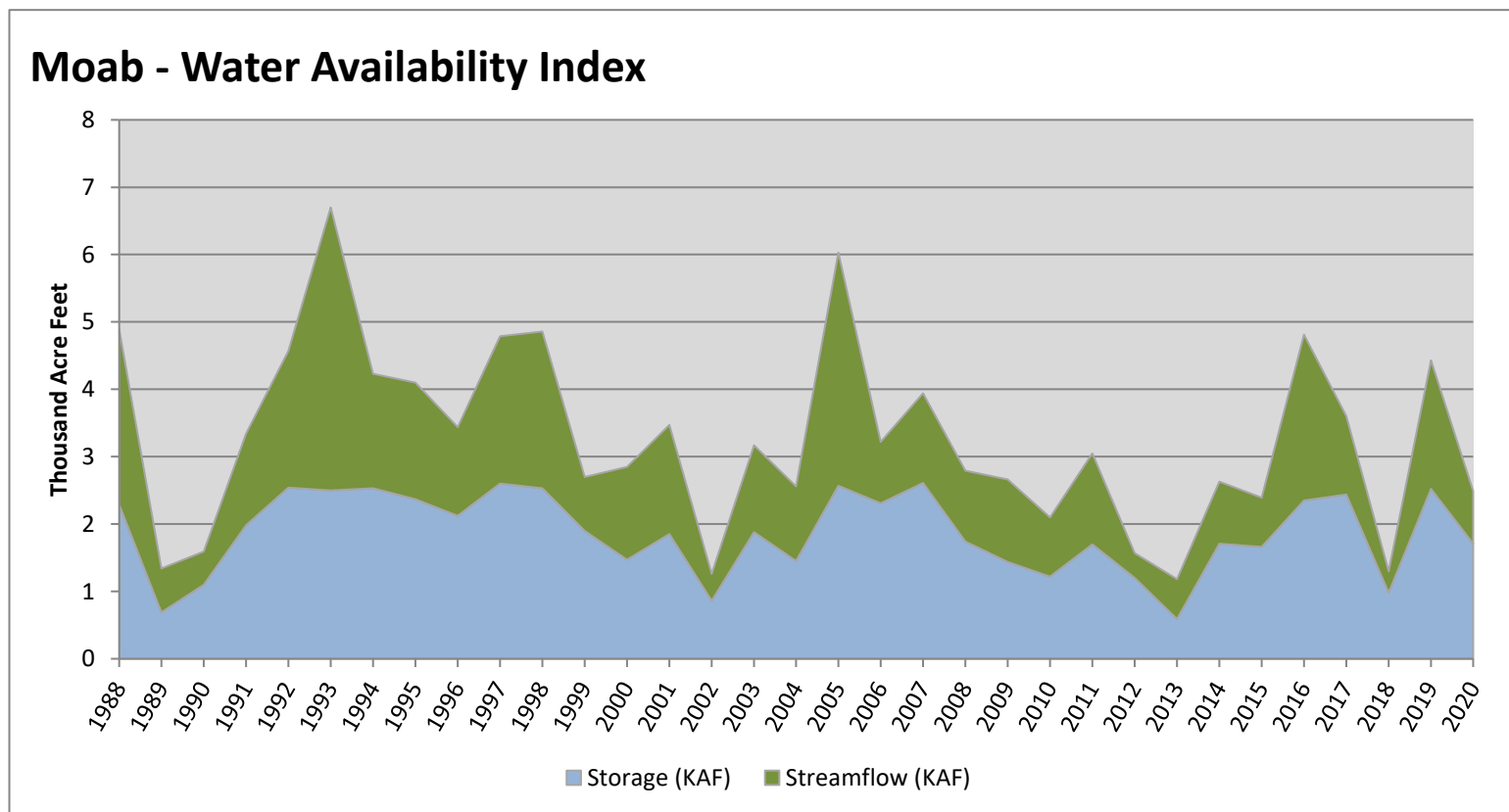


June 1, 2020

## Water Availability Index

Basin or Region	May EOM <sup>*</sup> Storage	May Flow	Storage + Flow	Percentile	WAI <sup>#</sup>	Years with similar WAI
	KAF <sup>^</sup>	KAF <sup>^</sup>	KAF <sup>^</sup>	%		
<b>Moab</b>	<b>1.71</b>	<b>0.78</b>	<b>2.49</b>	<b>26</b>	<b>-1.96</b>	<b>10, 15, 04, 14</b>

