# Utah Water Supply Outlook Report

April 1, 2020

**Huntington-Horseshoe snow course, Wasatch Plateau**

**Solo snow sampling due to social distancing**

**Photo by Jordan Clayton**

# Water Supply Outlook Reports
## and Federal - State - Private Cooperative Snow Surveys

*For more water supply and resource management information, contact: your local Natural Resources Conservation Service Office or:*
*Snow Surveys*
*245 N Jimmy Doolittle Rd, SLC Utah, 84116. Phone (385)285-3118*
**Email Address: jordan.clayton@usda.gov**

### *How forecasts are made*

Most of the annual streamflow in the western United States originates as snowfall that has accumulated in the mountains during the winter and early spring. As the snowpack accumulates, hydrologists estimate the runoff that will occur when it melts. Measurements of snow water equivalent at selected manual snowcourses and automated SNOTEL sites, along with precipitation, antecedent streamflow, and indices of the El Niño / Southern Oscillation are used in statistical and simulation models to prepare runoff forecasts. Unless otherwise specified, all forecasts are for flows that would occur naturally without any upstream influences.

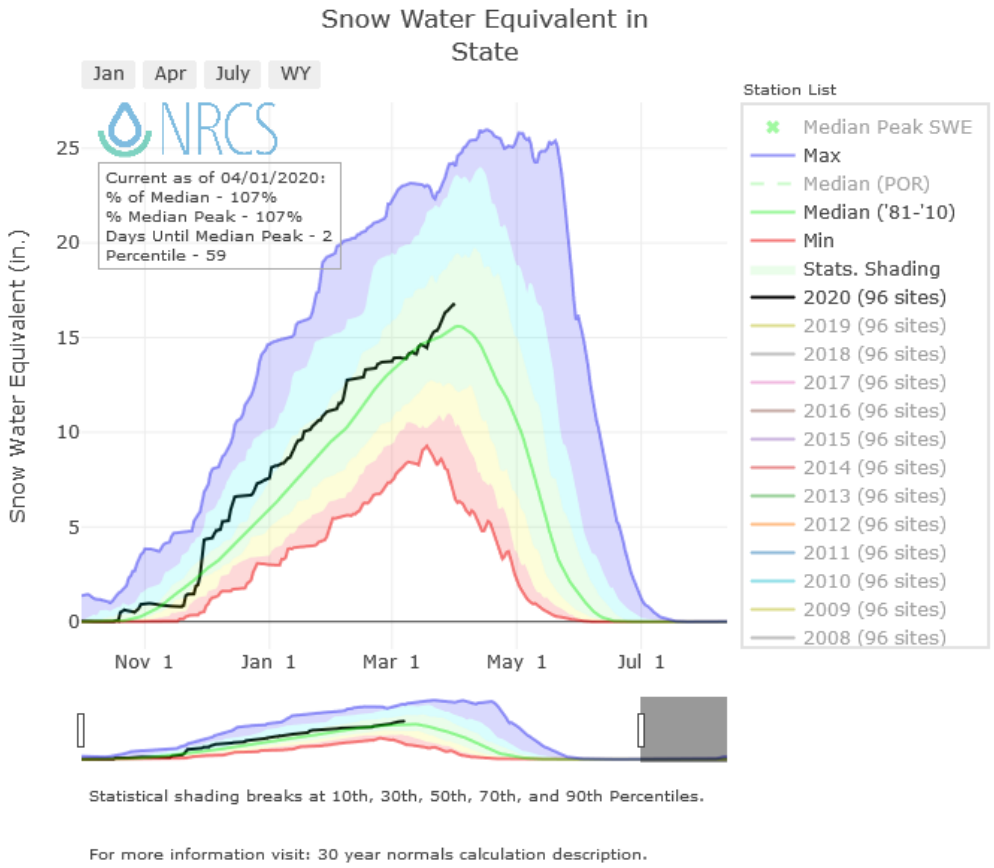
Forecasts of any kind, of course, are not perfect. Streamflow forecast uncertainty arises from three primary sources: (1) uncertain knowledge of future weather conditions, (2) uncertainty in the forecasting procedure, and (3) errors in the data. The forecast, therefore, must be interpreted not as a single value but rather as a range of values with specific probabilities of occurrence. The middle of the range is expressed by the 50% exceedance probability forecast, for which there is a 50% chance that the actual flow will be above, and a 50% chance that the actual flow will be below, this value. To describe the expected range around this 50% value, four other forecasts are provided, two smaller values (90% and 70% exceedance probability) and two larger values (30%, and 10% exceedance probability). For example, there is a 90% chance that the actual flow will be more than the 90% exceedance probability forecast. The others can be interpreted similarly.

The wider the spread among these values, the more uncertain the forecast. As the season progresses, forecasts become more accurate, primarily because a greater portion of the future weather conditions become known; this is reflected by a narrowing of the range around the 50% exceedance probability forecast. Users should take this uncertainty into consideration when making operational decisions by selecting forecasts corresponding to the level of risk they are willing to assume about the amount of water to be expected. If users anticipate receiving a lesser supply of water, or if they wish to increase their chances of having an adequate supply of water for their operations, they may want to base their decisions on the 90% or 70% exceedance probability forecasts, or something in between. On the other hand, if users are concerned about receiving too much water (for example, threat of flooding), they may want to base their decisions on the 30% or 10% exceedance probability forecasts, or something in between. Regardless of the forecast value users choose for operations, they should be prepared to deal with either more or less water. (Users should remember that even if the 90% exceedance probability forecast is used, there is still a 10% chance of receiving less than this amount.) By using the exceedance probability information, users can easily determine the chances of receiving more or less water.

# STATE OF UTAH GENERAL OUTLOOK
**April 1, 2020**

## SUMMARY

After a quiet February, Utah received some nice storms in March, and as of April 1st the statewide snow water equivalent (SWE) is 107% of normal. As shown by the black line in the graph below, the statewide SWE has been hovering around 100% for a while- dipping below in between storms as some sites started to melt, and then popping back above 100% during the small storms we've been receiving. That was until this recent storm cycle, which was colder (thereby turning off most of the melting) and adding significant SWE (snow water equivalent). The typical peak statewide snow accumulation occurs on April 3rd, so Utah's snowpack this winter is winding up pretty close to average. For comparison, this year's statewide April 1 SWE (16.7") is exactly 5" lower than last year's outstanding snowpack.




As always, there are regional differences: currently, the Southwestern Utah, Southeastern Utah, Northeastern Uintas, and Escalante watersheds are above 120% of normal SWE. All other basins in Utah are within 13% of average. After the recent flip flopping winters between extremely dry and extremely snowy conditions, this is a nice reminder of what an average winter looks like in Utah.

The individual SNOTEL sites with the most SWE right now are all in the Wasatch Front and Bear River headwaters: Snowbird (43.5"), Tony Grove Lake (39.7"), Farmington (31.7"), Lookout Peak (31.1"), and Ben Lomond Peak (30.4"). Numerous other SNOTEL sites in Utah are not far behind. In terms of percent normal, the leading SNOTEL sites are (ordered from most to least current SWE, with associated basins in parentheses): Hole-in-Rock at 166% (NE Uintas), Dry Fork at 156% (Provo-Jordan), East Willow Creek at 156% (SE Utah), Webster Flat at 153% (SW Utah), Hickerson Park at 148% (NE Uintas), and Gardner Peak at 147% (SW Utah). Note that this list does not include several sites that have already melted out or that normally have very low overall SWE this time of year.

The close-to-average SWE values at Utah's SNOTEL sites are good news because co-located soil moisture values remain below average at 54% of saturation. The dry soils are reducing the predicted runoff amounts to around average or below for most gage locations. Streamflow forecasts for April to July range from 70% to 136% for all locations in Utah. The lowest expected runoff, in terms of percent normal, is predicted for the Price, San Rafael, Muddy, and Fremont Rivers. At the other end, the forecast for the Sevier River near Kingston is the most optimistic, with 136% of average flow expected during the April to July runoff period. Predictions for April to July runoff at all of Utah's forecast points are included in this Water Supply Outlook Report.

Surface Water Supply Indices (SWSI, combining reservoir storage and forecast streamflow) are highest for the Western Uintas and Upper Sevier watersheds and lowest for the Ferron Creek, Eastern Uintas, and Blacks Fork drainages.

**SNOWPACK**

Statewide snowpack is above normal at 107% compared to 139% last year. All major watersheds in Utah are now close to average SWE or above. The basins with the highest SWE are Southwestern Utah (138%), Southeastern Utah (130%), and the Northeastern Uintas (126%).

**PRECIPITATION**

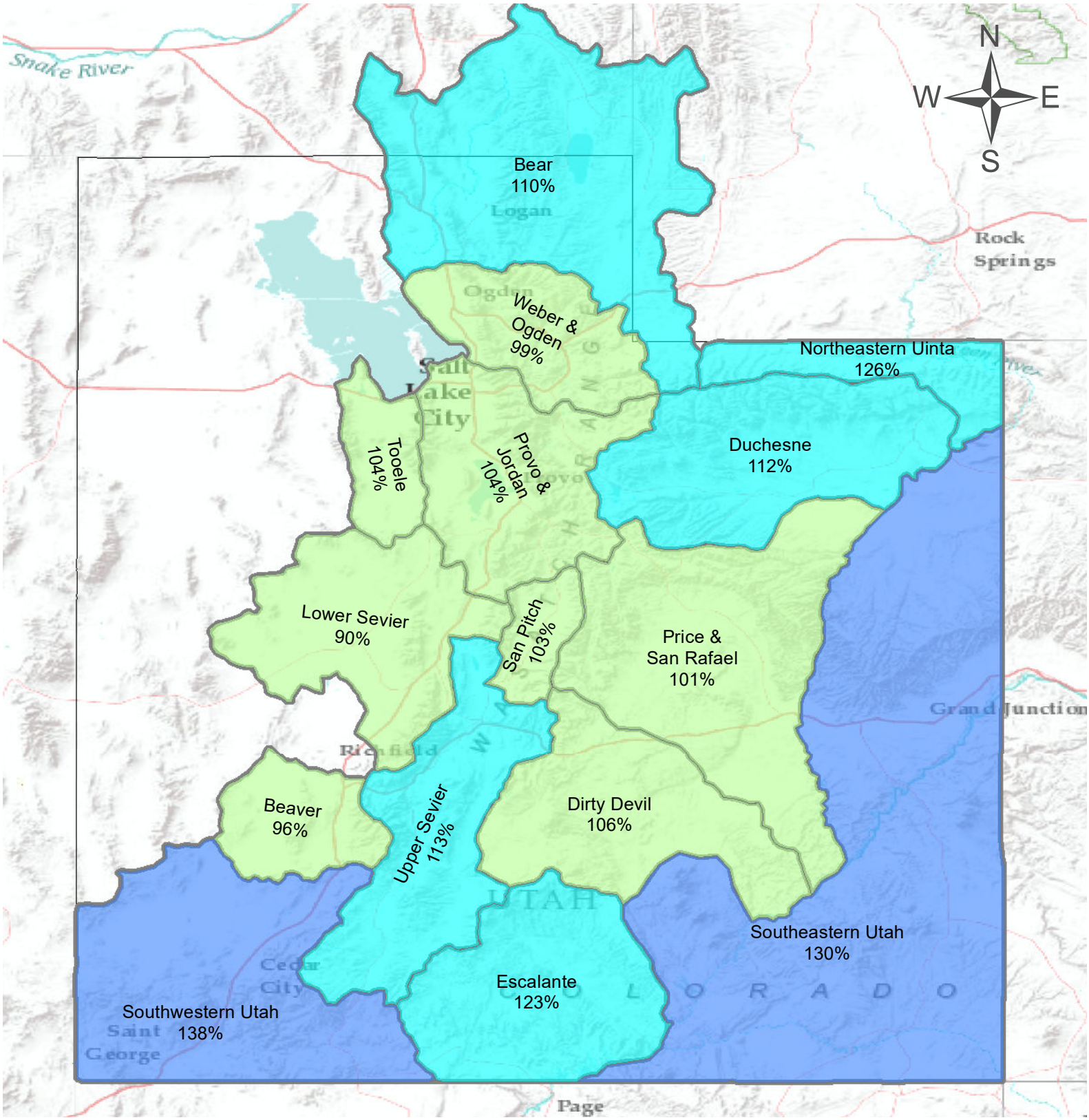
February precipitation across the state was near average at 101%, which brings the seasonal accumulation (Oct-Jan) to 93% of average. All Utah watersheds are between 87% and 109% of average except for the Tooele-Vernon basin which is slightly lower at 80%.

**RESERVOIRS**

Reservoir storage is at 83% of capacity statewide compared to 66% last year. Due to the excellent 2019 water year, overall reservoir levels remain relatively high despite the dry conditions last summer. Expect almost all small to medium size reservoirs, as well as some of Utah's larger reservoirs, to fill this year after the snow melts.

**STREAMFLOW**

As noted above, the streamflow forecasts for April to July reflect not just the snow water equivalent but also the dry start to the water year and the below-average soil moisture. This explains the relatively lower forecast percent normal values when compared to the snowpack percent normal observed at Utah's SNOTEL sites. Forecasts for the state are mostly close to normal or slightly below. Specific values are included in this report for each major watershed in Utah.




# Statewide Snow Water Equivalent

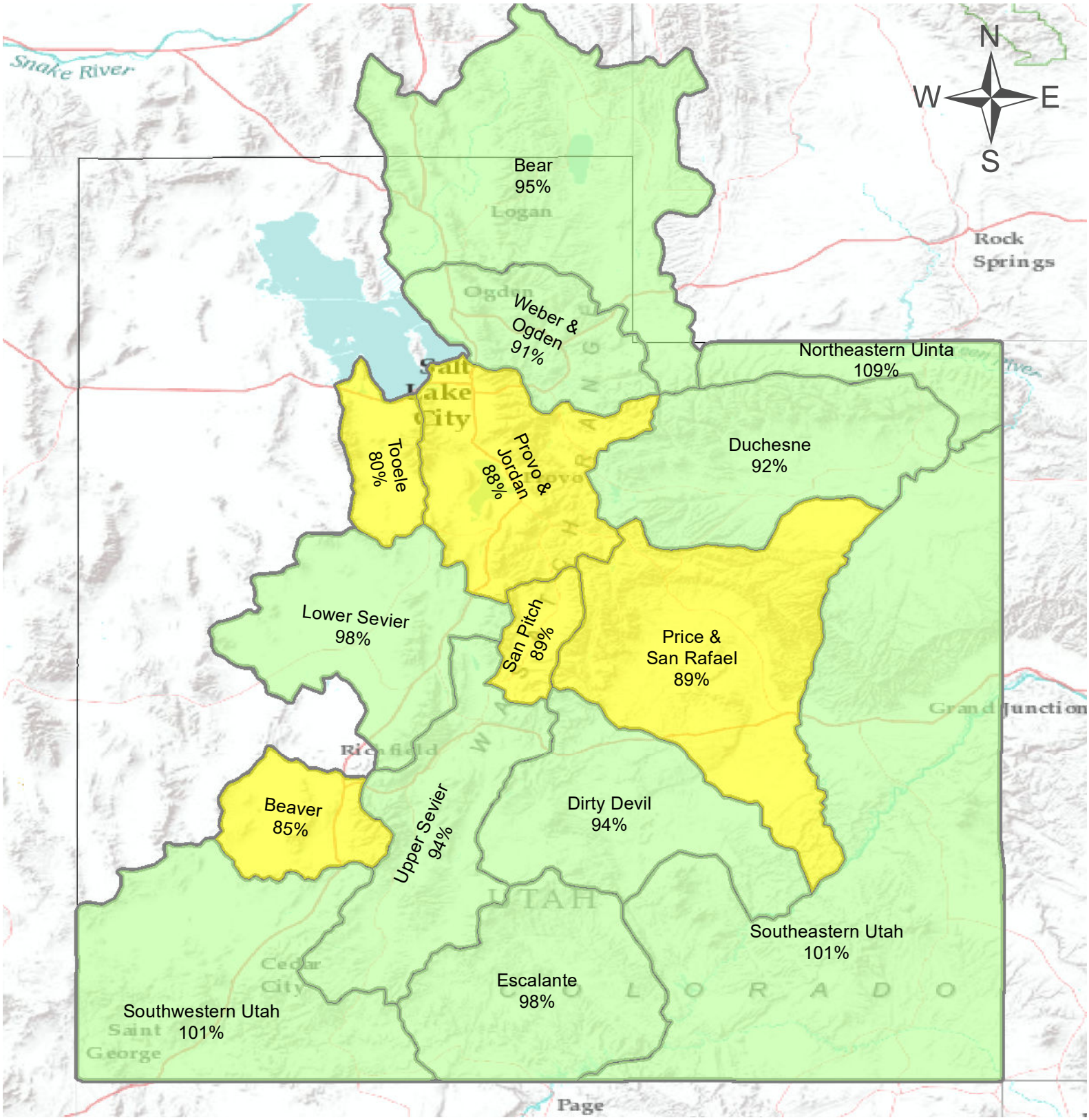
As of April 1, 2020:

107% of Normal Snow Water Equivalent

0 10 20 40 60 80 100
Miles

**% of Normal**

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




# Statewide Precipitation

As of April 1, 2020:

93% of Normal Precipitation

101% of Normal Precipitation Last Month

0 10 20 40 60 80 100
Miles

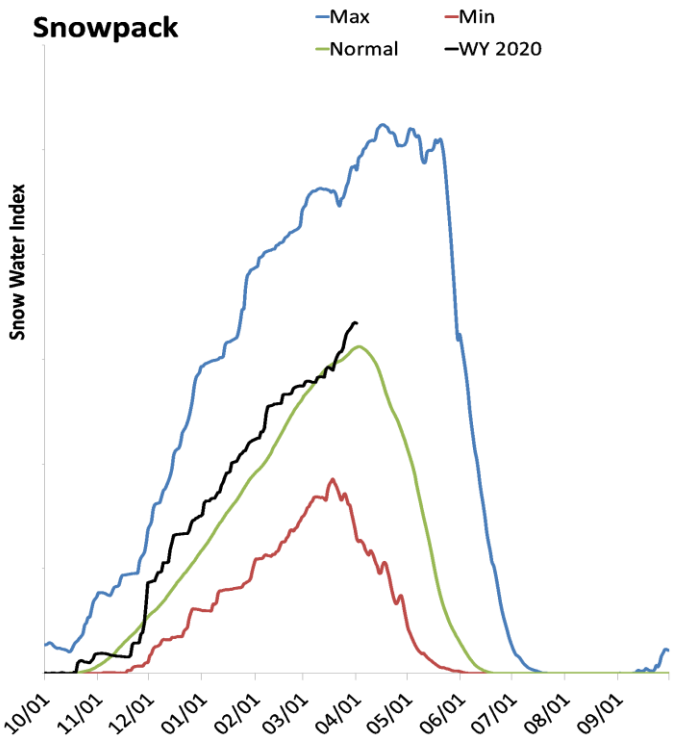
**% of Normal**

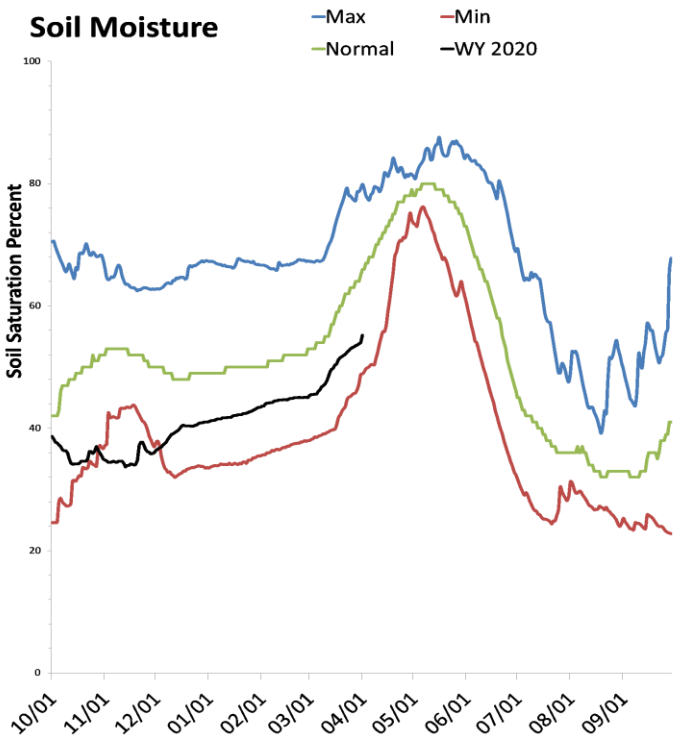
- < 50%
- 50 - 69%
- 70 - 89%
- 90 - 109%
- 110 - 129%
- 130 - 149%
- > 150%