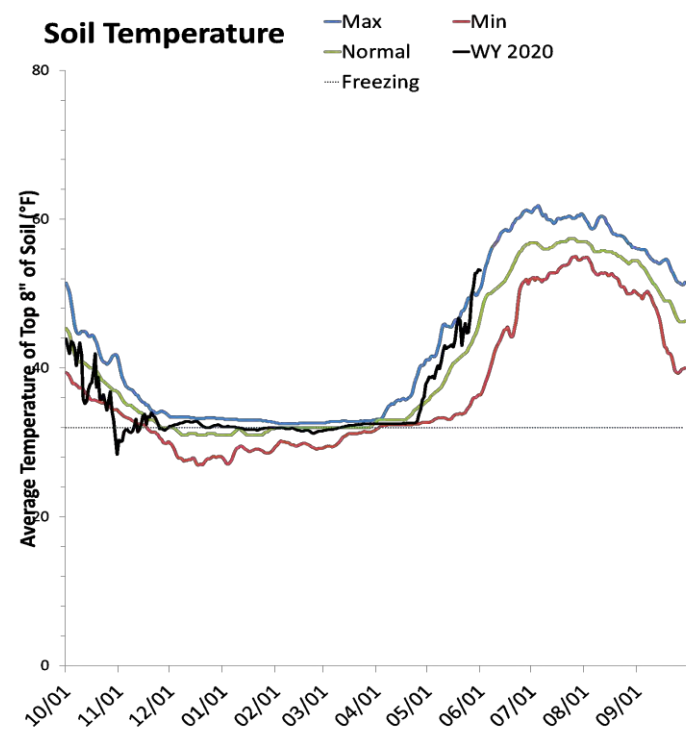
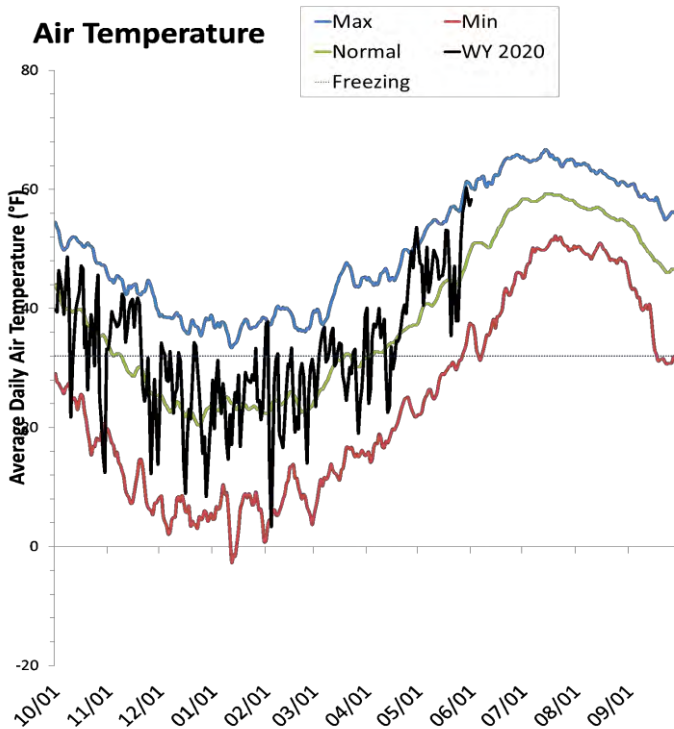
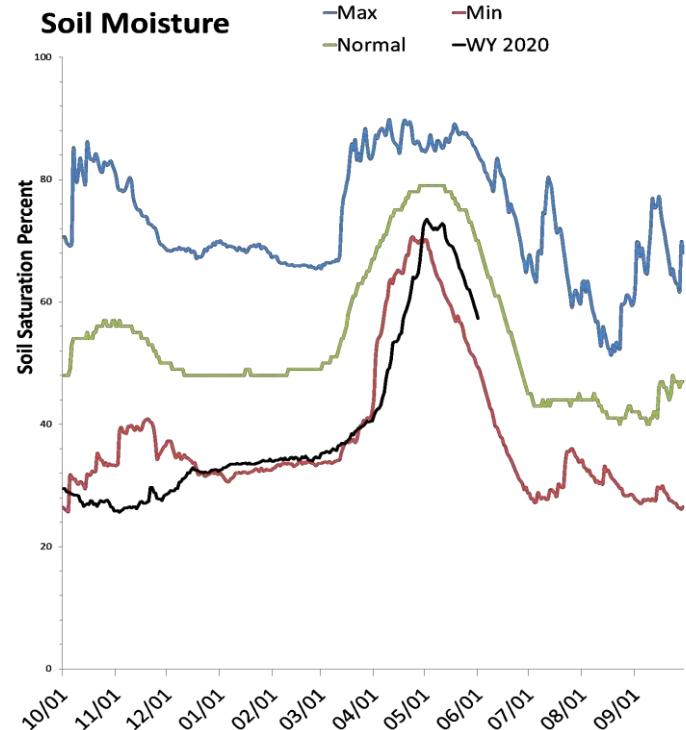
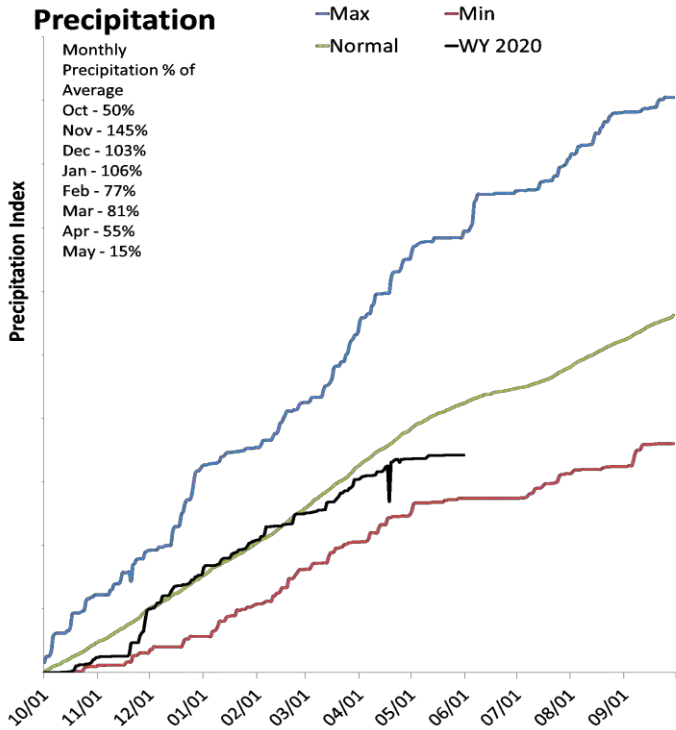
<sup>\*</sup>EOM, end of month; <sup>#</sup>WAI, Water Availability Index; <sup>^</sup>KAF, thousand acre-feet.



# Dirty Devil Basin

June 1, 2020

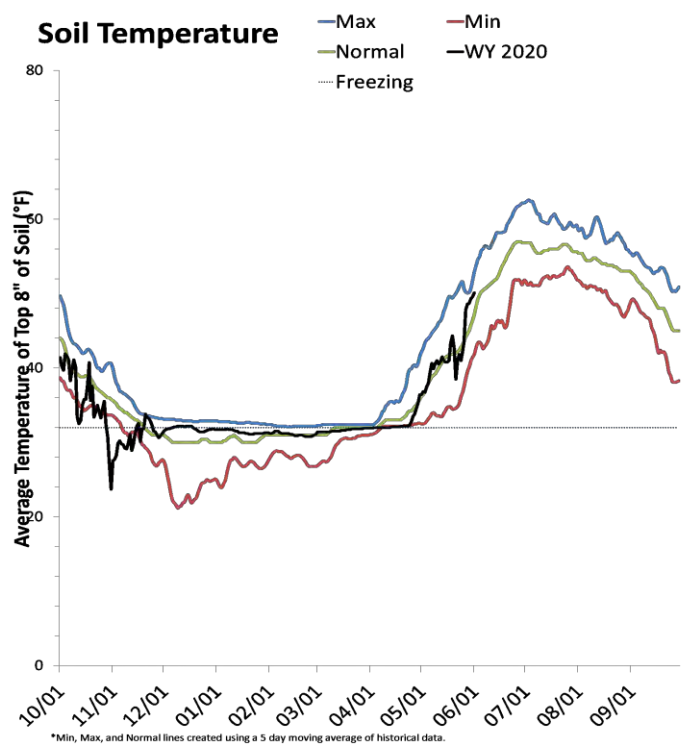
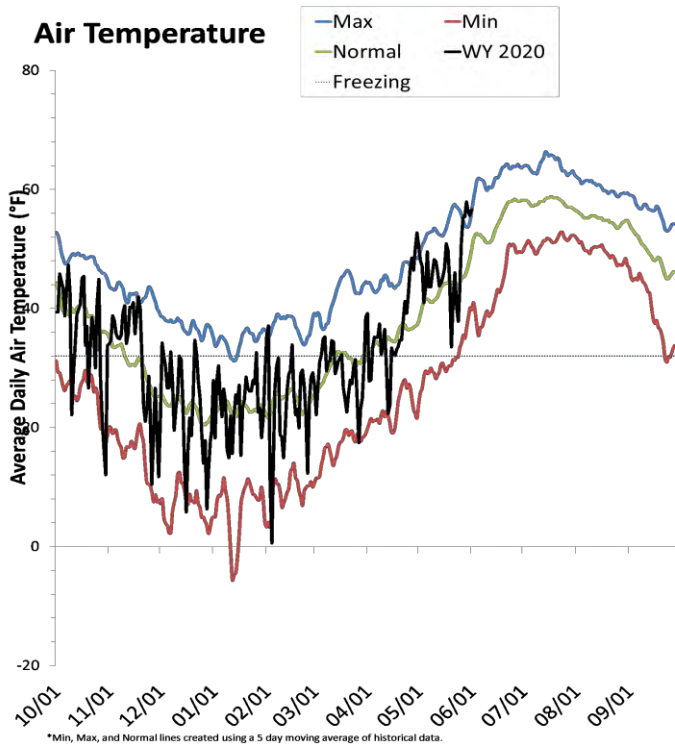
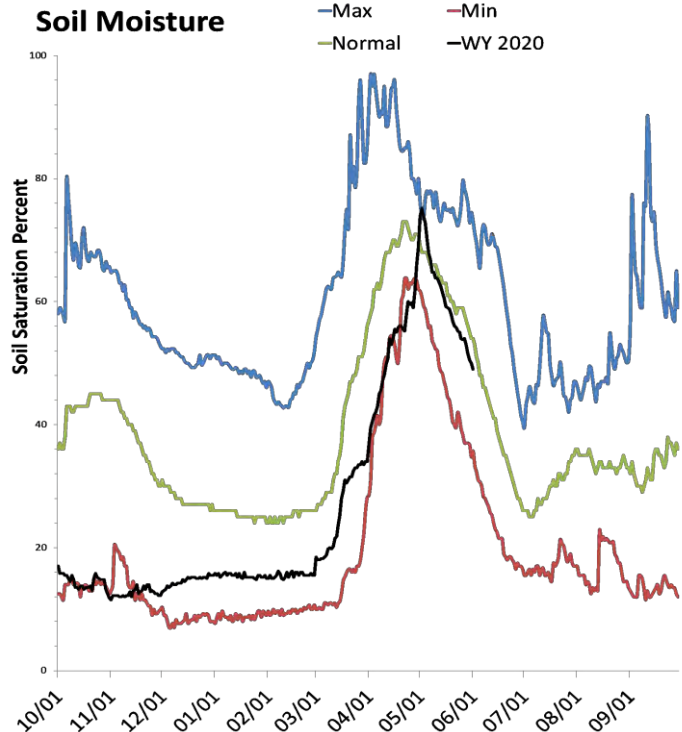
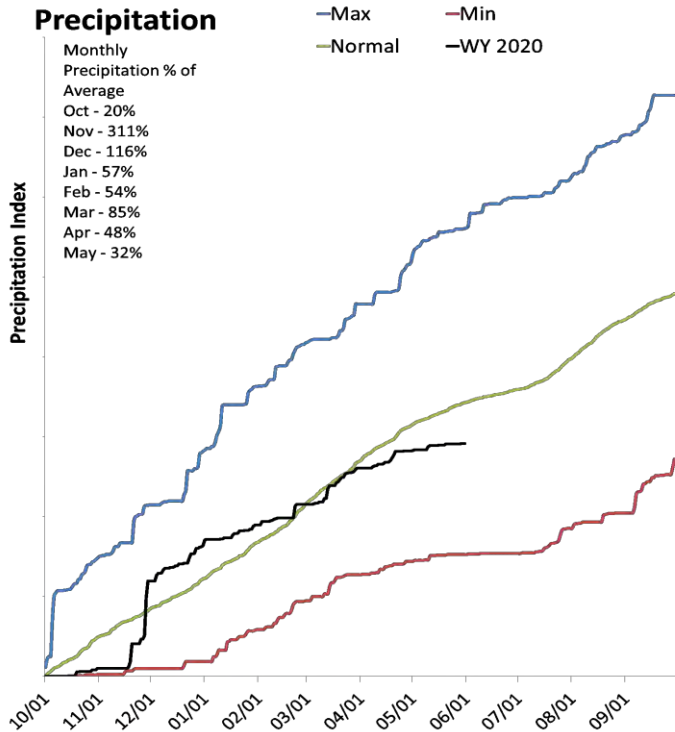
Precipitation in May was much below average at 15%, which brings the seasonal accumulation (Oct-May) to 81% of average. Soil moisture is at 58% compared to 82% last year.