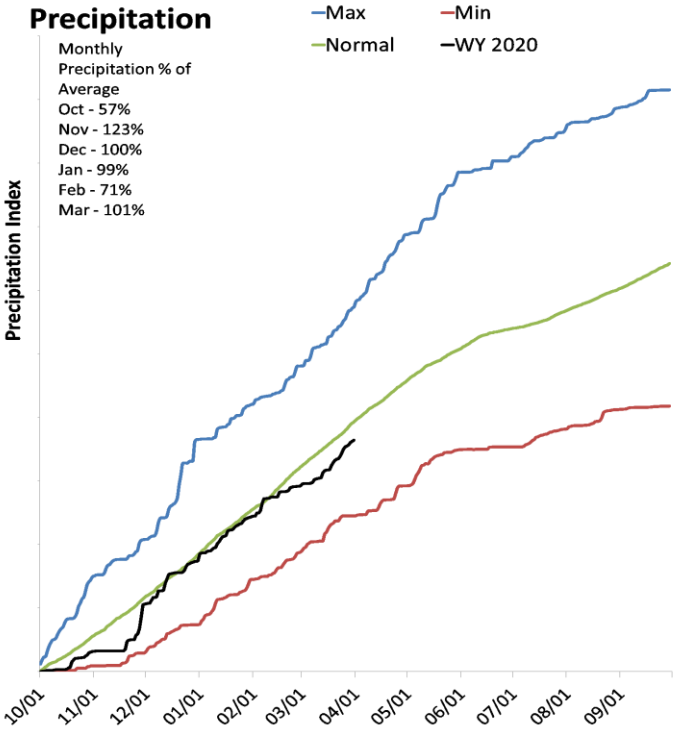
# Statewide Utah

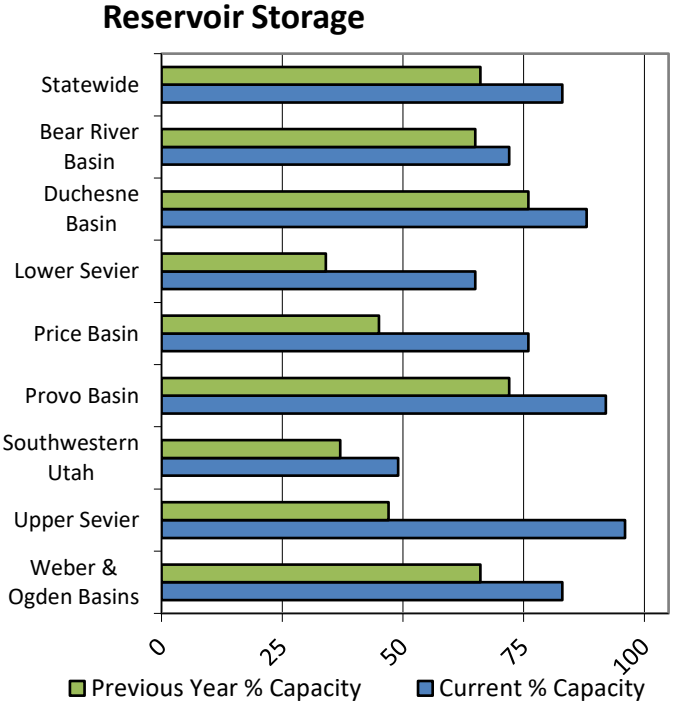
April 1, 2020

Snowpack in Utah is near normal at 107% of normal, compared to 139% last year. Precipitation in March was near average at 101%, which brings the seasonal accumulation (Oct-Mar) to 93% of average. Soil moisture is at 54% compared to 59% last year. Reservoir storage is at 83% of capacity, compared to 66% last year. Forecast streamflow volumes range from 70% to 136% of average.




SNOTEL Data

*April 1, 2020*

# Surface Water Supply Index

| Basin or Region | Mar EOM* Storage | APR-JUL Forecast | Storage + Forecast | Percentile | SWSI# | Years with similiar SWSI |
|---|---|---|---|---|---|---|
| | *KAF ^* | *KAF ^* | *KAF ^* | *%* | | |
| **Bear River** | **912.3** | **165.0** | **1077.3** | **71** | **1.73** | **87, 12, 11, 18** |
| **Woodruff Narrows** | **57.8** | **107.0** | **164.8** | **61** | **0.91** | **93, 05, 16, 19** |
| **Little Bear** | **11.8** | **40.0** | **51.8** | **55** | **0.43** | **16, 08, 93, 09** |
| **Ogden River** | **77.2** | **97.0** | **174.2** | **54** | **0.3** | **89, 94, 96, 16** |
| **Weber River** | **375.0** | **290.0** | **665.0** | **56** | **0.51** | **81, 10, 96, 09** |
| **Provo River** | **1259.5** | **99.0** | **1358.5** | **74** | **2.01** | **00, 07, 96, 06** |
| **Western Uinta** | **192.7** | **107.0** | **299.7** | **90** | **3.35** | **19, 95, 05, 86** |
| **Eastern Uinta** | **32.1** | **68.0** | **100.1** | **41** | **-0.71** | **19, 88, 92, 08** |
| **Blacks Fork** | **12.1** | **90.0** | **102.1** | **45** | **-0.44** | **06, 18, 08, 16** |
| **Smiths Fork** | **5.9** | **28.0** | **33.9** | **61** | **0.88** | **14, 10, 01, 05** |
| **Price River** | **52.2** | **30.0** | **82.2** | **68** | **1.52** | **96, 17, 97, 99** |
| **Joe's Valley** | **48.5** | **47.0** | **95.5** | **59** | **0.71** | **93, 09, 08, 96** |
| **Ferron Creek** | **8.3** | **30.0** | **38.3** | **41** | **-0.71** | **04, 07, 03, 91** |
| **Moab** | **2.0** | **3.6** | **5.6** | **62** | **0.98** | **07, 91, 17, 94** |
| **Upper Sevier** | **120.0** | **81.0** | **201.0** | **83** | **2.74** | **88, 84, 85, 98** |
| **San Pitch** | **12.7** | **16.2** | **28.9** | **56** | **0.51** | **05, 12, 19, 09** |
| **Lower Sevier** | **154.5** | **106.0** | **260.5** | **59** | **0.71** | **89, 00, 12, 05** |
| **Beaver River** | **22.7** | **28.0** | **50.7** | **73** | **1.93** | **93, 97, 82, 95** |
| **Virgin River** | **40.8** | **64.3** | **105.1** | **66** | **1.29** | **99, 01, 06, 17** |

**EOM, end of month; # SWSI, surface water supply index; ^KAF, thousand acre-feet.*

## What is a Surface Water Supply Index?

The Surface Water Supply Index (SWSI) is a predictive indicator of total surface water availability within a watershed for the spring and summer water use seasons. The index is calculated by combining pre-runoff reservoir storage (carryover) with forecasts of spring and summer streamflow which are based on current snowpack and other hydrologic variables. SWSI 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. SWSI's are calculated in this fashion to be consistent with other hydroclimatic indicators such as the Palmer Drought Index and the Precipitation index.

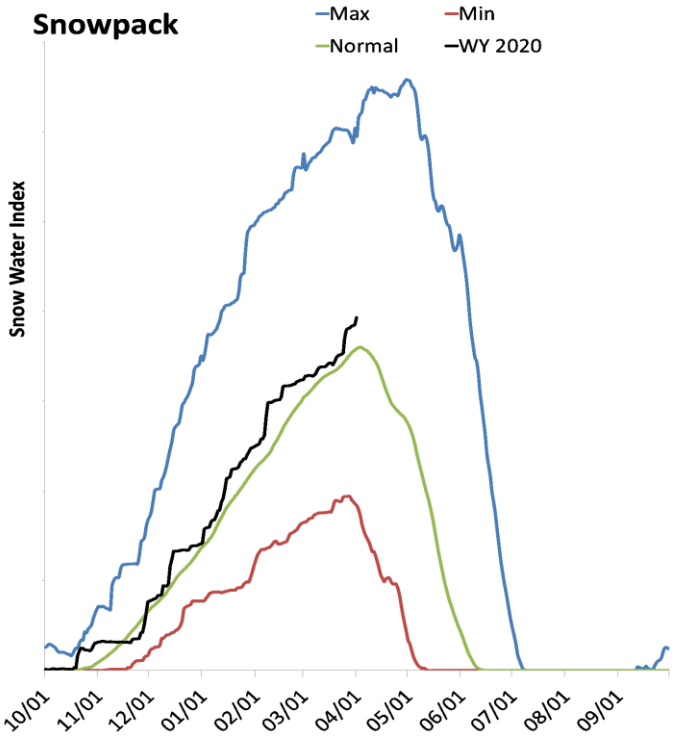
Utah Snow Surveys has also chosen to display the SWSI value as well as a PERCENT CHANCE OF NON-EXCEEDANCE. While this is a cumbersome name, it has the simplest application. It can be best thought of as a scale of 1 to 99 with 1 being the drought of record (driest possible conditions) and 99 being the 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 SWSI 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 SWSI 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.

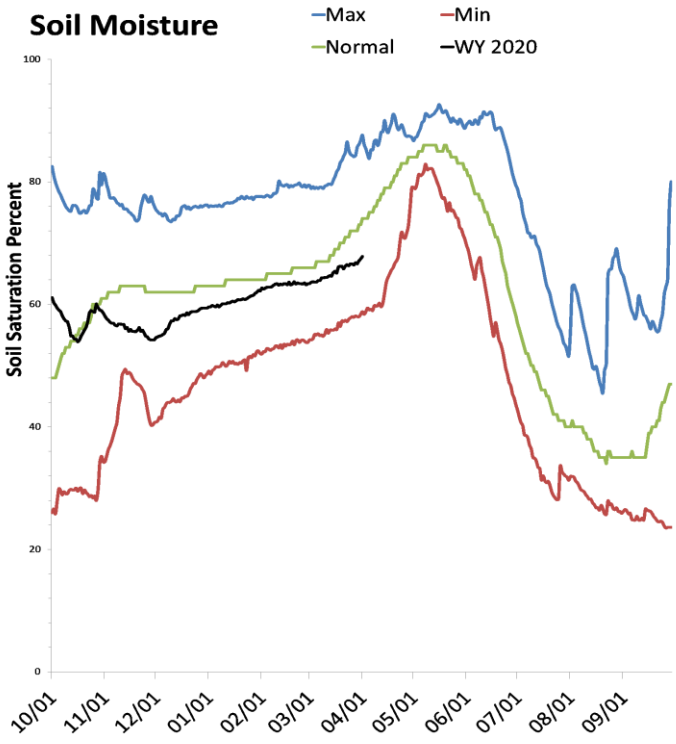
For more information on the SWSI go to: www.ut.nrcs.usda.gov/snow/ on the water supply page. The entire period of historical record for reservoir storage and streamflow is available.

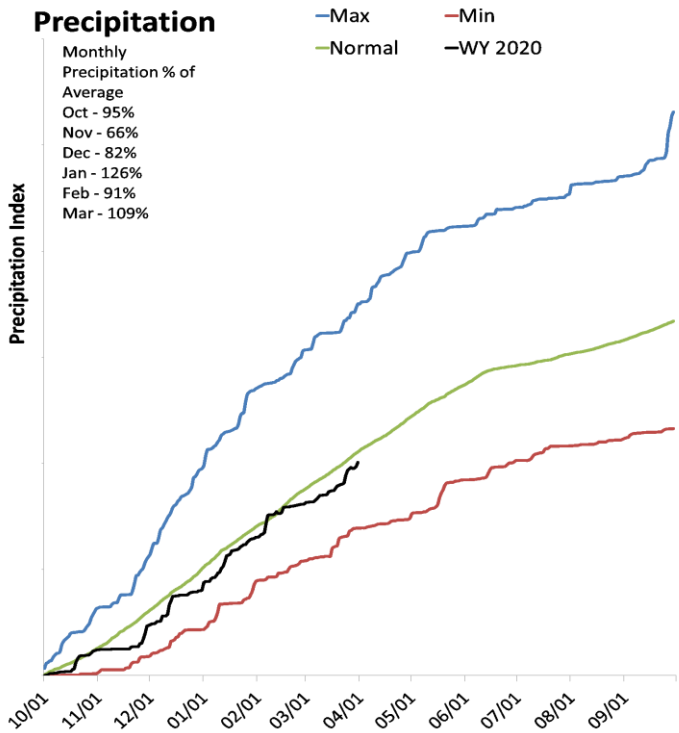
# Bear River Basin

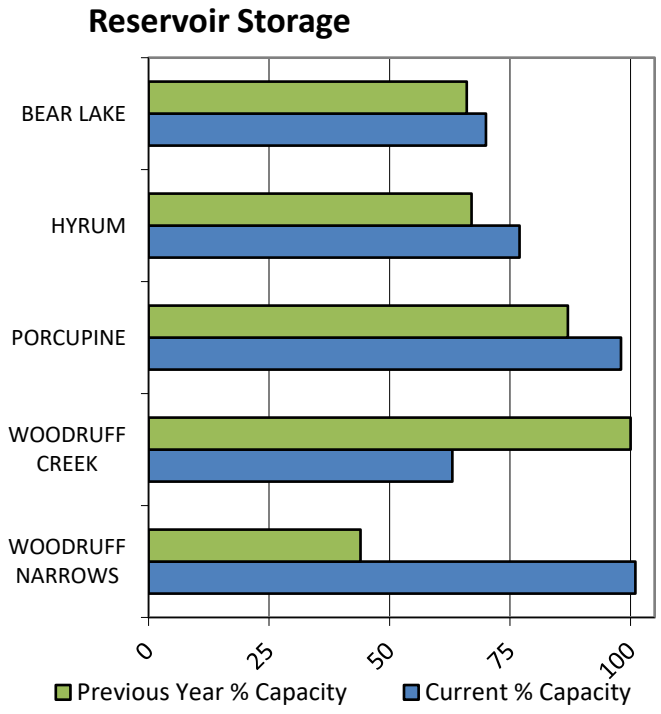
April 1, 2020

Snowpack in the Bear River Basin is above normal at 110% of normal, compared to 118% last year. Precipitation in March was above average at 110%, which brings the seasonal accumulation (Oct-Mar) to 95% of average. Soil moisture is at 67% compared to 64% last year. Reservoir storage is at 72% of capacity, compared to 65% last year. Forecast streamflow volumes range from 89% to 111% of average. The surface water supply index is 71% for the Bear River, 61% for the Woodruff Narrows, 55% for the Little Bear.




SNOTEL Data

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# Bear River
## Streamflow Forecasts - April 1, 2020

| Bear River | Forecast Period | Forecast Exceedance Probabilities for Risk Assessment<br>Chance that actual volume will exceed forecast<br>90% (KAF) | 70% (KAF) | 50% (KAF) | % Avg | 30% (KAF) | 10% (KAF) | 30yr Avg (KAF) |
|---|---|---|---|---|---|---|---|---|
| Bear R nr UT-WY State Line | | | | | | | | |
| | APR-JUL | 75 | 94 | 107 | 96% | 120 | 139 | 112 |
| | APR-SEP | 82 | 104 | 118 | 96% | 133 | 154 | 123 |
| Bear R ab Resv nr Woodruff | | | | | | | | |
| | APR-JUL | 37 | 82 | 112 | 93% | 143 | 187 | 121 |
| | APR-SEP | 35 | 83 | 116 | 91% | 149 | 197 | 128 |
| Big Ck nr Randolph | | | | | | | | |
| | APR-JUL | 0.52 | 2.7 | 4.2 | 111% | 5.7 | 7.9 | 3.8 |
| Smiths Fk nr Border | | | | | | | | |
| | APR-JUL | 72 | 87 | 97 | 109% | 107 | 121 | 89 |
| | APR-SEP | 84 | 101 | 113 | 109% | 124 | 141 | 104 |
| Bear R bl Stewart Dam | | | | | | | | |
| | APR-JUL | 60 | 123 | 165 | 90% | 205 | 270 | 183 |
| | APR-SEP | 67 | 137 | 185 | 90% | 235 | 305 | 205 |
| Little Bear at Paradise | | | | | | | | |
| | APR-JUL | 22 | 33 | 40 | 89% | 47 | 58 | 45 |
| Logan R nr Logan | | | | | | | | |
| | APR-JUL | 84 | 100 | 111 | 100% | 122 | 138 | 111 |
| Blacksmith Fk nr Hyrum | | | | | | | | |
| | APR-JUL | 24 | 36 | 45 | 105% | 54 | 66 | 43 |

1) 90% and 10% exceedance probabilities are actually 95% and 5%
2) Forecasts are for unimpaired flows. Actual flow will be dependent on management of upstream reservoirs and diversions
3) Median value used in place of average

| **Reservoir Storage End of March, 2020** | Current (KAF) | Last Year (KAF) | Average (KAF) | Capacity (KAF) |
|---|---|---|---|---|
| Bear Lake | 912.3 | 853.7 | 611.9 | 1302.0 |
| Hyrum Reservoir | 11.8 | 10.2 | 13.0 | 15.3 |
| Porcupine Reservoir | 11.1 | 9.8 | 8.2 | 11.3 |
| Woodruff Creek | 2.5 | 4.0 | 3.3 | 4.0 |
| Woodruff Narrows Reservoir | 57.8 | 25.3 | 38.4 | 57.3 |
| Basin-wide Total | 995.5 | 903.0 | 674.8 | 1389.9 |
| # of reservoirs | 5 | 5 | 5 | 5 |

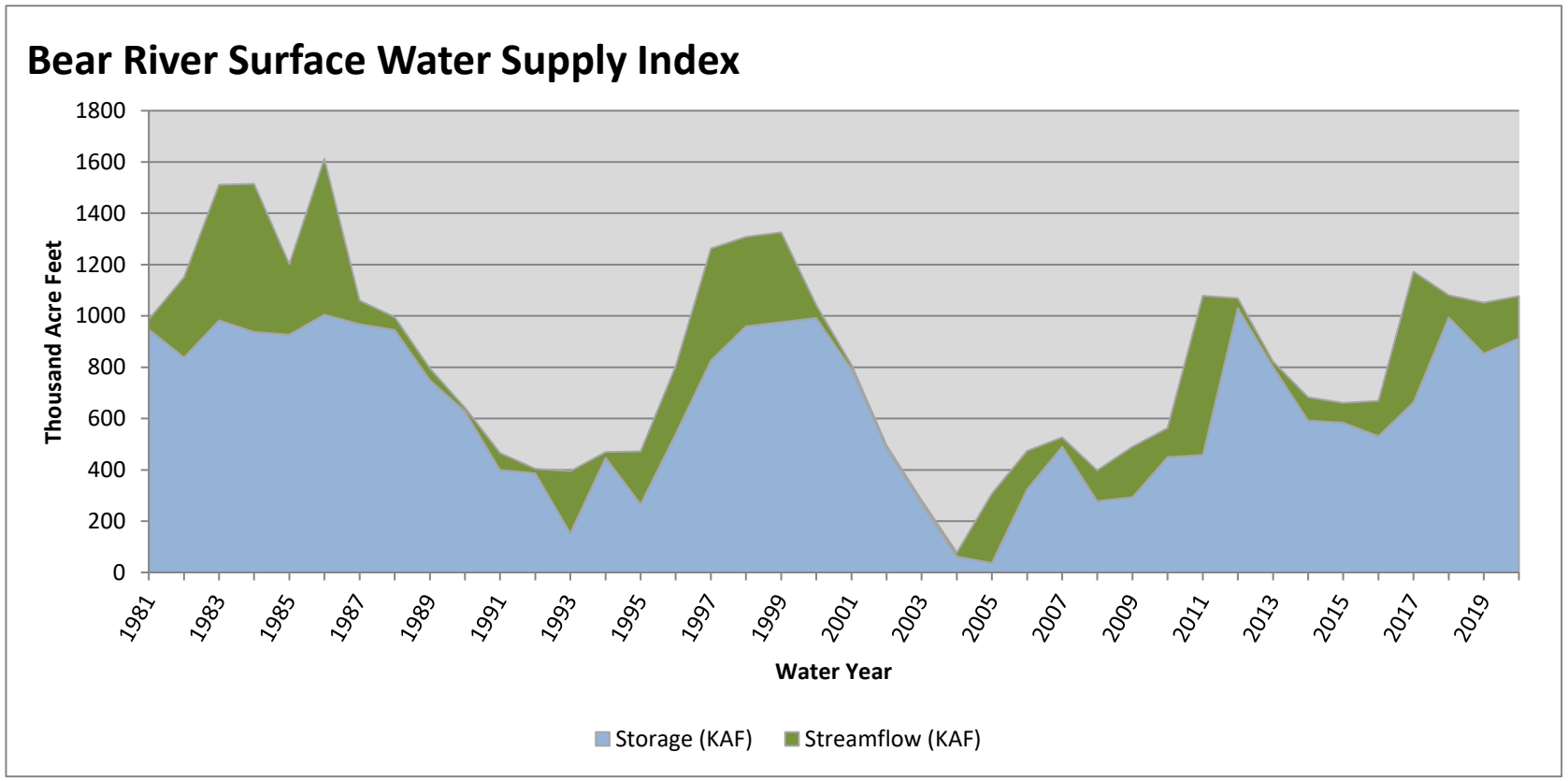
| **Watershed Snowpack Analysis April 1, 2020** | # of Sites | % Median | Last Year % Median |
|---|---|---|---|
| Upper Bear | 4 | 109% | 129% |
| Middle Bear | 7 | 115% | 112% |
| Lower Bear | 3 | 96% | 126% |
| Logan River | 9 | 108% | 116% |

April 1, 2020

# Surface Water Supply Index

| Basin or Region | Mar EOM* Storage | APR-JUL Forecast | Storage + Forecast | Percentile | SWSI# | Years with similiar SWSI |
|---|---|---|---|---|---|---|
| | KAF^ | KAF^ | KAF^ | % | | |
| **Bear River** | **912.33** | **165.00** | **1077.33** | **71** | **1.73** | **87, 12, 11, 18** |

*EOM, end of month; #SWSI, Surface Water Supply Index; ^KAF, thousand acre-feet.