# Escalante River Basin

June 1, 2020

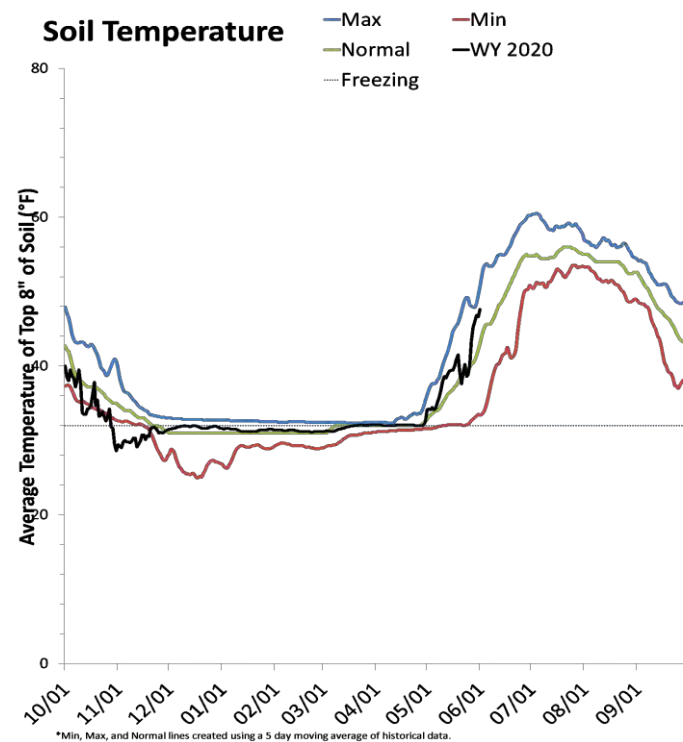
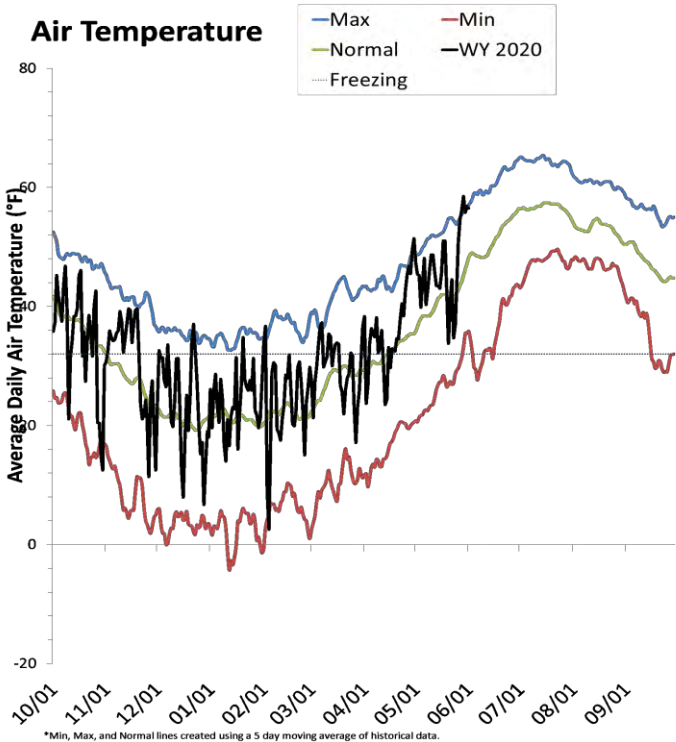
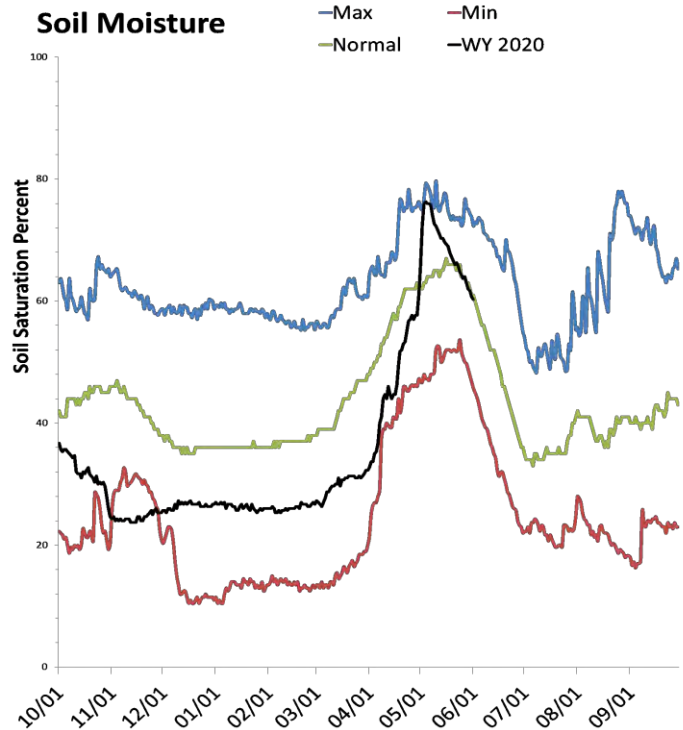
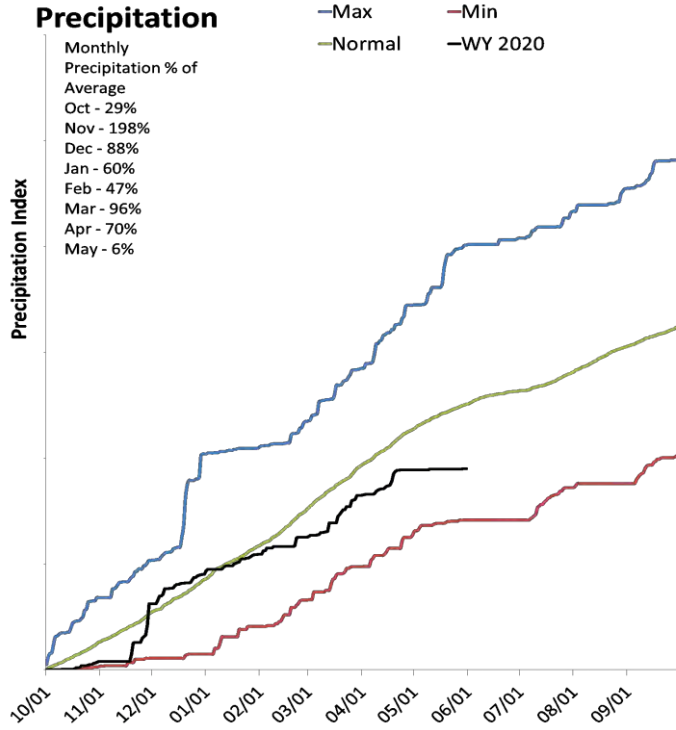
Precipitation in May was much below average at 33%, which brings the seasonal accumulation (Oct-May) to 85% of average. Soil moisture is at 50% compared to 78% last year.



# Beaver River Basin

June 1, 2020

Precipitation in May was much below average at 6%, which brings the seasonal accumulation (Oct-May) to 76% of average. Soil moisture is at 60% compared to 70% last year. Reservoir storage is at 75% of capacity, compared to 90% last year. The water availability index for the Beaver River is 56%.

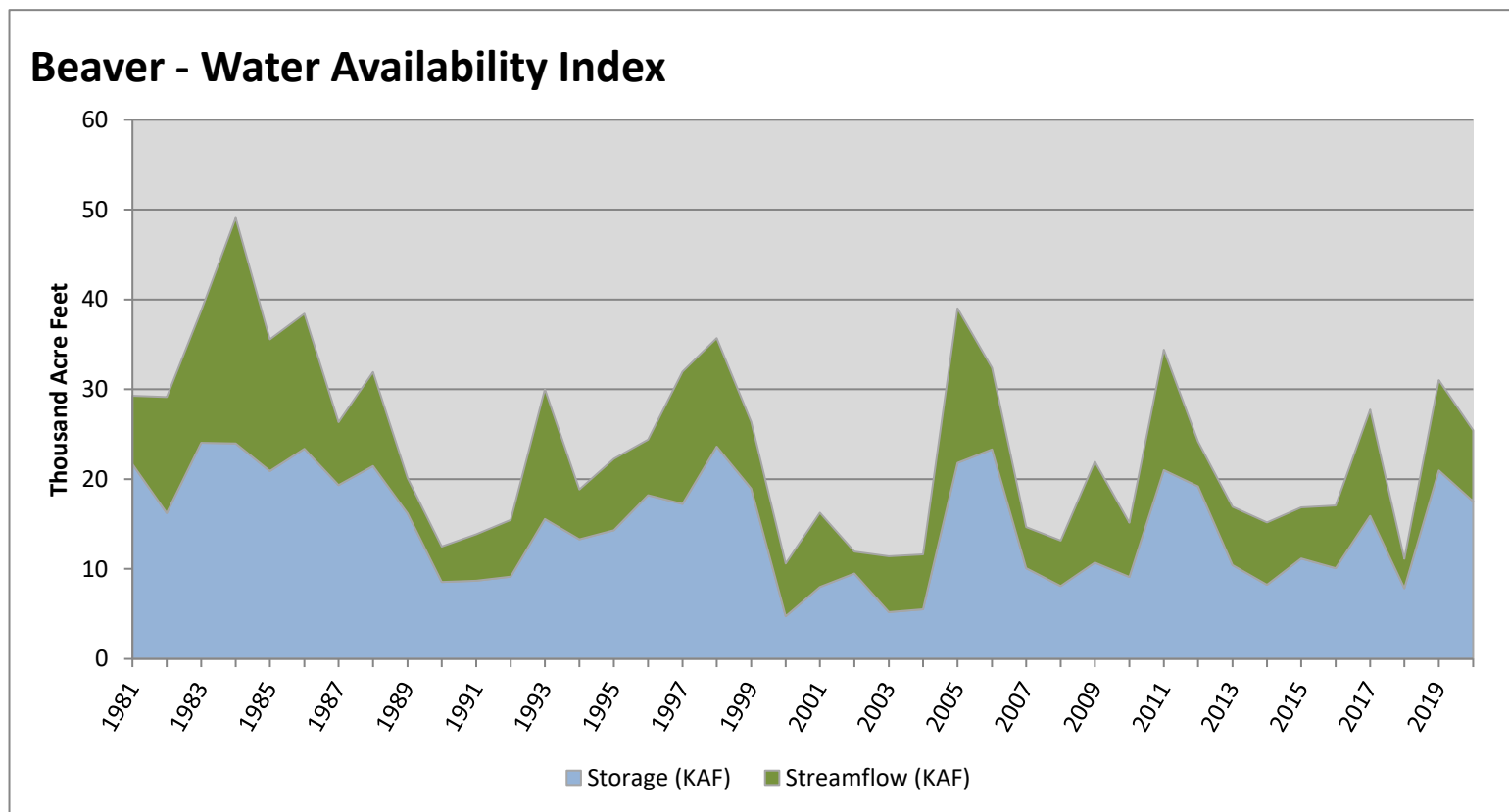


June 1, 2020

## Water Availability Index

Basin or Region	May EOM <sup>*</sup> Storage	May Flow	Storage + Flow	Percentile	WAI <sup>#</sup>	Years with similar WAI
	KAF <sup>^</sup>	KAF <sup>^</sup>	KAF <sup>^</sup>	%		
<b>Beaver</b>	<b>17.53</b>	<b>7.90</b>	<b>25.43</b>	<b>56</b>	<b>0.51</b>	<b>12, 96, 87, 99</b>