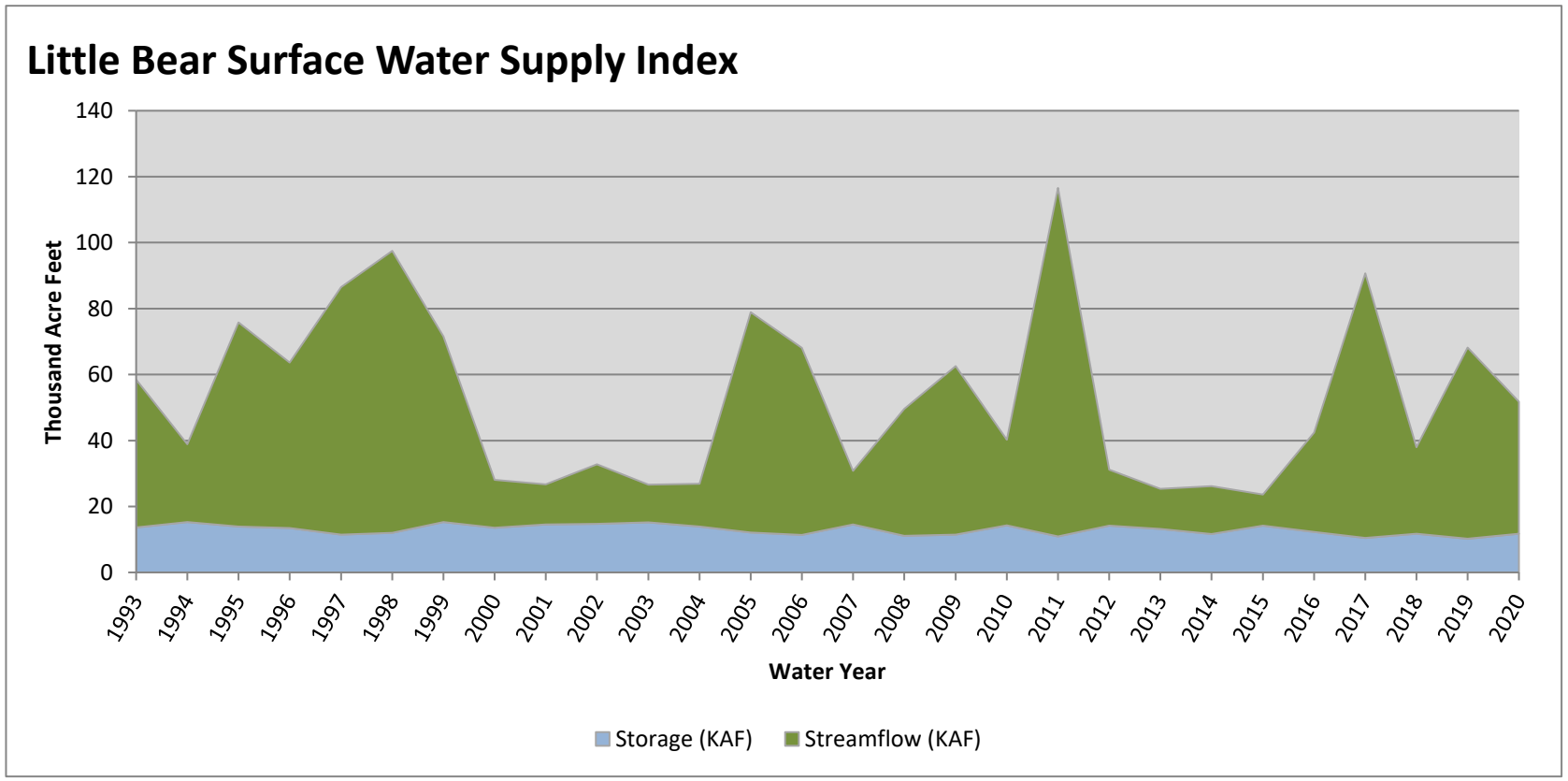


April 1, 2020

# Surface Water Supply Index

| Basin or Region | Mar EOM* Storage | APR-JUL Forecast | Storage + Forecast | Percentile | SWSI# | Years with similiar SWSI |
|---|---|---|---|---|---|---|
| | KAF^ | KAF^ | KAF^ | % | | |
| **Little Bear** | **11.78** | **40.00** | **51.78** | **55** | **0.43** | **16, 08, 93, 09** |

*EOM, end of month; #SWSI, Surface Water Supply Index; ^KAF, thousand acre-feet.

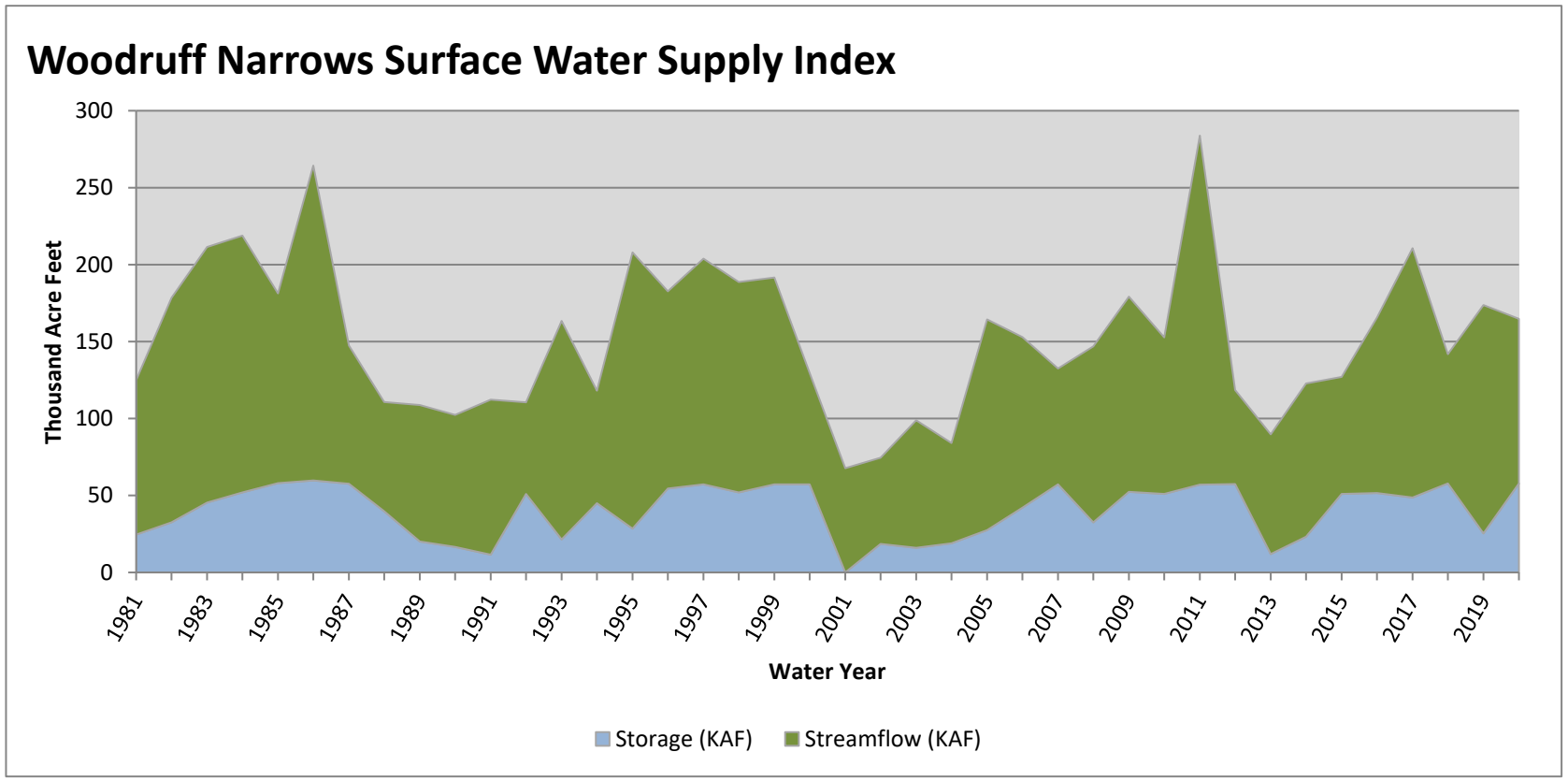


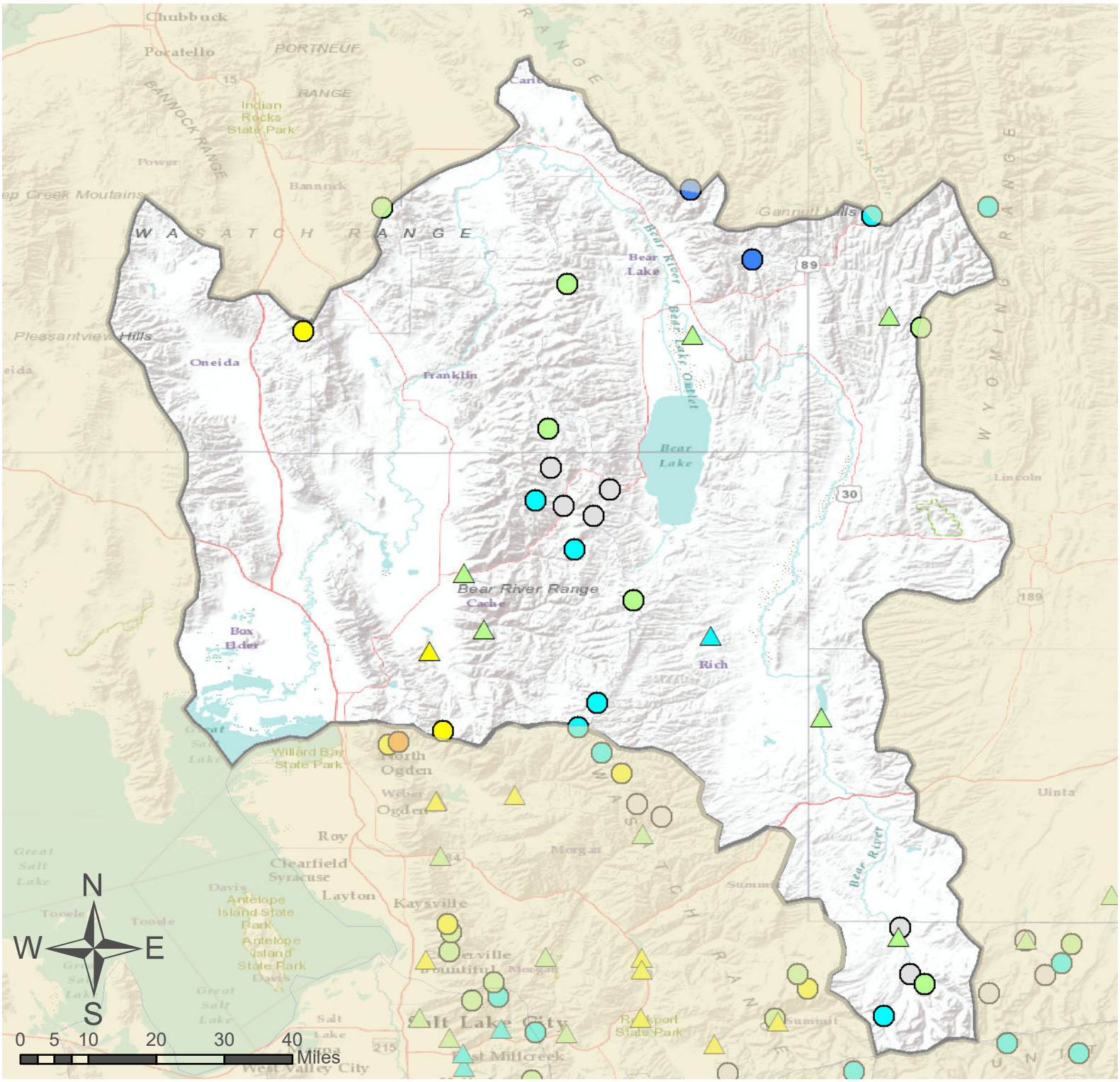
April 1, 2020

# Surface Water Supply Index

| Basin or Region | Mar EOM* Storage | APR-JUL Forecast | Storage + Forecast | Percentile | SWSI# | Years with similiar SWSI |
|---|---|---|---|---|---|---|
| | KAF^ | KAF^ | KAF^ | % | | |
| **Woodruff Narrows** | **57.84** | **107.00** | **164.84** | **61** | **0.91** | **93, 05, 16, 19** |

*EOM, end of month; #SWSI, Surface Water Supply Index; ^KAF, thousand acre-feet.





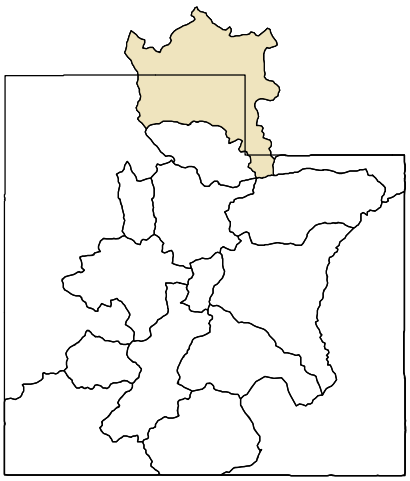

# Bear River Basin

SNOTEL Site

Forecast Point

## % of Normal

- < 50%
- 50 - 69%
- 70 - 89%
- 90 - 109%
- 110 - 129%
- 130 - 149%
- > 150%
- No Normal



As of April 1, 2020:

110% of Normal SWE

95% of Normal Precipitation

110% of Normal Precipitation Last Month

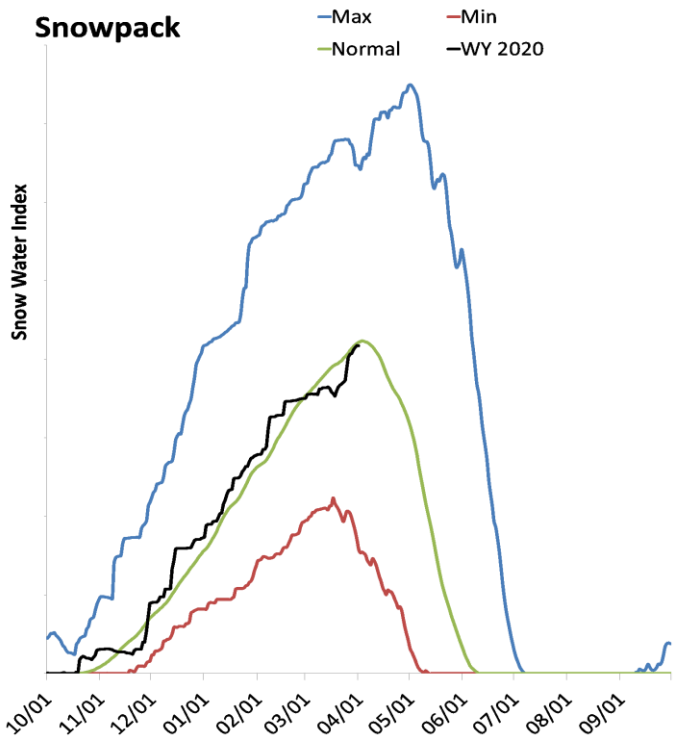
67% Saturation Soil Moisture

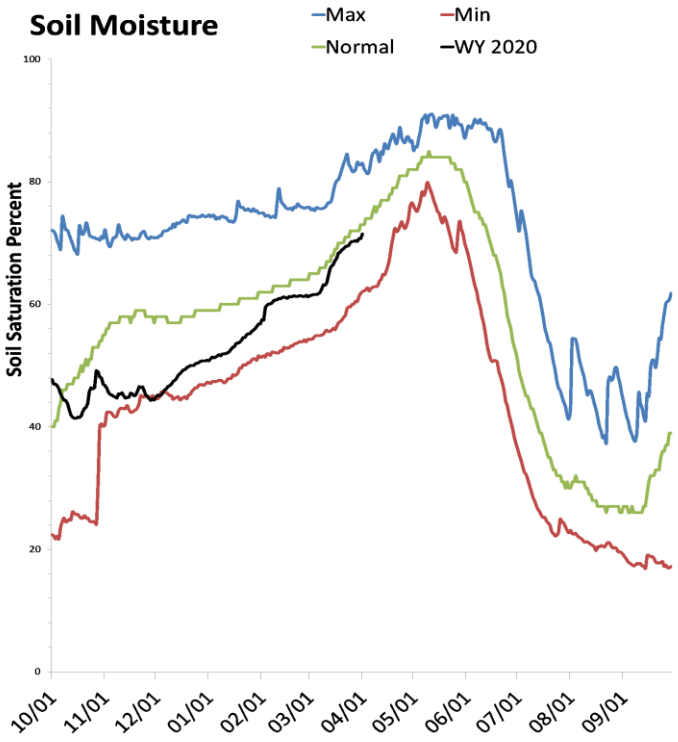
Bear River Basin

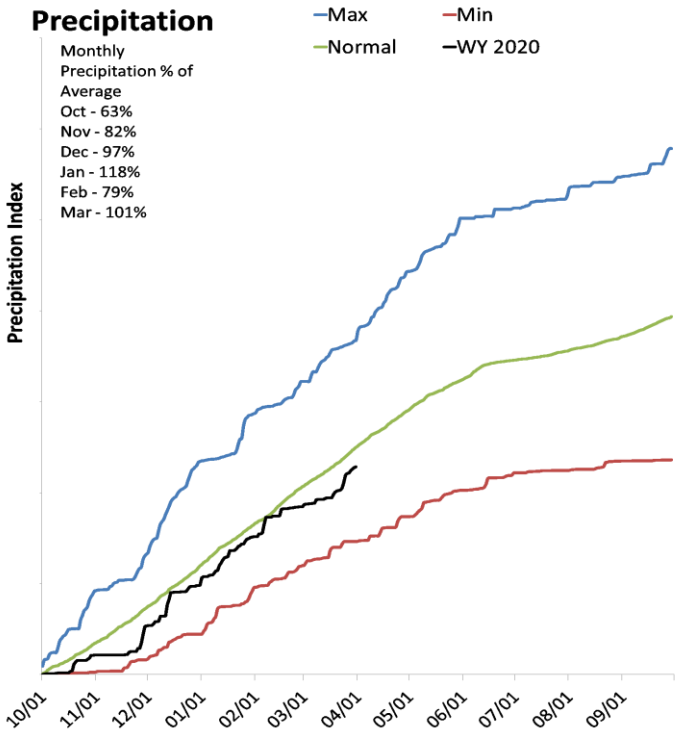
# Weber & Ogden River Basins

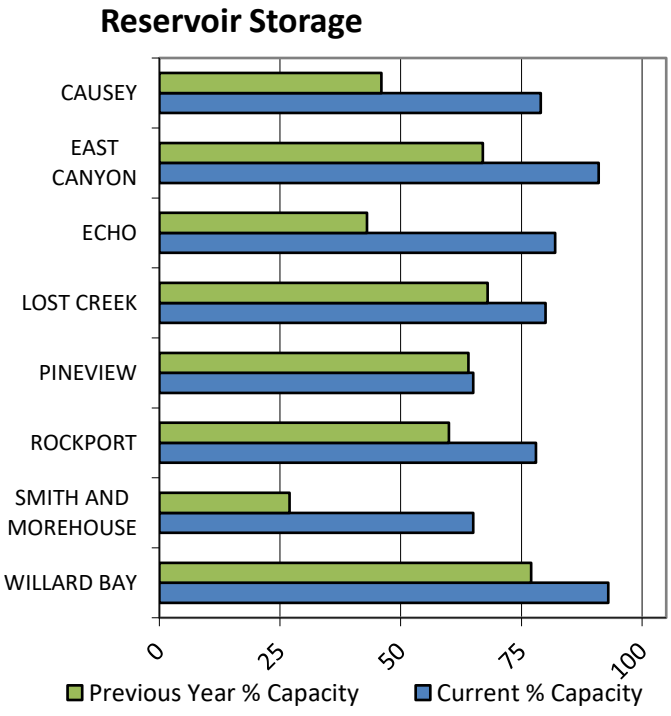
April 1, 2020

Snowpack in the Weber & Ogden River Basins is near normal at 99% of normal, compared to 134% last year. Precipitation in March was near average at 101%, which brings the seasonal accumulation (Oct-Mar) to 91% of average. Soil moisture is at 71% compared to 67% last year. Reservoir storage is at 83% of capacity, compared to 66% last year. Forecast streamflow volumes range from 79% to 101% of average. The surface water supply index is 54% for the Ogden River, 56% for the Weber River.