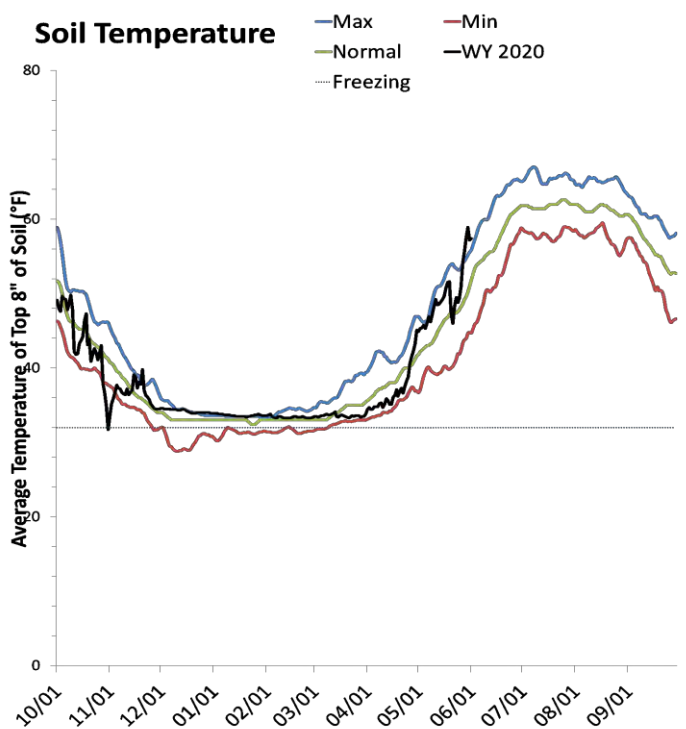
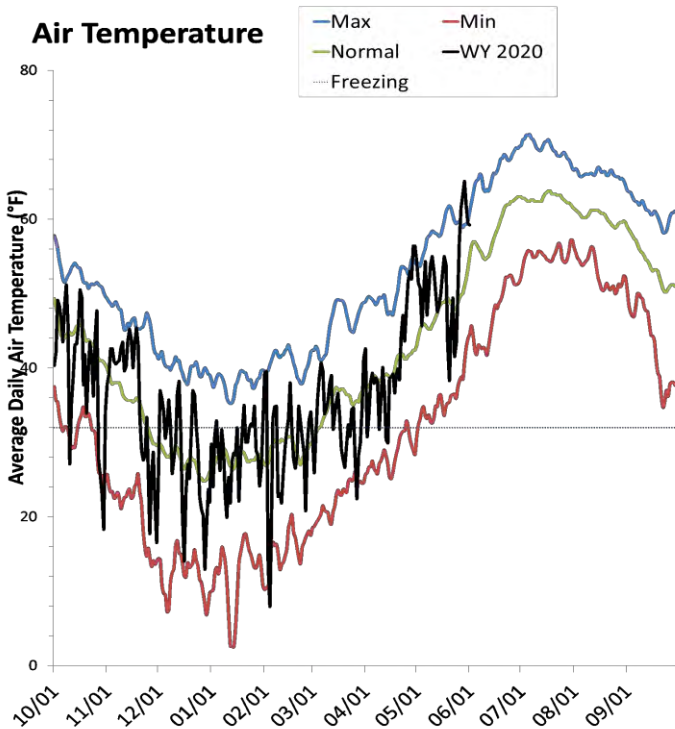
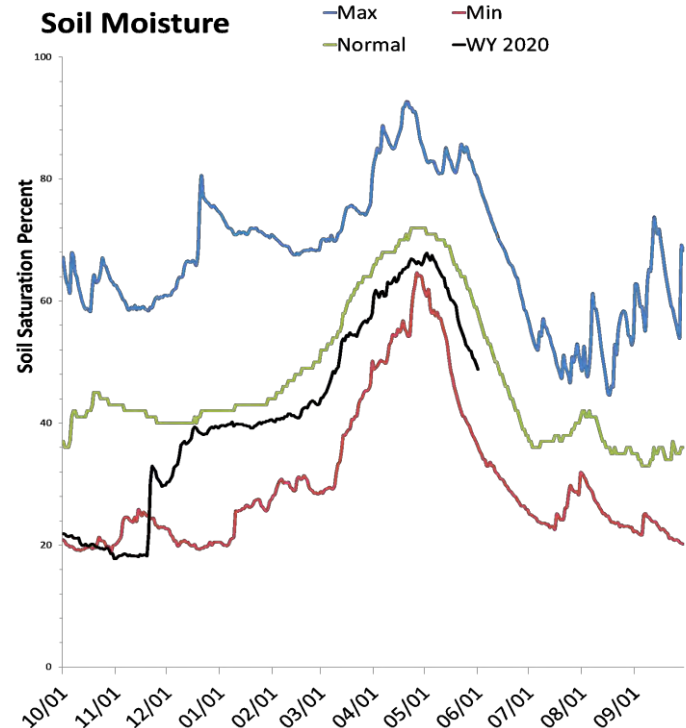
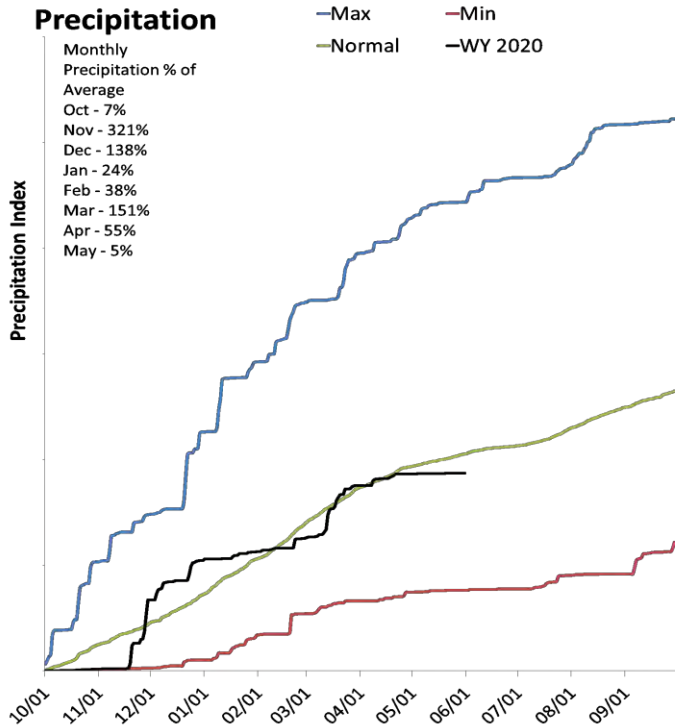
<sup>\*</sup>EOM, end of month; <sup>#</sup>WAI, Water Availability Index; <sup>^</sup>KAF, thousand acre-feet.



# Southwestern Utah

June 1, 2020

Precipitation in May was much below average at 5%, which brings the seasonal accumulation (Oct-May) to 91% of average. Soil moisture is at 49% compared to 77% last year. Reservoir storage is at 50% of capacity, compared to 43% last year. The water availability index for the Virgin River is 50%.



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

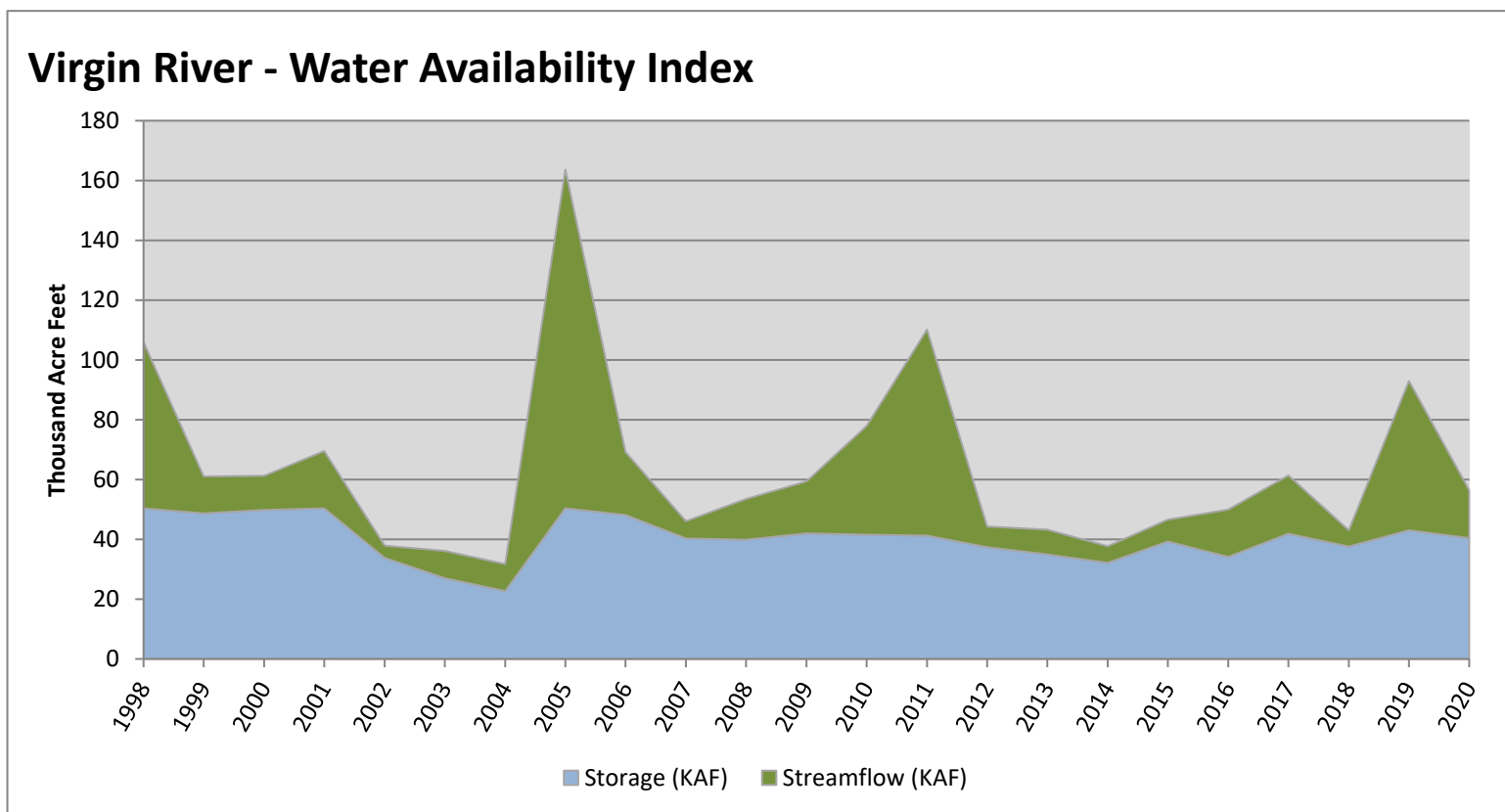
\*Min, Max, and Normal lines created using a 5 day moving average of historical data.

June 1, 2020

## Water Availability Index

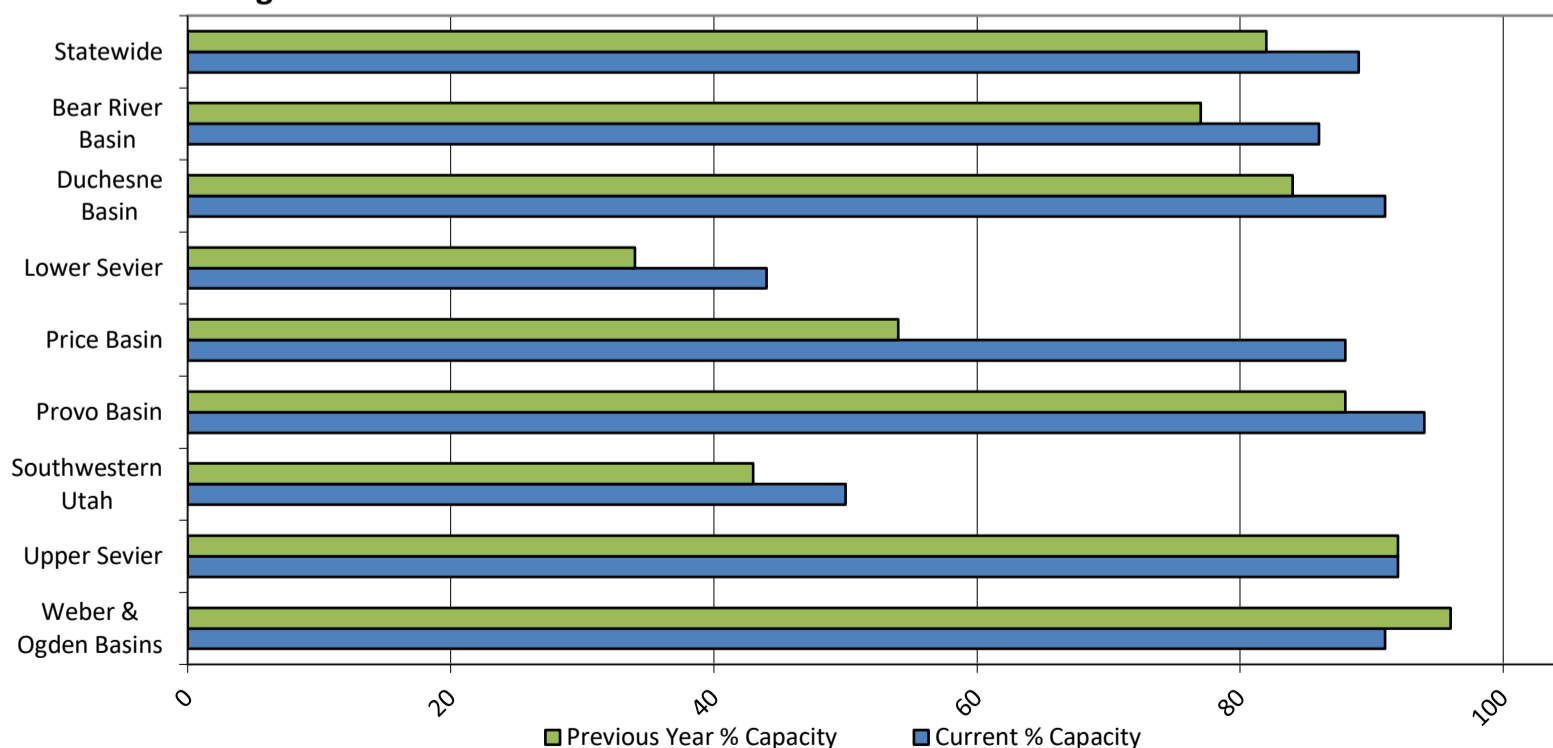
Basin or Region	May EOM <sup>*</sup> Storage	May Flow	Storage + Flow	Percentile	WAI <sup>#</sup>	Years with similar WAI
	KAF <sup>^</sup>	KAF <sup>^</sup>	KAF <sup>^</sup>	%		
<b>Virgin River</b>	<b>40.39</b>	<b>16.01</b>	<b>56.40</b>	<b>50</b>	<b>0</b>	<b>16, 08, 09, 99</b>