SNOTEL Data

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# Weber Ogden Rivers
## Streamflow Forecasts - April 1, 2020

Forecast Exceedance Probabilities for Risk Assessment
Chance that actual volume will exceed forecast

| Weber Ogden Rivers | Forecast Period | 90% (KAF) | 70% (KAF) | 50% (KAF) | % Avg | 30% (KAF) | 10% (KAF) | 30yr Avg (KAF) |
|---|---|---|---|---|---|---|---|---|
| Smith & Morehouse Resv Inflow | APR-JUL | 21 | 25 | 28 | 82% | 31 | 36 | 34 |
| Weber R nr Oakley | APR-JUL | 72 | 90 | 102 | 87% | 114 | 132 | 117 |
| Rockport Reservoir Inflow | APR-JUL | 67 | 90 | 105 | 85% | 120 | 142 | 123 |
| Chalk Ck at Coalville | APR-JUL | 12.3 | 25 | 33 | 80% | 41 | 54 | 41 |
| Weber R nr Coalville | APR-JUL | 70 | 94 | 110 | 87% | 126 | 150 | 126 |
| Echo Reservoir Inflow | APR-JUL | 66 | 109 | 139 | 84% | 169 | 210 | 166 |
| Lost Ck Reservoir Inflow | APR-JUL | 3.4 | 8.7 | 12.2 | 101% | 15.7 | 21 | 12.1 |
| East Canyon Ck nr Jeremy Ranch | APR-JUL | 7.7 | 12 | 15 | 99% | 18 | 22 | 15.2 |
| East Canyon Ck nr Morgan | APR-JUL | 15.1 | 22 | 27 | 96% | 32 | 39 | 28 |
| Weber R at Gateway | APR-JUL | 117 | 220 | 290 | 92% | 360 | 465 | 315 |
| SF Ogden R nr Huntsville | APR-JUL | 25 | 36 | 44 | 79% | 51 | 63 | 56 |
| Pineview Reservoir Inflow | APR-JUL | 46 | 76 | 97 | 82% | 117 | 147 | 118 |
| Wheeler Ck nr Huntsville | APR-JUL | 2.2 | 3.9 | 5 | 79% | 6.1 | 7.8 | 6.3 |
| Centerville Ck | APR-JUL | 0.62 | 0.89 | 1.08 | 80% | 1.26 | 1.54 | 1.35 |

1) 90% and 10% exceedance probabilities are actually 95% and 5%
2) Forecasts are for unimpaired flows. Actual flow will be dependent on management of upstream reservoirs and diversions
3) Median value used in place of average

| Reservoir Storage End of March, 2020 | Current (KAF) | Last Year (KAF) | Average (KAF) | Capacity (KAF) |
|---|---|---|---|---|
| Causey Reservoir | 5.6 | 3.3 | 3.2 | 7.1 |
| East Canyon Reservoir | 44.8 | 33.1 | 36.4 | 49.5 |
| Echo Reservoir | 60.2 | 31.9 | 50.2 | 73.9 |
| Lost Creek Reservoir | 18.1 | 15.3 | 12.6 | 22.5 |
| Pineview Reservoir | 71.5 | 70.3 | 62.8 | 110.1 |
| Rockport Reservoir | 47.5 | 36.4 | 37.6 | 60.9 |
| Willard Bay | 199.1 | 166.3 | 147.7 | 215.0 |
| Smith And Morehouse Reservoir | 5.3 | 2.2 | 3.6 | 8.1 |
| Basin-wide Total | 452.2 | 358.9 | 354.1 | 547.1 |
| # of reservoirs | 8 | 8 | 8 | 8 |

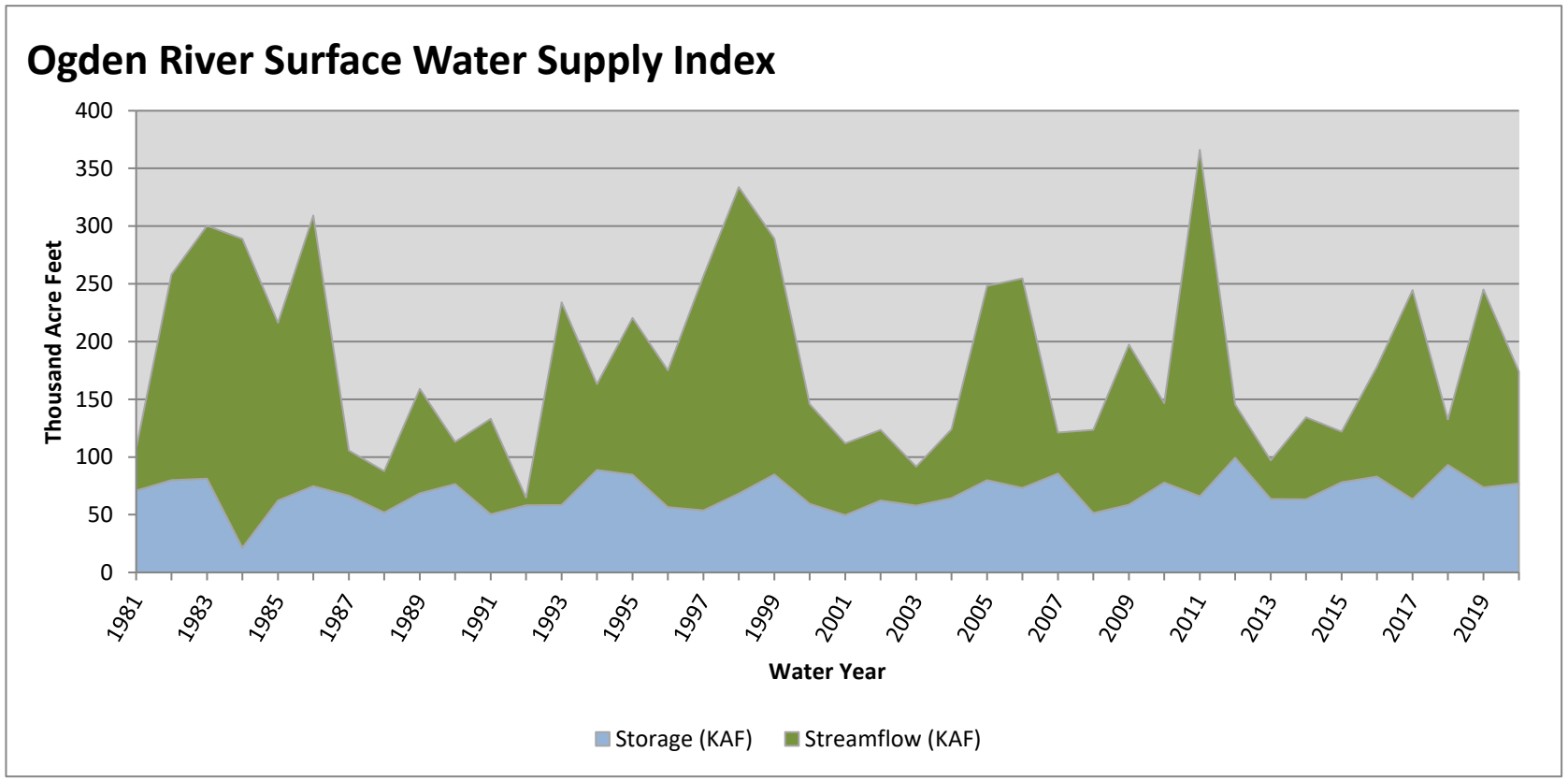
| Watershed Snowpack Analysis April 1, 2020 | # of Sites | % Median | Last Year % Median |
|---|---|---|---|
| Upper Weber | 10 | 105% | 131% |
| Lower Weber | 7 | 101% | 137% |
| Ogden River | 5 | 93% | 134% |
| Lost Creek | 3 | 107% | 129% |

April 1, 2020

# Surface Water Supply Index

| Basin or Region | Mar EOM* Storage | APR-JUL Forecast | Storage + Forecast | Percentile | SWSI# | Years with similiar SWSI |
|---|---|---|---|---|---|---|
| | KAF^ | KAF^ | KAF^ | % | | |
| **Ogden River** | **77.17** | **97.00** | **174.17** | **54** | **0.3** | **89, 94, 96, 16** |

*EOM, end of month; #SWSI, Surface Water Supply Index; ^KAF, thousand acre-feet.

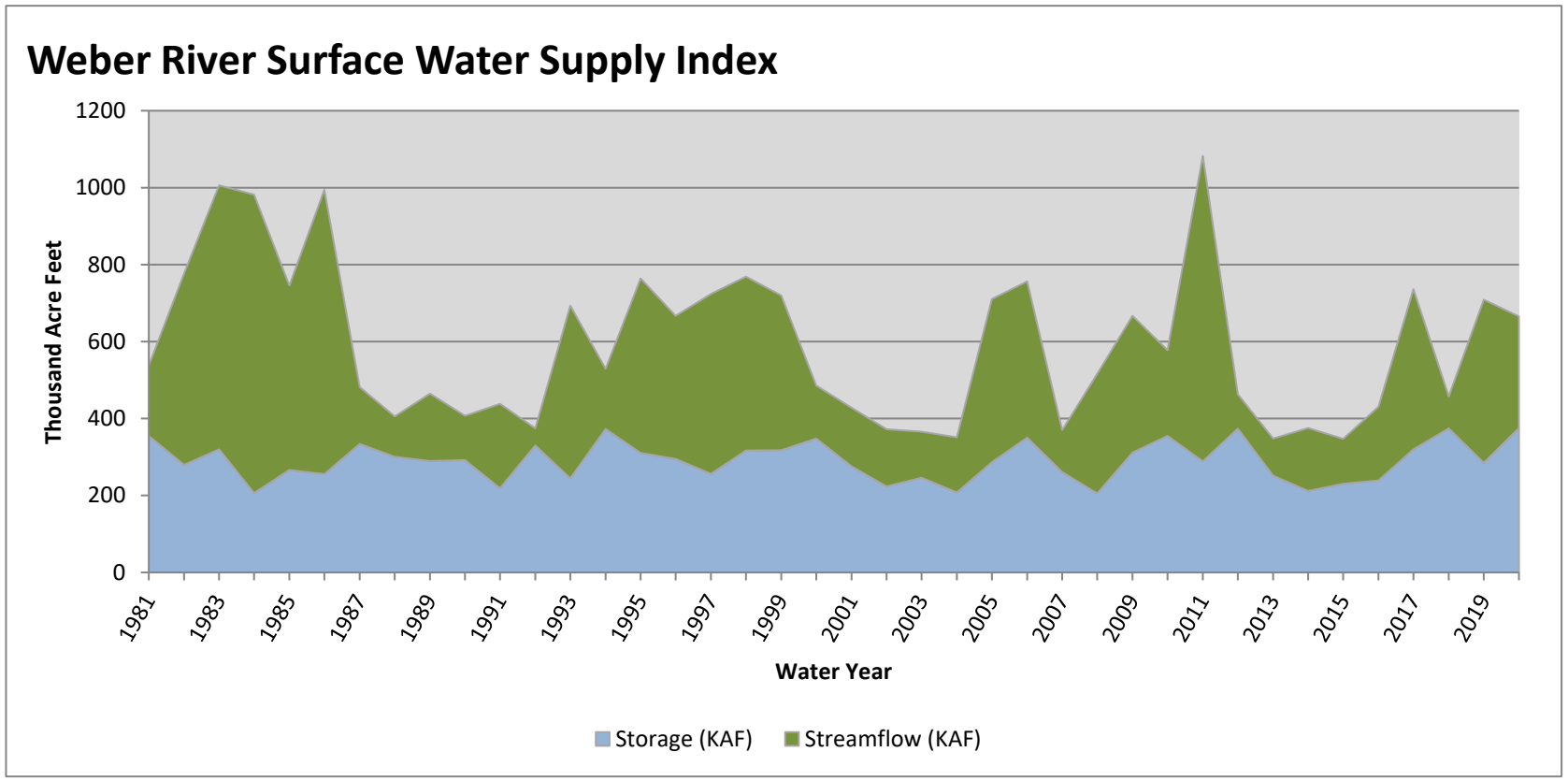


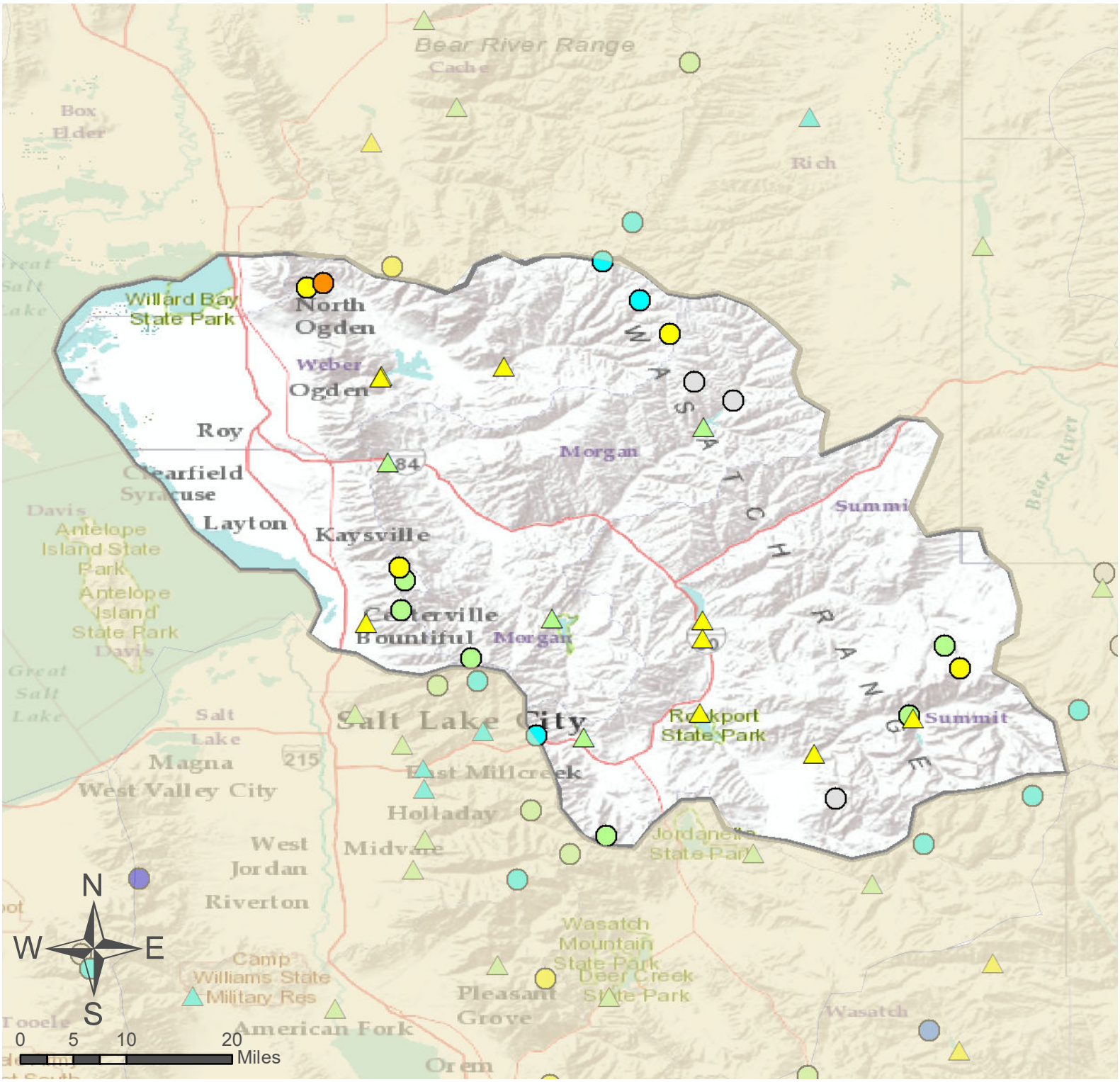
April 1, 2020

# Surface Water Supply Index

| Basin or Region | Mar EOM* Storage | APR-JUL Forecast | Storage + Forecast | Percentile | SWSI# | Years with similiar SWSI |
|---|---|---|---|---|---|---|
| | KAF^ | KAF^ | KAF^ | % | | |
| **Weber River** | **375.01** | **290.00** | **665.01** | **56** | **0.51** | **81, 10, 96, 09** |

*EOM, end of month; #SWSI, Surface Water Supply Index; ^KAF, thousand acre-feet.





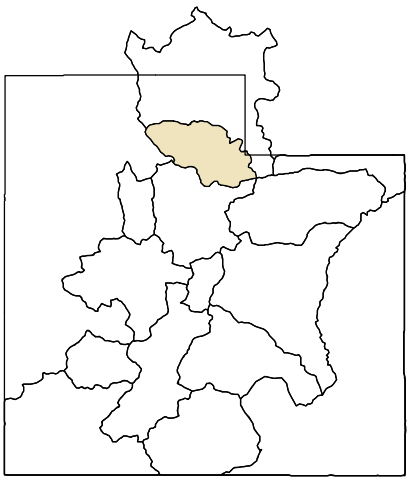

# Weber & Ogden River Basins

SNOTEL Site

Forecast Point

**% of Normal**

- < 50%
- 50 - 69%
- 70 - 89%
- 90 - 109%
- 110 - 129%
- 130 - 149%
- > 150%
- No Normal



<u>As of April 1, 2020:</u>

99% of Normal SWE

91% of Normal Precipitation

101% of Normal Precipitation Last Month

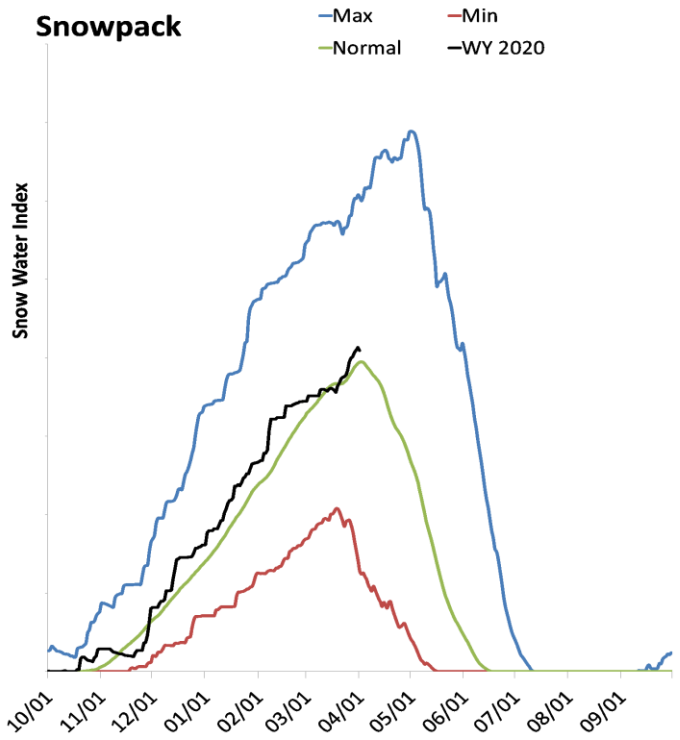
71% Saturation Soil Moisture

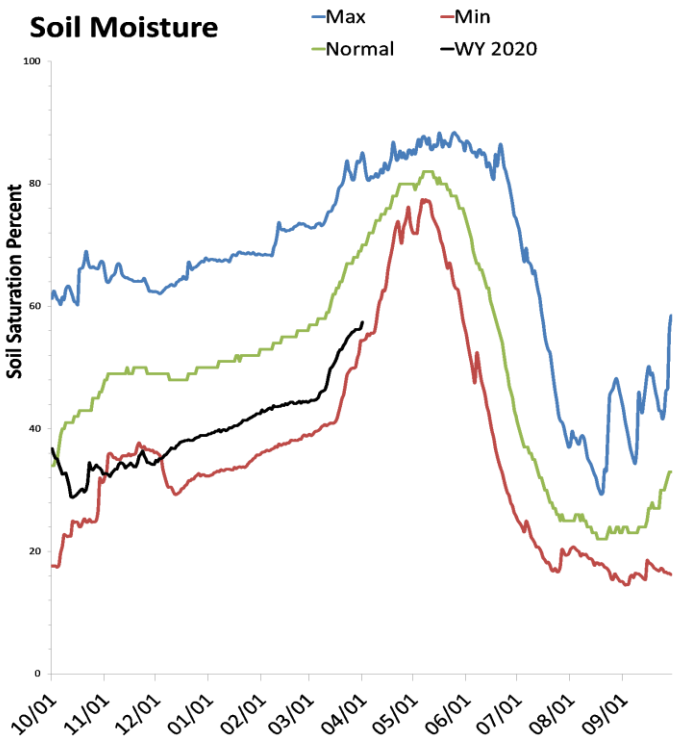
Weber & Ogden River Basins

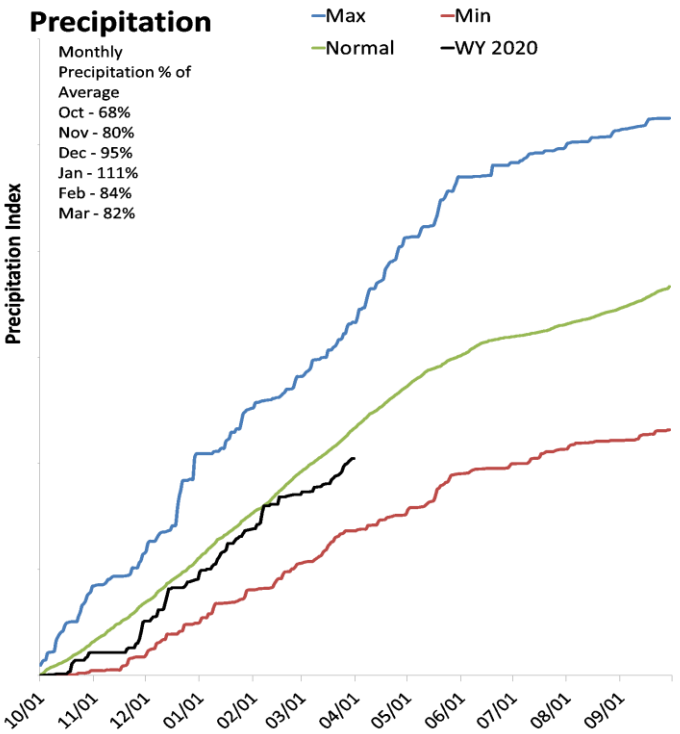
# Provo & Jordan River Basins

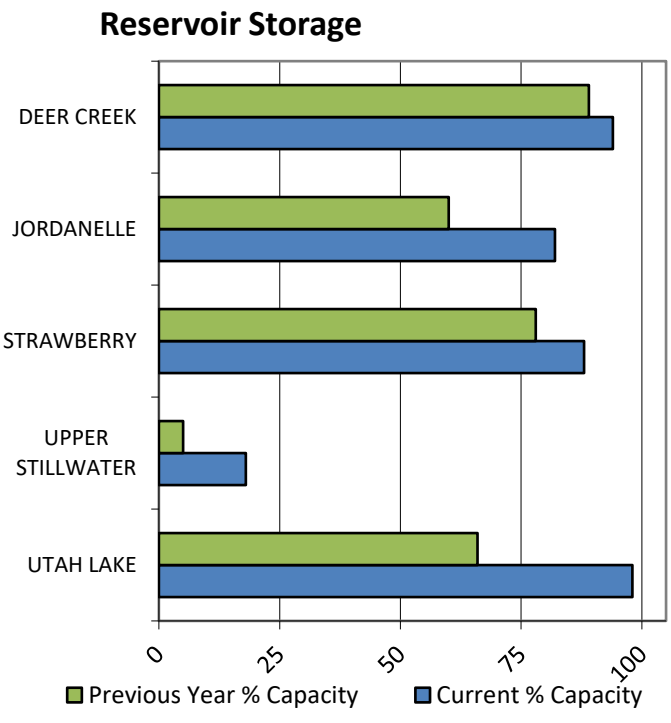
April 1, 2020

Snowpack in the Provo & Jordan River Basins is near normal at 104% of normal, compared to 140% last year. Precipitation in March was below average at 82%, which brings the seasonal accumulation (Oct-Mar) to 88% of average. Soil moisture is at 57% compared to 68% last year. Reservoir storage is at 92% of capacity, compared to 72% last year. Forecast streamflow volumes range from 94% to 115% of average. The surface water supply index is 74% for the Provo River.




SNOTEL Data

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# Provo Jordan Rivers
# Streamflow Forecasts - April 1, 2020

Forecast Exceedance Probabilities for Risk Assessment
Chance that actual volume will exceed forecast

| Provo Jordan Rivers | Forecast Period | 90% (KAF) | 70% (KAF) | 50% (KAF) | % Avg | 30% (KAF) | 10% (KAF) | 30yr Avg (KAF) |
|---|---|---|---|---|---|---|---|---|
| Provo R at Woodland | APR-JUL | 67 | 85 | 99 | 99% | 114 | 137 | 100 |
| Provo R at Hailstone | APR-JUL | 63 | 85 | 103 | 95% | 121 | 151 | 108 |
| Provo R bl Deer Ck Dam | APR-JUL | 76 | 99 | 115 | 99% | 132 | 155 | 116 |
| Spanish Fk at Castilla | APR-JUL | 4.8 | 34 | 65 | 94% | 90 | 127 | 69 |
| American Fk ab Upper Powerplant | APR-JUL | 17.2 | 25 | 30 | 94% | 35 | 43 | 32 |
| Utah Lake Inflow | APR-JUL | 21 | 164 | 260 | 98% | 355 | 465 | 265 |
| W Canyon Ck nr Cedar Fort | APR-JUL | 1.14 | 1.65 | 2 | 114% | 2.3 | 2.9 | 1.76 |
| Little Cottonwood Ck nr SLC | APR-JUL | 29 | 34 | 38 | 100% | 42 | 48 | 38 |
| Big Cottonwood Ck nr SLC | APR-JUL | 27 | 33 | 37 | 103% | 41 | 47 | 36 |
| Mill Ck nr SLC | APR-JUL | 3.6 | 5.6 | 7 | 109% | 8.4 | 10.4 | 6.4 |
| Parleys Ck nr SLC | APR-JUL | 8.3 | 13.1 | 16.3 | 115% | 19.5 | 24 | 14.2 |
| Dell Fk nr SLC | APR-JUL | 0.33 | 3.4 | 6.2 | 113% | 8.5 | 10.8 | 5.5 |
| Emigration Ck nr SLC | APR-JUL | 1.19 | 3 | 4.3 | 108% | 5.6 | 7.4 | 4 |
| City Ck nr SLC | APR-JUL | 4.1 | 6.6 | 8.3 | 108% | 10 | 12.5 | 7.7 |
| Salt Ck at Nephi | APR-JUL | 2.3 | 6.3 | 9 | 95% | 11.7 | 15.7 | 9.5 |

1) 90% and 10% exceedance probabilities are actually 95% and 5%
2) Forecasts are for unimpaired flows. Actual flow will be dependent on management of upstream reservoirs and diversions
3) Median value used in place of average

| Reservoir Storage End of March, 2020 | Current (KAF) | Last Year (KAF) | Average (KAF) | Capacity (KAF) |
|---|---|---|---|---|
| Deer Creek Reservoir | 140.7 | 133.4 | 116.8 | 149.7 |
| Strawberry Reservoir | 978.6 | 860.3 | 665.1 | 1105.9 |
| Utah Lake | 855.4 | 578.6 | 816.5 | 870.9 |
| Jordanelle Reservoir | 263.4 | 191.2 | 239.4 | 314.0 |
| Basin-wide Total | 2238.2 | 1763.4 | 1837.8 | 2440.5 |
| # of reservoirs | 4 | 4 | 4 | 4 |

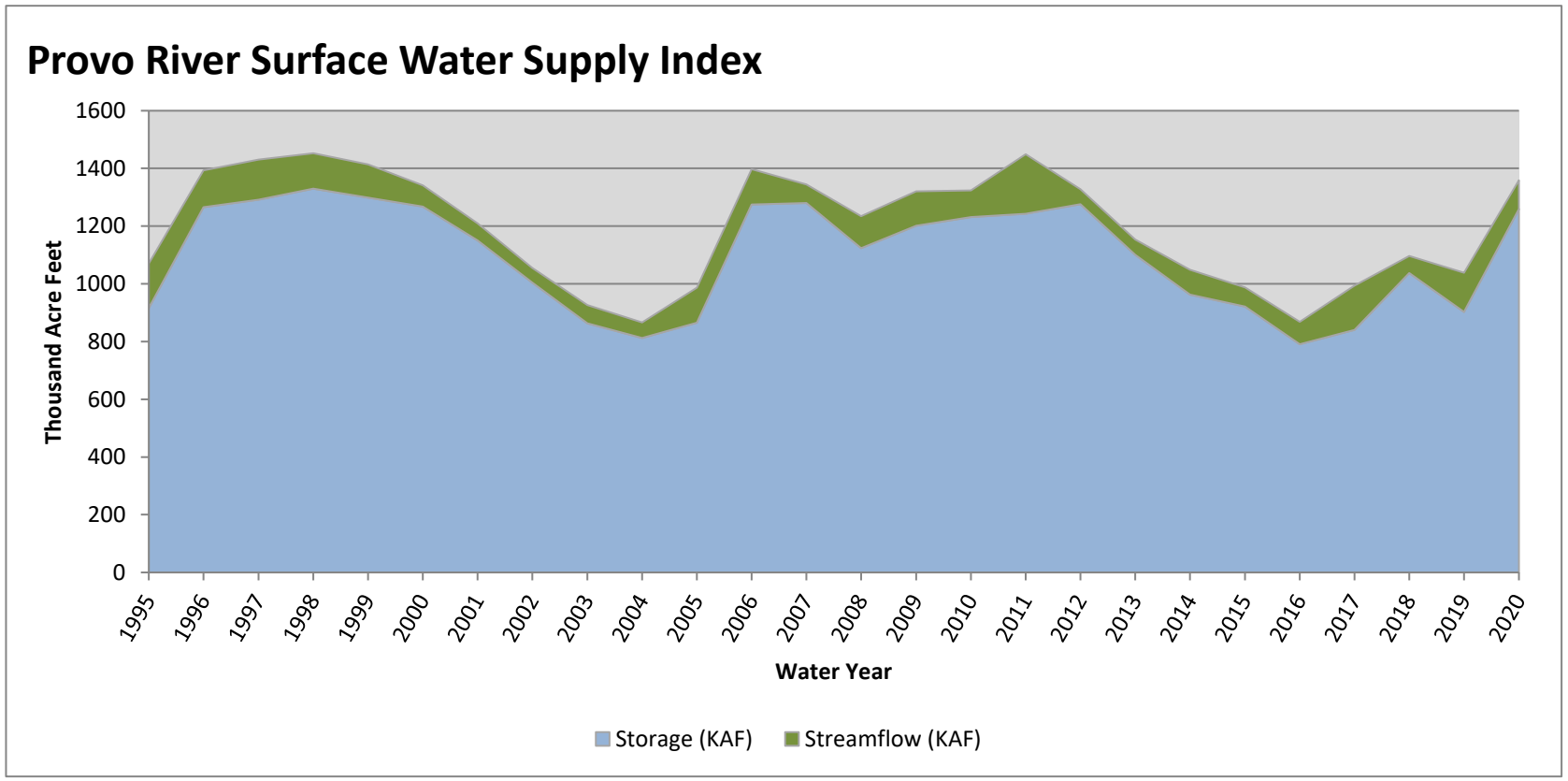
| Watershed Snowpack Analysis April 1, 2020 | # of Sites | % Median | Last Year % Median |
|---|---|---|---|
| Provo River | 7 | 101% | 145% |
| Jordan River | 16 | 113% | 137% |
| Utah Lake | 13 | 99% | 139% |
| Spanish Fork River | 5 | 85% | 143% |
| Six Creeks | 15 | 111% | 137% |
| Cottonwood Creeks | 7 | 111% | 131% |

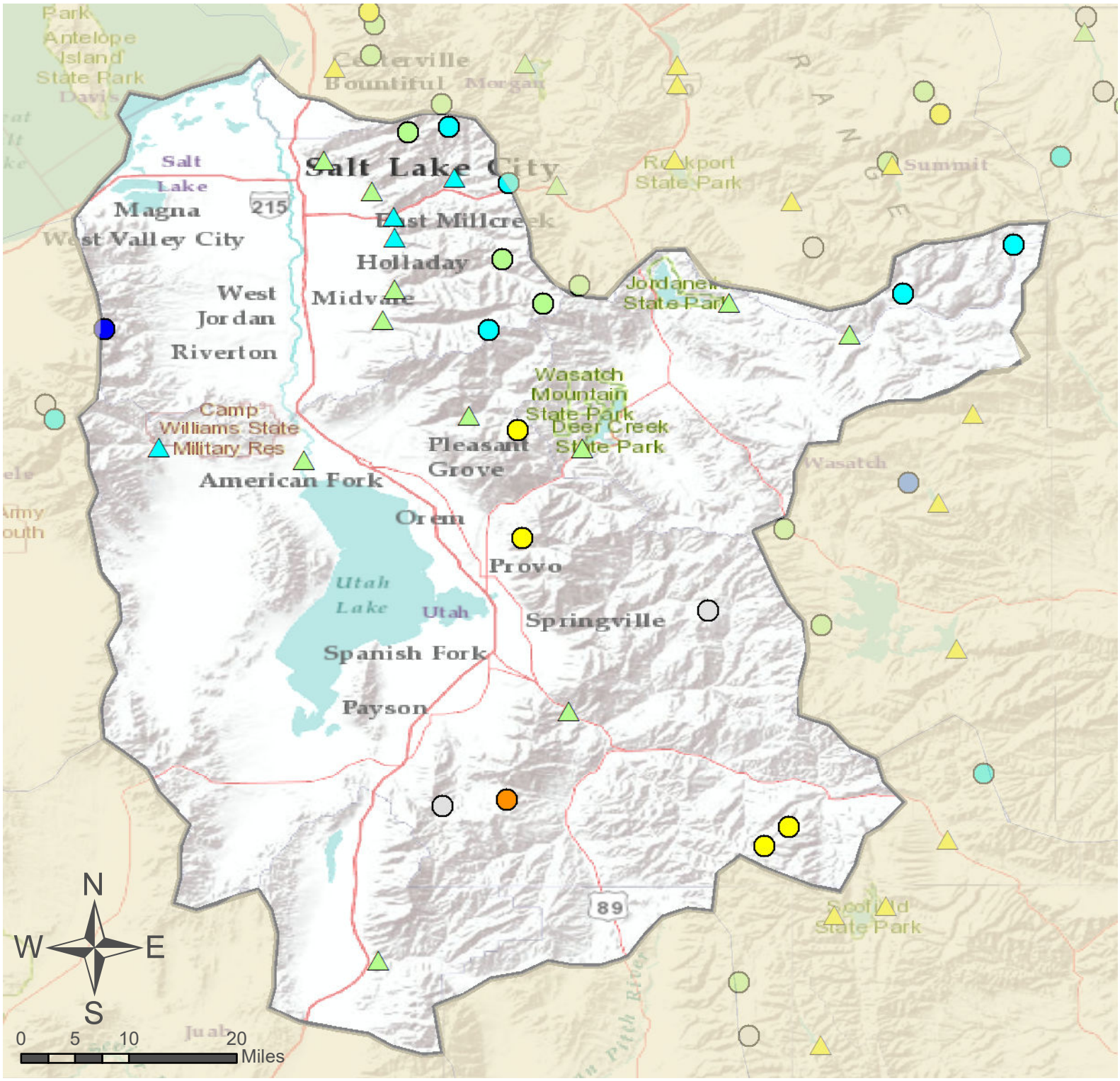
April 1, 2020

# Surface Water Supply Index

| Basin or Region | Mar EOM* Storage | APR-JUL Forecast | Storage + Forecast | Percentile | SWSI# | Years with similiar SWSI |
|---|---|---|---|---|---|---|
| | KAF^ | KAF^ | KAF^ | % | | |
| **Provo River** | **1259.52** | **99.00** | **1358.52** | **74** | **2.01** | **00, 07, 96, 06** |

*EOM, end of month; #SWSI, Surface Water Supply Index; ^KAF, thousand acre-feet.