<sup>\*</sup>EOM, end of month; <sup>#</sup>WAI, Water Availability Index; <sup>^</sup>KAF, thousand acre-feet.



<b>Reservoir Storage Summary for the end of May 2020</b>	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	21.1	25.1		25.7	82%	98%			
Causey Reservoir	7.1	7.1	7.0	7.1	99%	101%	99%	101%	102%
Cleveland Lake	5.4	3.3		5.4	100%	61%			
Currant Creek Reservoir	14.7	14.3	15.2	15.5	95%	92%	98%	97%	94%
Deer Creek Reservoir	147.9	147.0	132.8	149.7	99%	98%	89%	111%	111%
East Canyon Reservoir	49.0	49.9	46.7	49.5	99%	101%	94%	105%	107%
Echo Reservoir	65.4	66.2	67.0	73.9	89%	90%	91%	98%	99%
Grantsville Reservoir	2.1	3.5	2.8	3.3	65%	105%	85%	76%	124%
Gunlock	9.1	10.6	7.9	10.4	87%	102%	76%	115%	134%
Gunnison Reservoir	6.7	5.3	14.7	20.3	33%	26%	72%	45%	36%
Huntington North Reservoir	3.2	3.4	3.7	4.2	77%	80%	88%	87%	91%
Hyrum Reservoir	14.6	14.1	14.6	15.3	96%	92%	95%	100%	96%
Joes Valley Reservoir	55.8	27.6	51.0	61.6	91%	45%	83%	109%	54%
Jordanelle Reservoir	307.6	270.4	274.4	314.0	98%	86%	87%	112%	99%
Ken's Lake	1.7	2.5	2.0	2.3	74%	110%	87%	85%	126%
Kolob Reservoir	5.6	5.7		5.6	100%	102%			
Lost Creek Reservoir	22.6	23.0	18.7	22.5	100%	102%	83%	121%	123%
Lower Enterprise	1.0	2.3	1.2	2.6	38%	87%	45%	85%	191%
Miller Flat Reservoir	4.2	3.0		5.2	80%	57%			
Millsite	12.5	5.2	15.9	16.7	75%	31%	95%	79%	33%
Minersville Reservoir	17.5	21.0	15.0	23.3	75%	90%	64%	117%	140%
Moon Lake Reservoir	38.2	13.7	28.6	35.8	107%	38%	80%	134%	48%
Otter Creek Reservoir	48.3	52.2	43.7	52.5	92%	99%	83%	111%	119%
Panguitch Lake	24.4	21.0	18.1	22.3	109%	94%	81%	135%	116%
Pineview Reservoir	100.9	110.9	97.8	110.1	92%	101%	89%	103%	113%
Piute Reservoir	62.1	61.2	53.0	71.8	87%	85%	74%	117%	115%
Porcupine Reservoir	13.1	13.2	10.8	11.3	116%	117%	96%	121%	122%
Quail Creek	31.3	32.4	31.5	40.0	78%	81%	79%	99%	103%
Red Fleet Reservoir	23.4	19.9	23.5	25.7	91%	77%	91%	100%	85%
Rockport Reservoir	54.7	45.9	50.8	60.9	90%	75%	83%	108%	90%
Sand Hollow Reservoir	49.8	49.0		50.0	100%	98%			
Scofield Reservoir	58.9	44.3	48.7	65.8	90%	67%	74%	121%	91%
Settlement Canyon Reservoir	0.6	1.0	0.9	1.0	61%	99%	85%	72%	116%
Sevier Bridge Reservoir	104.2	80.3	159.0	236.0	44%	34%	67%	66%	51%
Smith And Morehouse Reservoir	8.5	4.3	6.7	8.1	105%	53%	83%	127%	64%
Starvation Reservoir	162.7	152.1	154.8	164.1	99%	93%	94%	105%	98%
Stateline Reservoir	14.3	9.4	10.2	12.0	119%	78%	85%	140%	92%
Steinaker Reservoir	15.8	-3.7	29.2	33.4	47%	-11%	87%	54%	-13%
Strawberry Reservoir	1003.1	957.9	714.9	1105.9	91%	87%	65%	140%	134%
Upper Enterprise	3.5	7.3	4.8	10.0	35%	73%	48%	73%	152%
Upper Stillwater Reservoir	19.3	5.8	15.7	32.5	59%	18%	48%	123%	37%
Utah Lake	846.7	781.2	864.9	870.9	97%	90%	99%	98%	90%
Willard Bay	192.4	220.3	164.5	215.0	89%	102%	77%	117%	134%
Woodruff Creek	3.9	4.0	3.8	4.0	98%	100%	95%	103%	105%
Woodruff Narrows Reservoir	46.8	50.7	44.8	57.3	82%	88%	78%	104%	113%
Meeks Cabin Reservoir	28.1	22.5	25.2	32.5	87%	69%	78%	112%	89%
Bear Lake	1122.4	990.8	710.6	1302.0	86%	76%	55%	158%	139%
Basin-wide Total	4750.5	4375.5	3977.8	5339.7	89%	82%	74%	119%	110%
# of reservoirs	41.0	41.0	41.0	41.0	41	41	41	41	41
# of reservoirs	42	42	42	42	42	42	42	42	42

### Reservoir Storage



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## **Utah Climate and Water Report**

**Natural Resources Conservation Service**  
**Salt Lake City, UT**