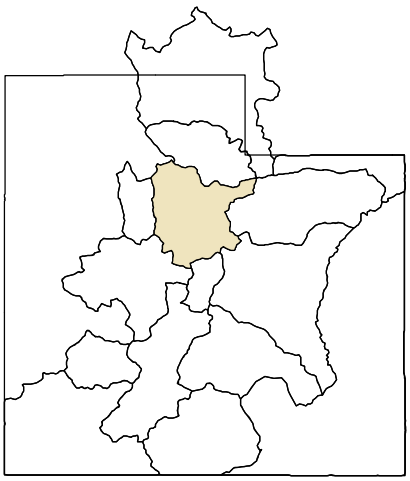

# Provo & Jordan River Basins

SNOTEL Site

Forecast Point

**% of Normal**

- < 50%
- 50 - 69%
- 70 - 89%
- 90 - 109%
- 110 - 129%
- 130 - 149%
- > 150%
- No Normal



<u>As of April 1, 2020:</u>

104% of Normal SWE

88% of Normal Precipitation

82% of Normal Precipitation Last Month

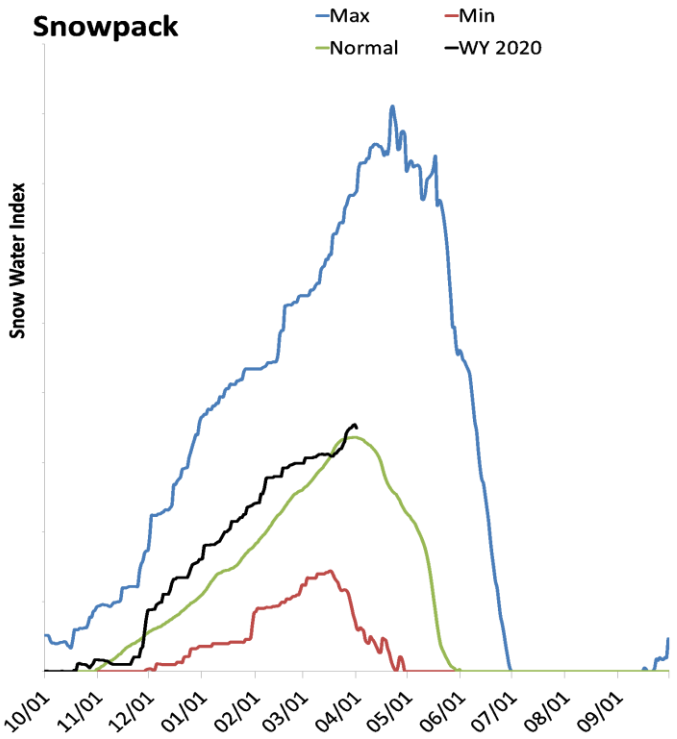
57% Saturation Soil Moisture

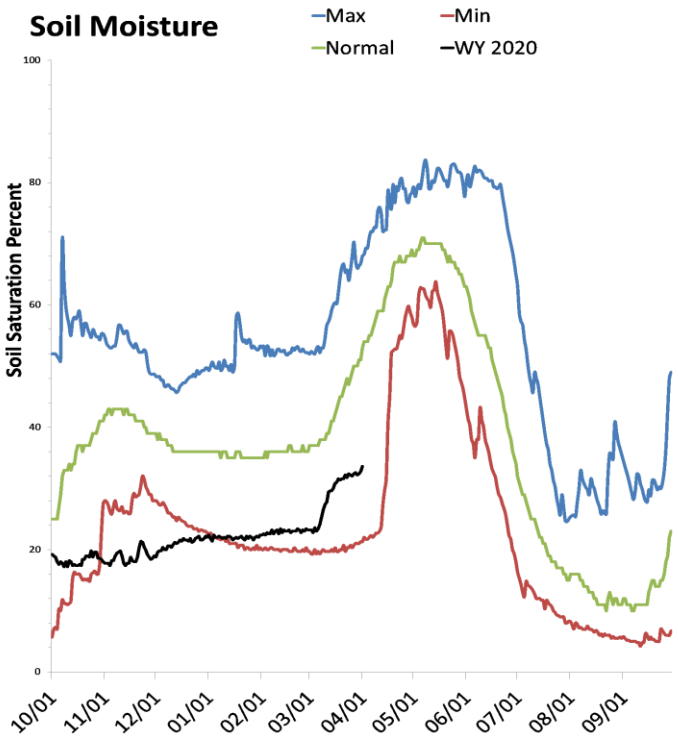
Provo & Jordan River Basins

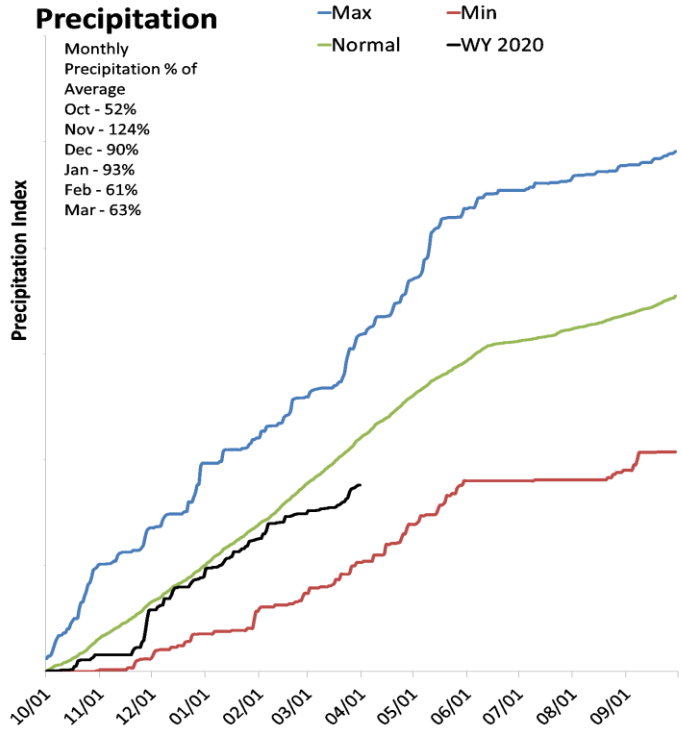
# Tooele Valley & West Desert Basins

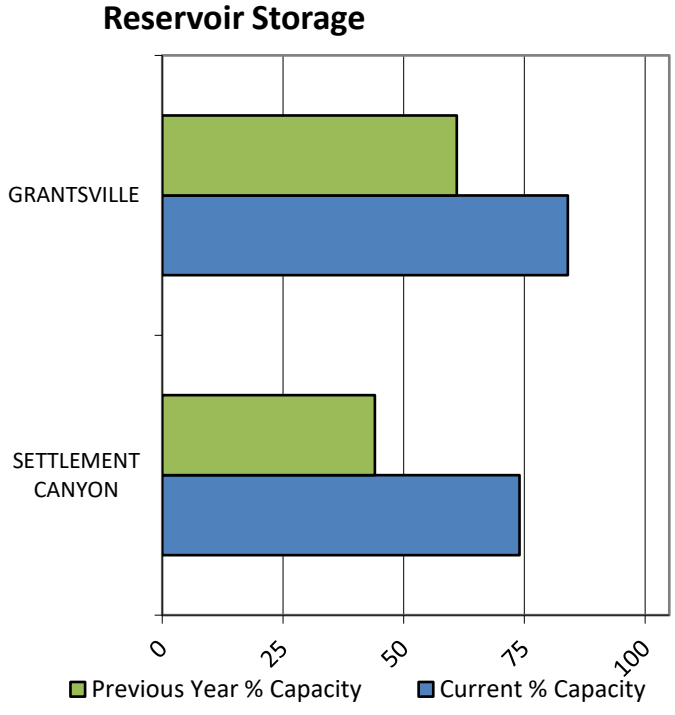
April 1, 2020

Snowpack in the Tooele Valley & West Desert Basins is near normal at 104% of normal, compared to 149% last year. Precipitation in March was much below average at 64%, which brings the seasonal accumulation (Oct-Mar) to 80% of average. Soil moisture is at 33% compared to 42% last year. Reservoir storage is at 81% of capacity, compared to 57% last year. Forecast streamflow volumes range from 97% to 115% of average.




SNOTEL Data

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# Tooele Valley West Desert
# Streamflow Forecasts - April 1, 2020

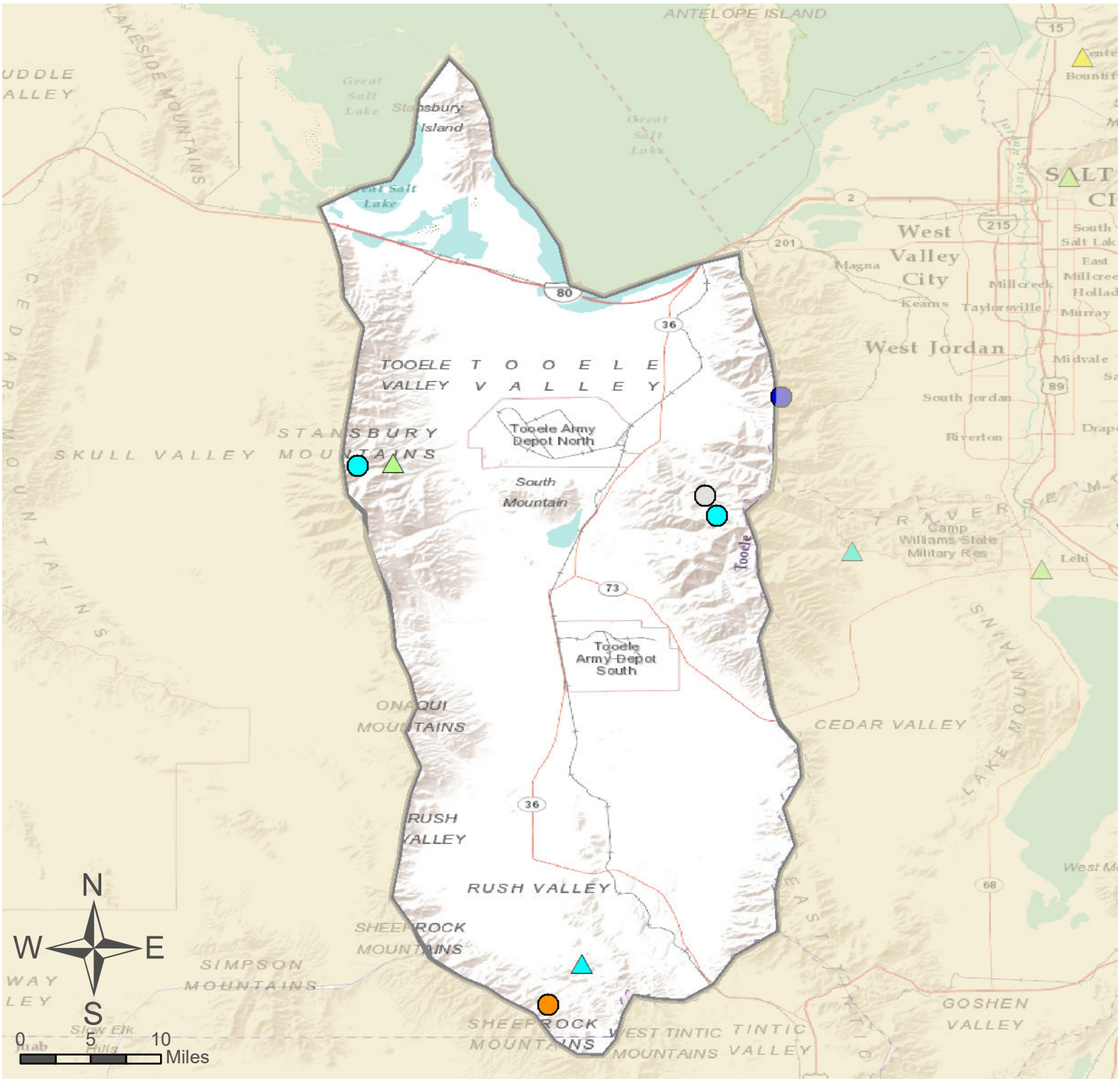
Forecast Exceedance Probabilities for Risk Assessment
Chance that actual volume will exceed forecast

| Tooele Valley West Desert | Forecast Period | 90% (KAF) | 70% (KAF) | 50% (KAF) | % Avg | 30% (KAF) | 10% (KAF) | 30yr Avg (KAF) |
|---|---|---|---|---|---|---|---|---|
| Vernon Ck nr Vernon | APR-JUL | 0.6 | 1.19 | 1.6 | 115% | 2 | 2.6 | 1.39 |
| S Willow Ck nr Grantsville | APR-JUL | 2.2 | 2.9 | 3.3 | 106% | 3.7 | 4.4 | 3.1 |
| Dunn Ck nr Park Valley | APR-JUL | 1.43 | 2.3 | 2.8 | 97% | 3.4 | 4.3 | 2.9 |
| W Canyon Ck nr Cedar Fort | APR-JUL | 1.14 | 1.65 | 2 | 114% | 2.3 | 2.9 | 1.76 |

1) 90% and 10% exceedance probabilities are actually 95% and 5%
2) Forecasts are for unimpaired flows. Actual flow will be dependent on management of upstream reservoirs and diversions
3) Median value used in place of average

| Reservoir Storage End of March, 2020 | Current (KAF) | Last Year (KAF) | Average (KAF) | Capacity (KAF) |
|---|---|---|---|---|
| Settlement Canyon Reservoir | 0.7 | 0.4 | 0.8 | 1.0 |
| Grantsville Reservoir | 2.8 | 2.0 | 2.5 | 3.3 |
| Basin-wide Total | 3.5 | 2.4 | 3.3 | 4.3 |
| # of reservoirs | 2 | 2 | 2 | 2 |

| Watershed Snowpack Analysis April 1, 2020 | # of Sites | % Median | Last Year % Median |
|---|---|---|---|
| Tooele Valley | 3 | 124% | 140% |
| Raft River | 5 | 108% | 116% |
| Deep Creek | 0 | | |
| Northwestern Utah | 3 | 102% | 140% |




# Tooele Valley & West Desert Basins

SNOTEL Site

Forecast Point

## As of April 1, 2020:

104% of Normal SWE

80% of Normal Precipitation

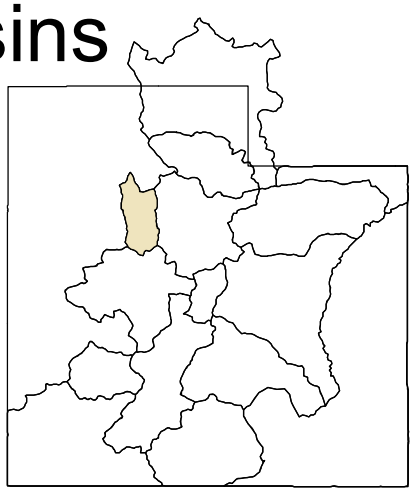
64% of Normal Precipitation Last Month

33% Saturation Soil Moisture

Tooele Valley & West Desert Basins

**% of Normal**

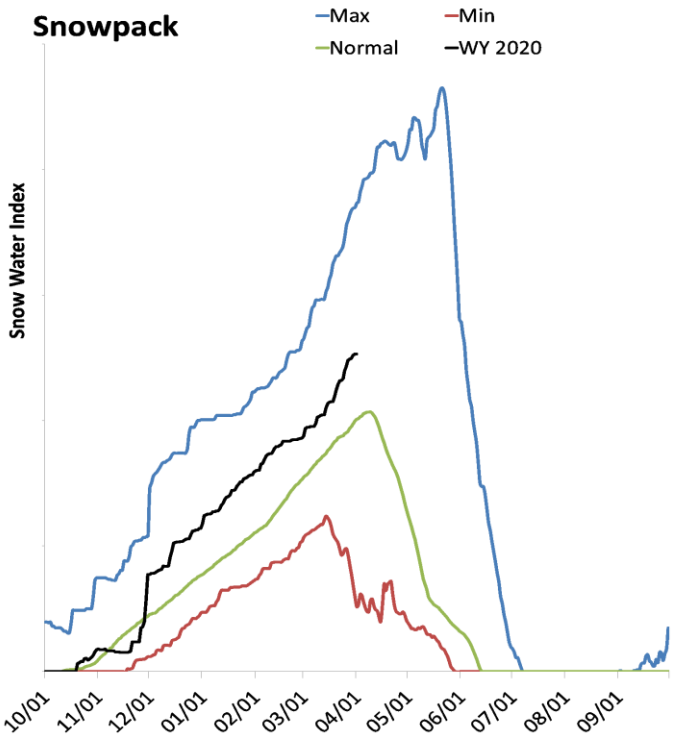
- < 50%
- 50 - 69%
- 70 - 89%
- 90 - 109%
- 110 - 129%
- 130 - 149%
- > 150%
- No Normal

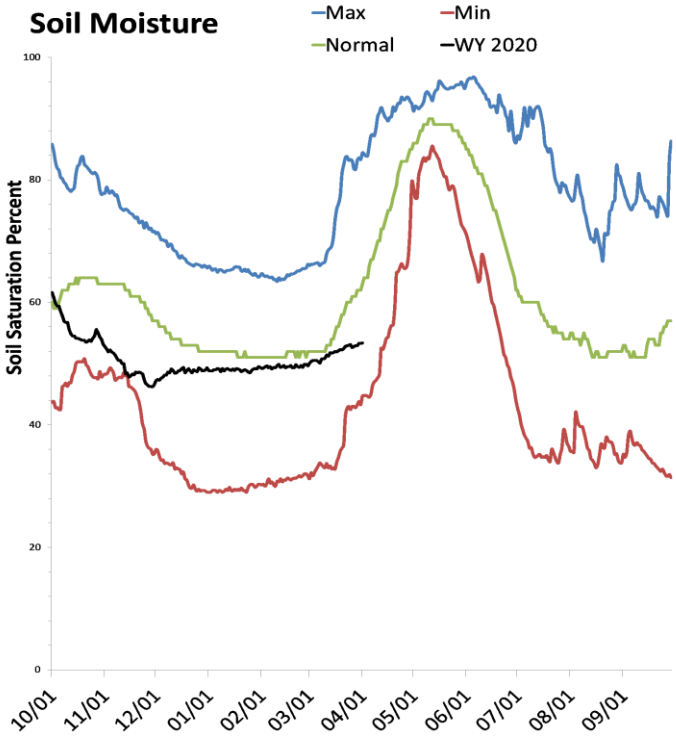


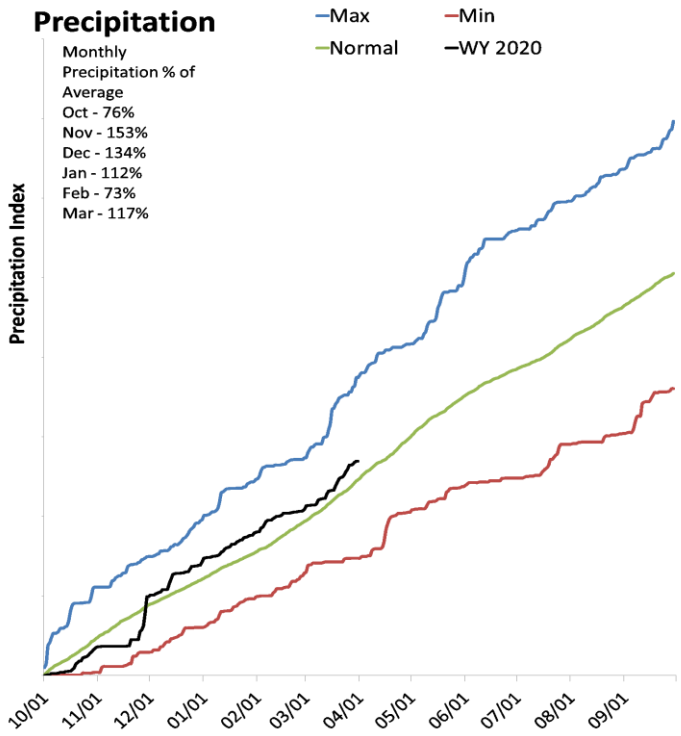
# Northeastern Uinta Basin

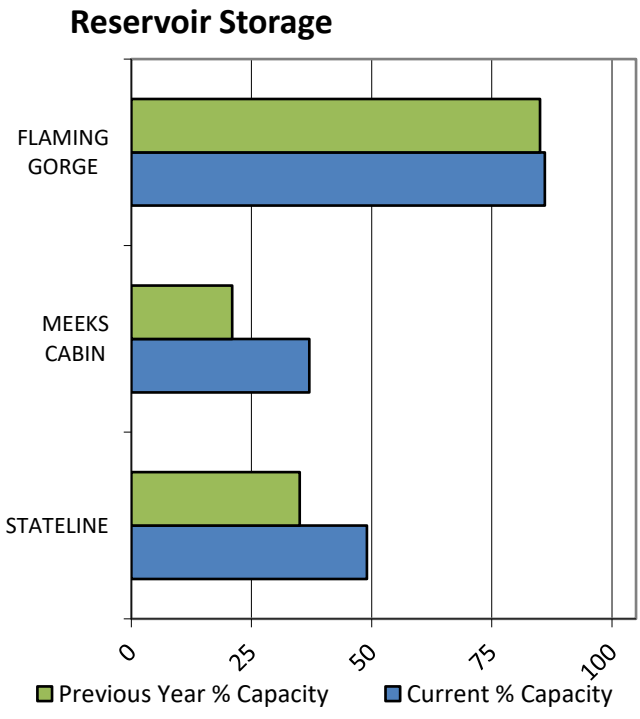
April 1, 2020

Snowpack in the Northeastern Uinta Basin is above normal at 126% of normal, compared to 114% last year. Precipitation in March was above average at 115%, which brings the seasonal accumulation (Oct-Mar) to 109% of average. Soil moisture is at 49% compared to 50% last year. Reservoir storage is at 85% of capacity, compared to 84% last year. Forecast streamflow volumes range from 87% to 105% of average. The surface water supply index is 45% for the Blacks Fork, 61% for the Smiths Creek.

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Data Current as of: 4/3/2020 2:45:20 PM

# Northeastern Uintas
# Streamflow Forecasts - April 1, 2020

| | | Forecast Exceedance Probabilities for Risk Assessment<br>Chance that actual volume will exceed forecast | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Northeastern Uintas** | Forecast Period | 90% (KAF) | 70% (KAF) | 50% (KAF) | % Avg | 30% (KAF) | 10% (KAF) | 30yr Avg (KAF) |
| Blacks Fk nr Robertson | APR-JUL | 66 | 80 | 90 | 105% | 101 | 118 | 86 |
| EF of Smiths Fork nr Robertson [2] | APR-JUL | 19.5 | 24 | 28 | 104% | 32 | 38 | 27 |
| Flaming Gorge Reservoir Inflow [2] | APR-JUL | 495 | 700 | 855 | 87% | 1030 | 1310 | 980 |
| Ashley Ck nr Vernal | APR-JUL | 28 | 39 | 47 | 94% | 56 | 71 | 50 |
| Big Brush Ck ab Red Fleet Reservoir | APR-JUL | 13.4 | 17.7 | 21 | 100% | 25 | 30 | 21 |

1) 90% and 10% exceedance probabilities are actually 95% and 5%
2) Forecasts are for unimpaired flows. Actual flow will be dependent on management of upstream reservoirs and diversions
3) Median value used in place of average

| **Reservoir Storage End of March, 2020** | Current (KAF) | Last Year (KAF) | Average (KAF) | Capacity (KAF) |
|---|---|---|---|---|
| Flaming Gorge Reservoir | 3220.1 | 3185.0 | 3020.0 | 3749.0 |
| Stateline Reservoir | 5.8 | 4.2 | 5.3 | 12.0 |
| Meeks Cabin Reservoir | 12.1 | 6.8 | 13.4 | 32.5 |
| Basin-wide Total | 3238.0 | 3196.0 | 3038.7 | 3793.5 |
| # of reservoirs | 3 | 3 | 3 | 3 |

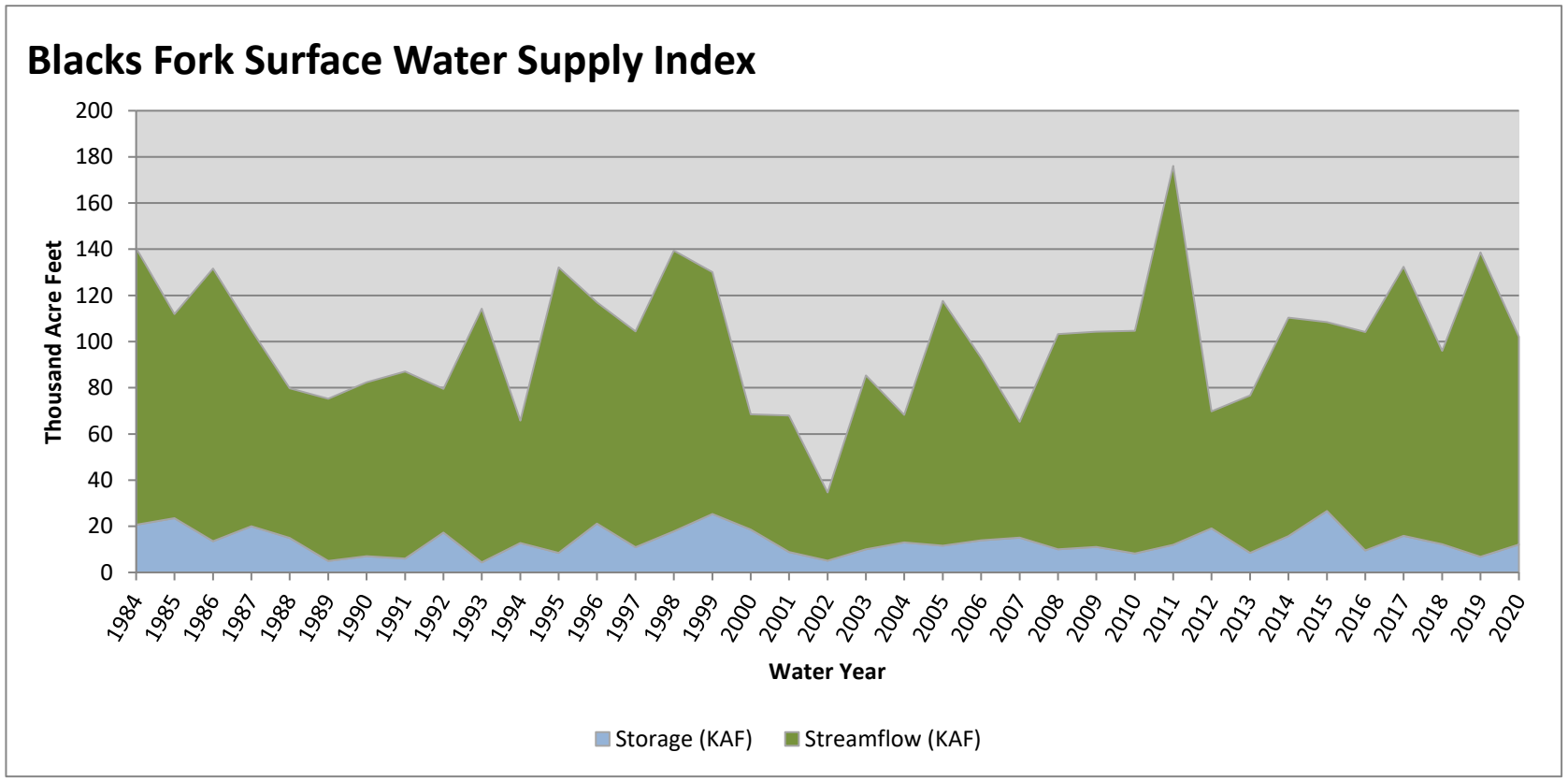
| **Watershed Snowpack Analysis April 1, 2020** | # of Sites | % Median | Last Year % Median |
|---|---|---|---|
| Blacks Fork River | 3 | 117% | 122% |
| Upper Green | 2 | 157% | 109% |
| Ashley Brush Creeks | 4 | 117% | 127% |

April 1, 2020

# Surface Water Supply Index

| Basin or Region | Mar EOM* Storage | APR-JUL Forecast | Storage + Forecast | Percentile | SWSI# | Years with similiar SWSI |
|---|---|---|---|---|---|---|
| | KAF^ | KAF^ | KAF^ | % | | |
| **Blacks Fork** | **12.06** | **90.00** | **102.06** | **45** | **-0.44** | **06, 18, 08, 16** |

*EOM, end of month; #SWSI, Surface Water Supply Index; ^KAF, thousand acre-feet.

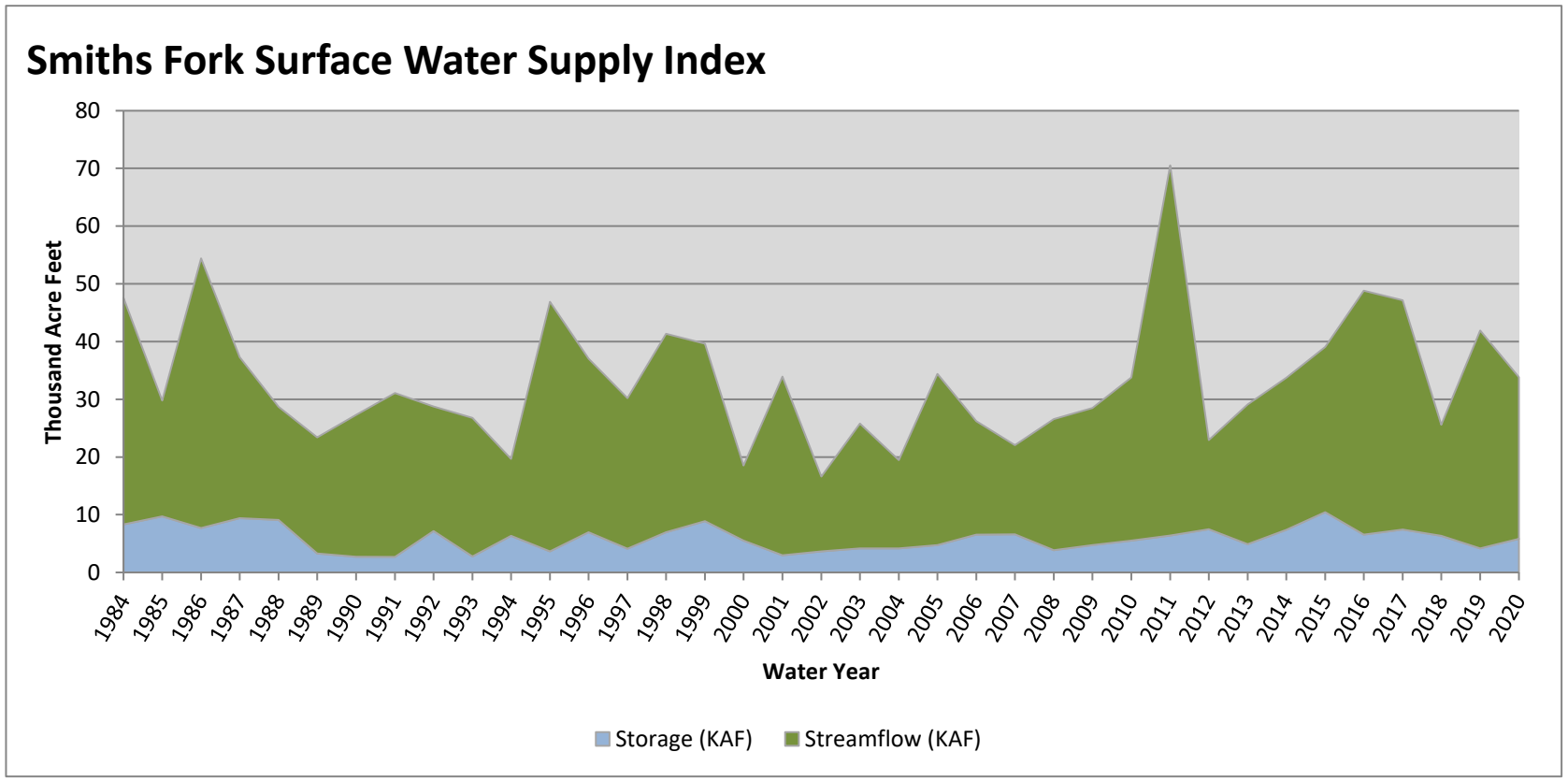


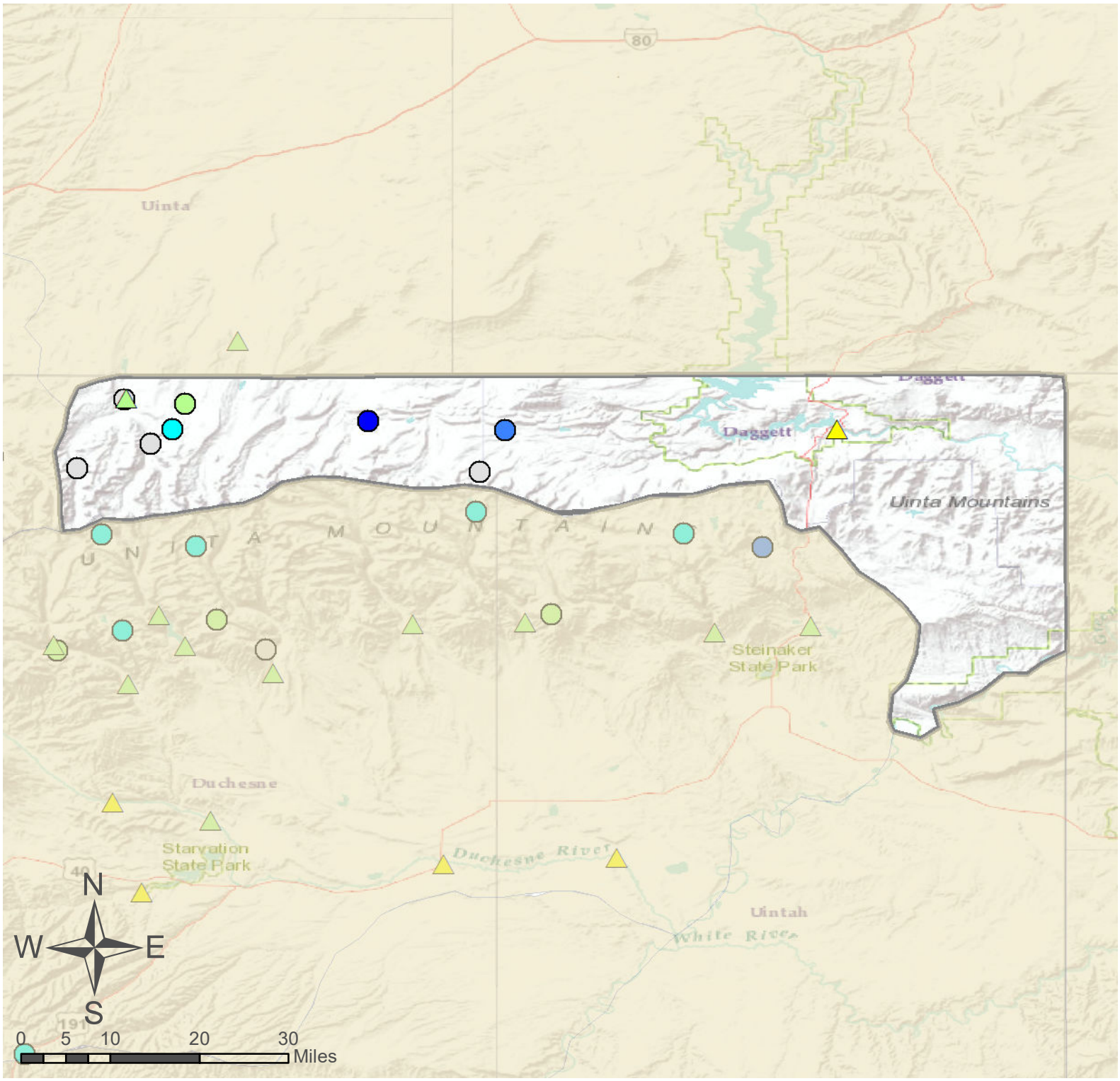
April 1, 2020

# Surface Water Supply Index

| Basin or Region | Mar EOM* Storage | APR-JUL Forecast | Storage + Forecast | Percentile | SWSI# | Years with similiar SWSI |
|---|---|---|---|---|---|---|
| | KAF^ | KAF^ | KAF^ | % | | |
| **Smiths Fork** | **5.85** | **28.00** | **33.85** | **61** | **0.88** | **14, 10, 01, 05** |

*EOM, end of month; #SWSI, Surface Water Supply Index; ^KAF, thousand acre-feet.





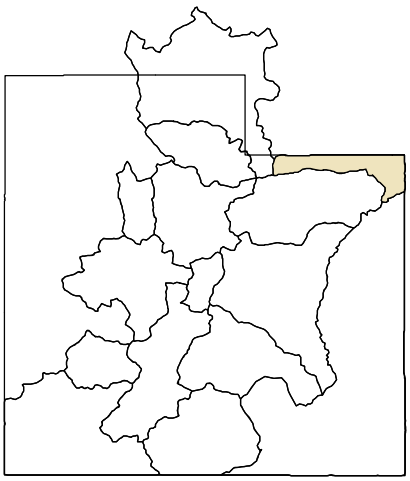

# Northeastern Uinta Basin

SNOTEL Site

Forecast Point

**% of Normal**

- < 50%
- 50 - 69%
- 70 - 89%
- 90 - 109%
- 110 - 129%
- 130 - 149%
- > 150%
- No Normal



As of April 1, 2020:

126% of Normal SWE

109% of Normal Precipitation

115% of Normal Precipitation Last Month

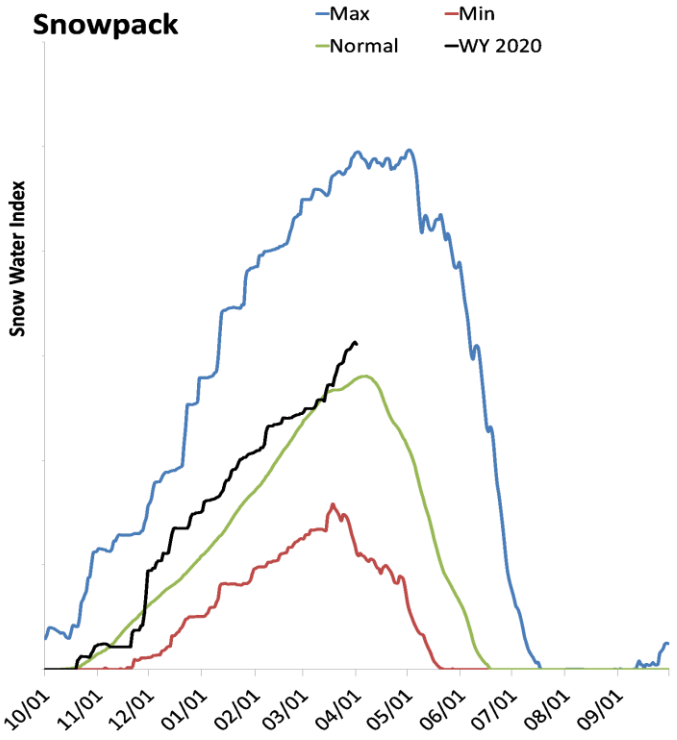
49% Saturation Soil Moisture

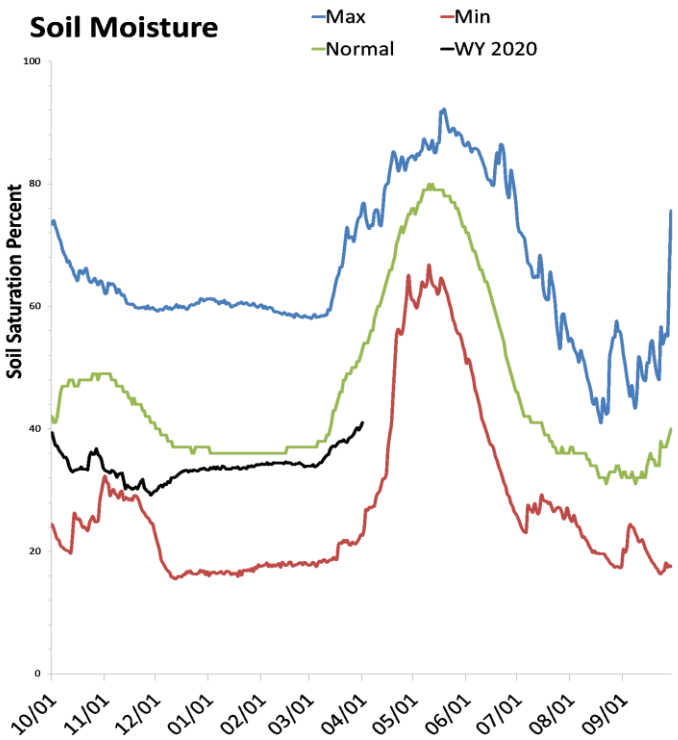
Northeastern Uinta Basin

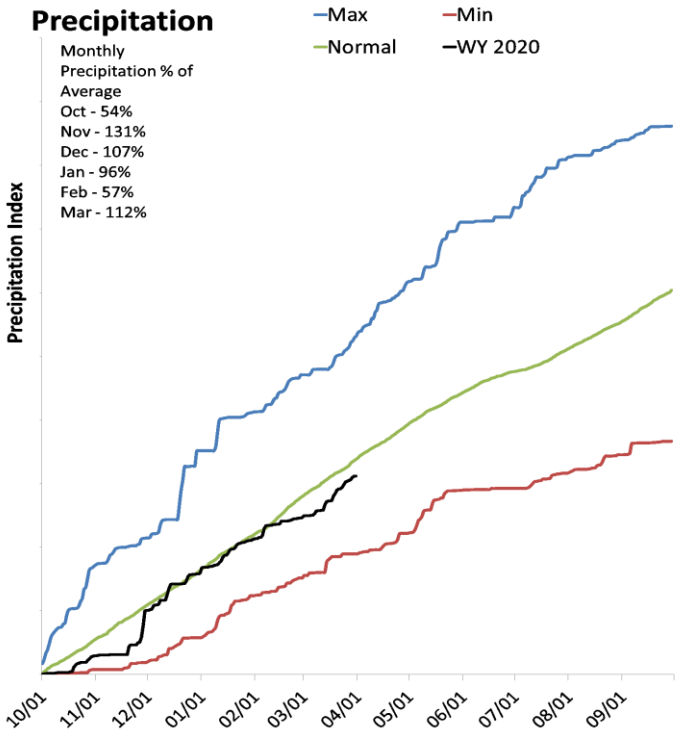
# Duchesne River Basin

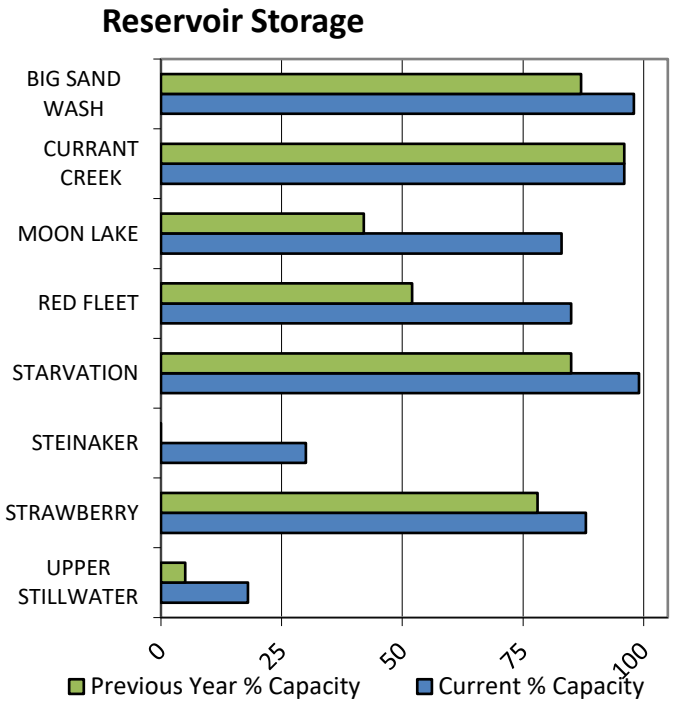
April 1, 2020

Snowpack in the Duchesne River Basin is above average at 112% of normal, compared to 148% last year. Precipitation in March was above average at 111%, which brings the seasonal accumulation (Oct-Mar) to 92% of average. Soil moisture is at 40% compared to 45% last year. Reservoir storage is at 88% of capacity, compared to 76% last year. Forecast streamflow volumes range from 78% to 100% of average. The surface water supply index is 90% for the Western Uintas, 41% for the Eastern Uintas.




SNOTEL Data

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# Duchesne River
## Streamflow Forecasts - April 1, 2020

| Duchesne River | Forecast Period | 90% (KAF) | 70% (KAF) | 50% (KAF) | % Avg | 30% (KAF) | 10% (KAF) | 30yr Avg (KAF) |
|---|---|---|---|---|---|---|---|---|
| | | Forecast Exceedance Probabilities for Risk Assessment<br>Chance that actual volume will exceed forecast | | | | | | |
| WF Duchesne R at VAT Diversion | APR-JUL | 10.7 | 13.7 | 16 | 86% | 18.4 | 22 | 18.6 |
| Duchesne R nr Tabiona [2] | APR-JUL | 69 | 84 | 95 | 88% | 108 | 127 | 108 |
| Upper Stillwater Reservoir Inflow[2] | APR-JUL | 55 | 65 | 73 | 99% | 81 | 93 | 74 |
| Rock Ck nr Mountain Home [2] | APR-JUL | 67 | 78 | 87 | 99% | 96 | 110 | 88 |
| Duchesne R ab Knight Diversion [2] | APR-JUL | 133 | 159 | 179 | 92% | 200 | 230 | 195 |
| Currant Ck Reservoir Inflow[2] | APR-JUL | 9.8 | 13.3 | 16 | 80% | 18.9 | 24 | 20 |
| Strawberry R nr Soldier Springs [2] | APR-JUL | 28 | 40 | 49 | 84% | 59 | 75 | 58 |
| Strawberry R nr Duchesne [2] | APR-JUL | 46 | 69 | 87 | 78% | 107 | 141 | 112 |
| Lake Fork R ab Moon Lake Reservoir | APR-JUL | 38 | 49 | 57 | 93% | 66 | 79 | 61 |
| Lake Fk R Bl Moon Lk nr Mountain Home[2] | APR-JUL | 45 | 54 | 61 | 92% | 68 | 80 | 66 |
| Yellowstone R nr Altonah | APR-JUL | 43 | 53 | 61 | 100% | 70 | 84 | 61 |
| Duchesne R at Myton [2] | APR-JUL | 169 | 235 | 285 | 86% | 340 | 425 | 330 |
| Uinta R bl Powerplant Diversion nr Neola[2] | APR-JUL | 42 | 59 | 72 | 97% | 86 | 110 | 74 |
| Whiterocks R nr Whiterocks | APR-JUL | 32 | 43 | 52 | 96% | 61 | 76 | 54 |
| Duchesne R nr Randlett [2] | APR-JUL | 176 | 260 | 330 | 86% | 405 | 525 | 385 |
| Ashley Ck nr Vernal | APR-JUL | 28 | 39 | 47 | 94% | 56 | 71 | 50 |
| Big Brush Ck ab Red Fleet Reservoir | APR-JUL | 13.4 | 17.7 | 21 | 100% | 25 | 30 | 21 |

1) 90% and 10% exceedance probabilities are actually 95% and 5%
2) Forecasts are for unimpaired flows. Actual flow will be dependent on management of upstream reservoirs and diversions
3) Median value used in place of average

| **Reservoir Storage End of March, 2020** | Current (KAF) | Last Year (KAF) | Average (KAF) | Capacity (KAF) |
|---|---|---|---|---|
| Steinaker Reservoir | 10.1 | -3.7 | 24.5 | 33.4 |
| Red Fleet Reservoir | 22.0 | 13.3 | 18.8 | 25.7 |
| Big Sand Wash Reservoir | 25.3 | 22.3 | | 25.7 |
| Upper Stillwater Reservoir | 5.8 | 1.5 | 4.5 | 32.5 |
| Starvation Reservoir | 163.0 | 140.1 | 149.7 | 164.1 |
| Moon Lake Reservoir | 29.7 | 15.0 | 27.3 | 35.8 |
| Currant Creek Reservoir | 14.9 | 14.8 | 14.8 | 15.5 |
| Strawberry Reservoir | 978.6 | 860.3 | 665.1 | 1105.9 |
| Basin-wide Total | 1213.9 | 1044.9 | 880.2 | 1379.5 |
| # of reservoirs | 6 | 6 | 6 | 6 |

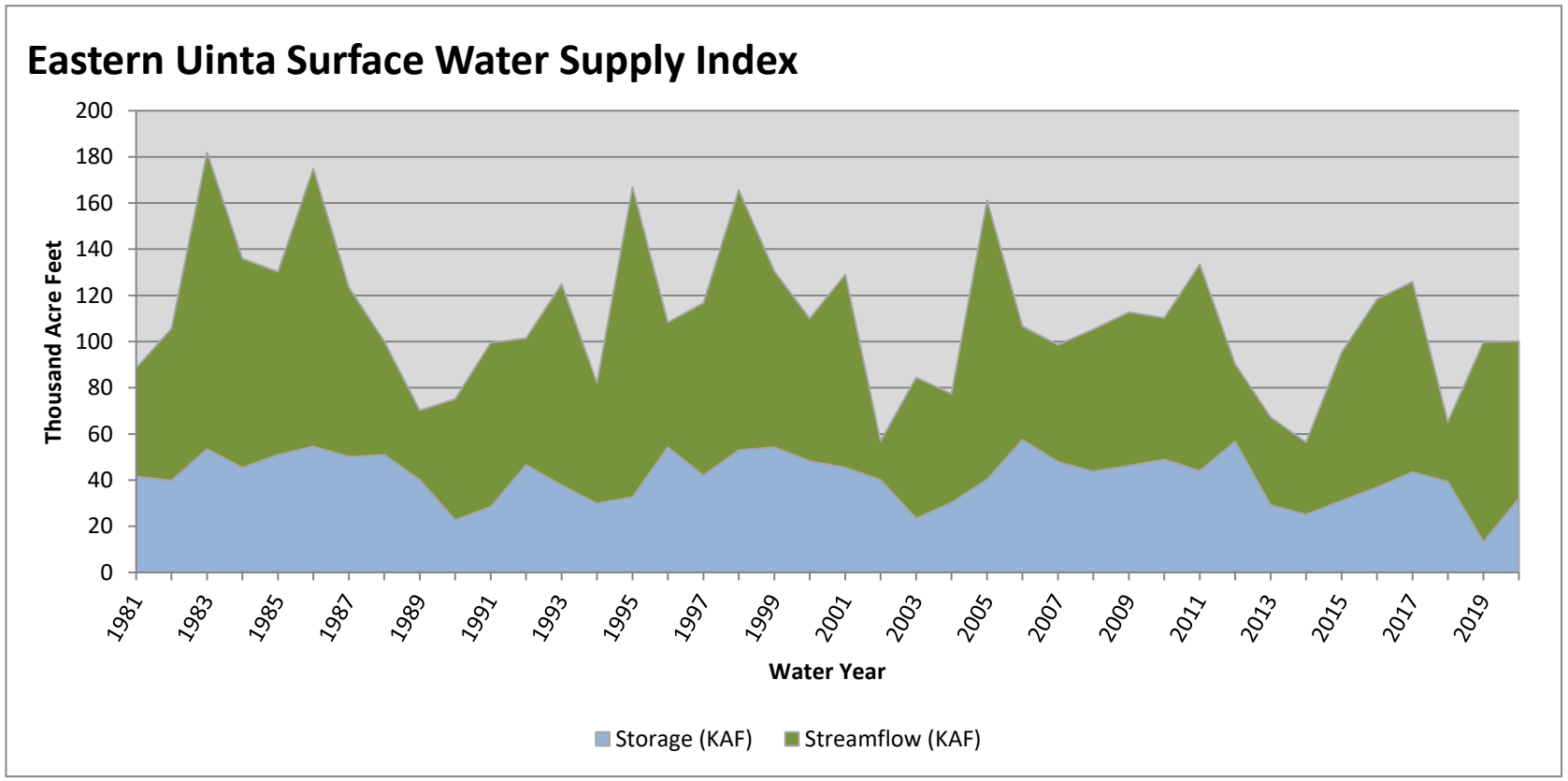
| **Watershed Snowpack Analysis April 1, 2020** | # of Sites | % Median | Last Year % Median |
|---|---|---|---|
| Strawberry River | 5 | 108% | 164% |
| Lakefork Yellowstone Rivers | 7 | 114% | 143% |
| Uinta Whiterocks River | 2 | 110% | 126% |

April 1, 2020

# Surface Water Supply Index

| Basin or Region | Mar EOM* Storage | APR-JUL Forecast | Storage + Forecast | Percentile | SWSI# | Years with similiar SWSI |
|---|---|---|---|---|---|---|
| | KAF^ | KAF^ | KAF^ | % | | |
| **Eastern Uinta** | **32.08** | **68.00** | **100.08** | **41** | **-0.71** | **19, 88, 92, 08** |

*EOM, end of month; #SWSI, Surface Water Supply Index; ^KAF, thousand acre-feet.

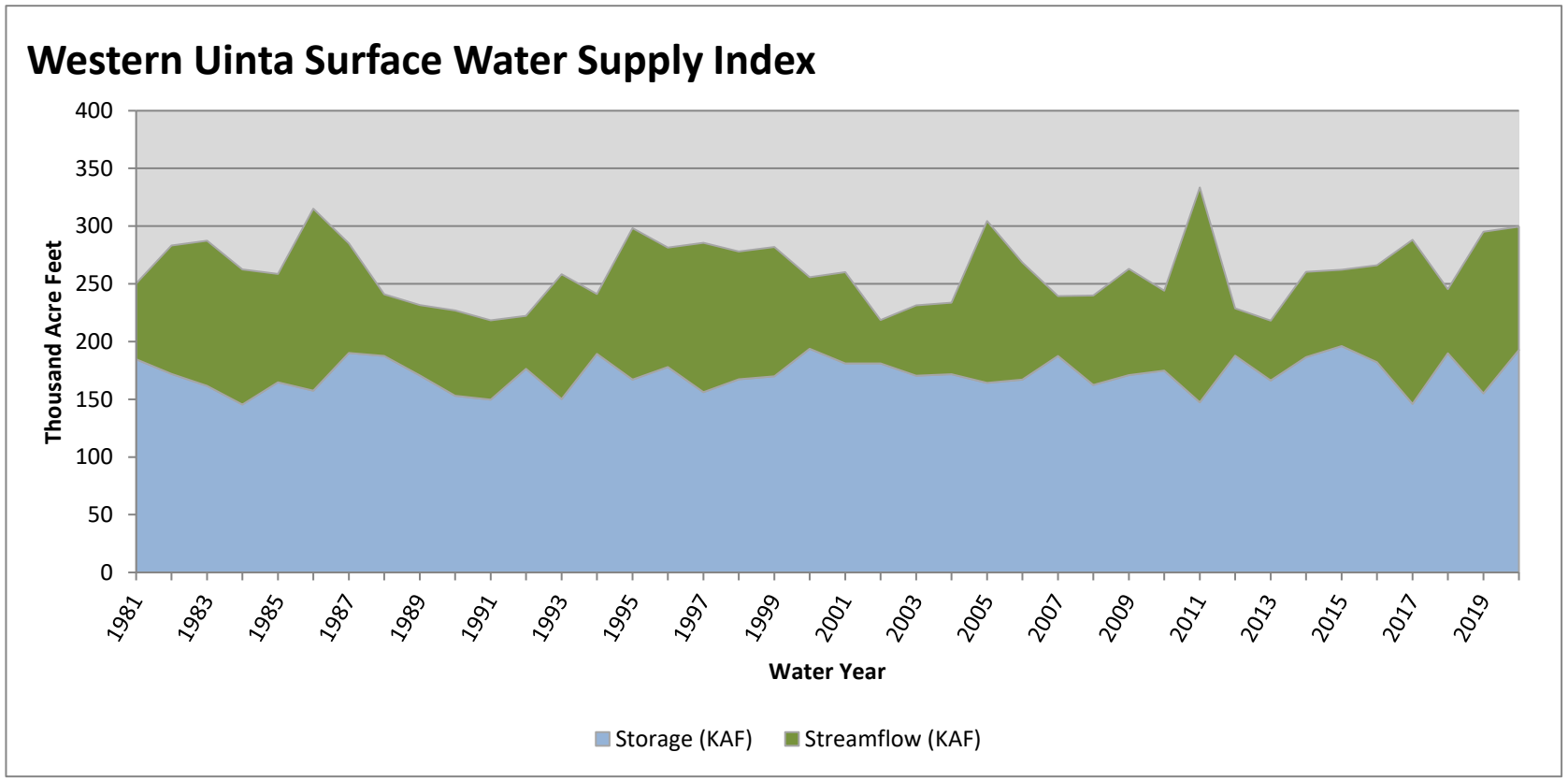


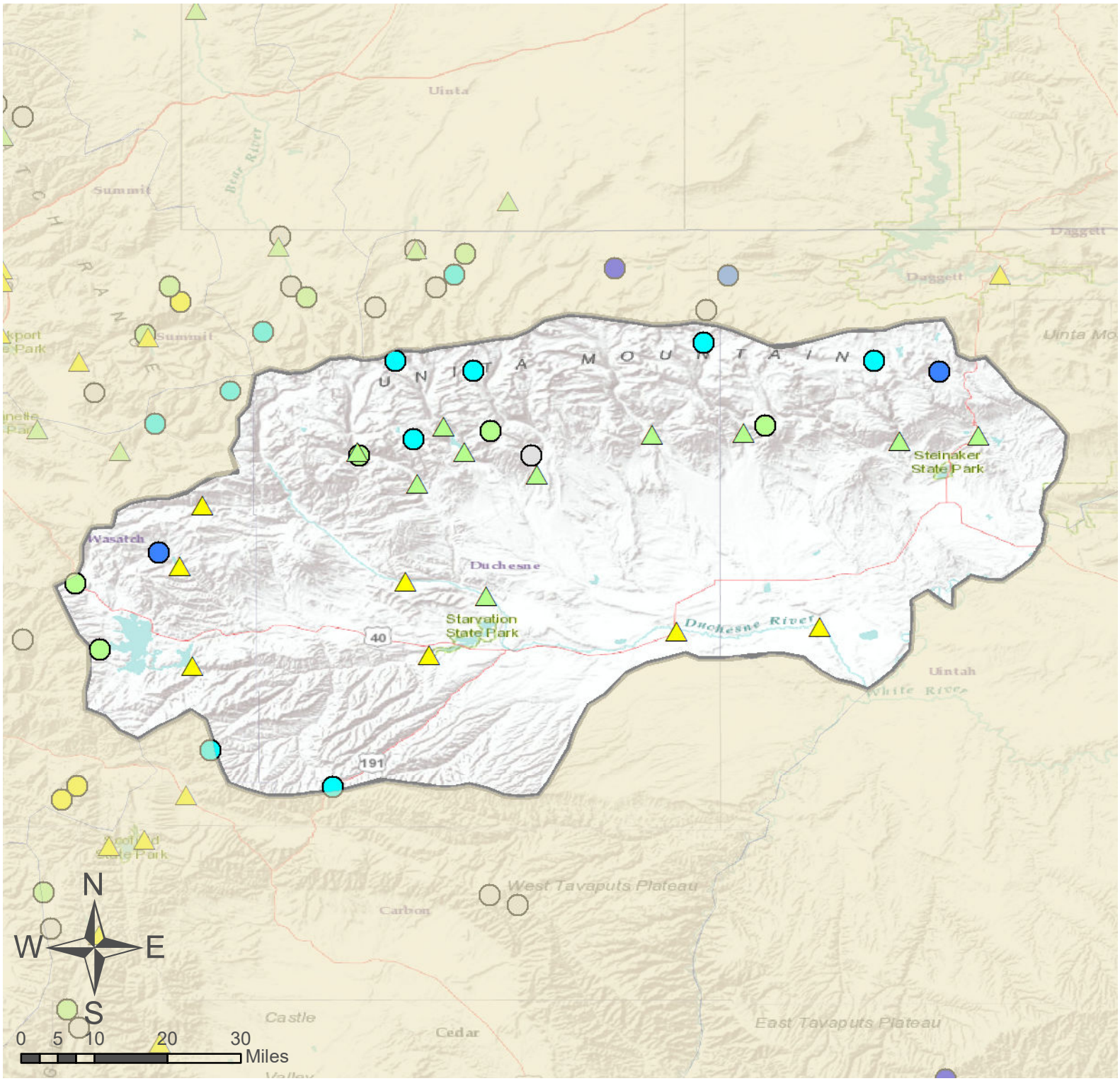
April 1, 2020

# Surface Water Supply Index

| Basin or Region | Mar EOM* Storage | APR-JUL Forecast | Storage + Forecast | Percentile | SWSI# | Years with similiar SWSI |
|---|---|---|---|---|---|---|
| | KAF^ | KAF^ | KAF^ | % | | |
| **Western Uinta** | **192.67** | **107.00** | **299.67** | **90** | **3.35** | **19, 95, 05, 86** |

*EOM, end of month; #SWSI, Surface Water Supply Index; ^KAF, thousand acre-feet.





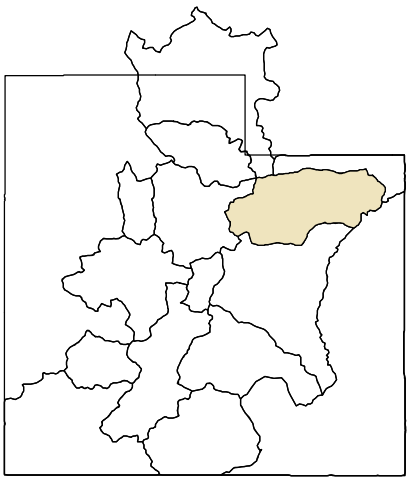

# Duchesne River Basin

SNOTEL Site

Forecast Point

## % of Normal

- < 50%
- 50 - 69%
- 70 - 89%
- 90 - 109%
- 110 - 129%
- 130 - 149%
- > 150%
- No Normal



As of April 1, 2020:

112% of Normal SWE

92% of Normal Precipitation

111% of Normal Precipitation Last Month

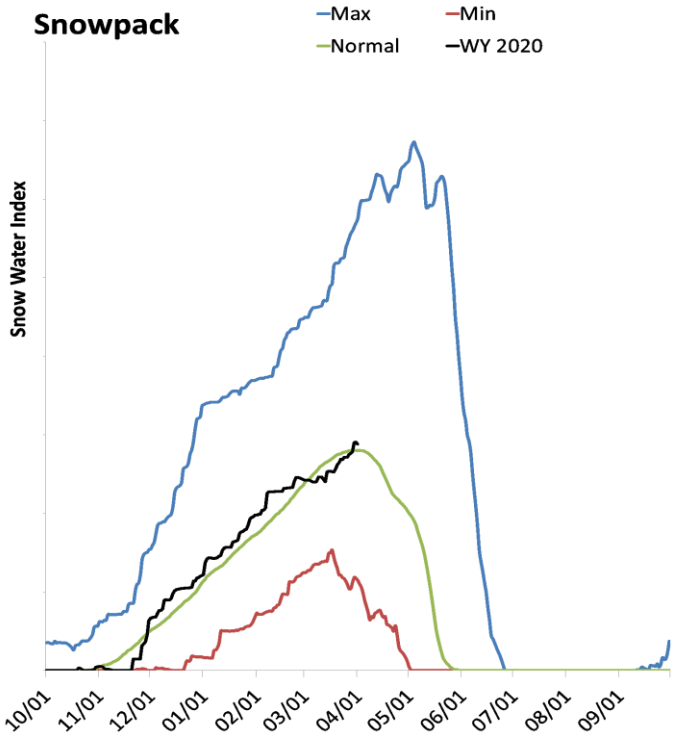
40% Saturation Soil Moisture

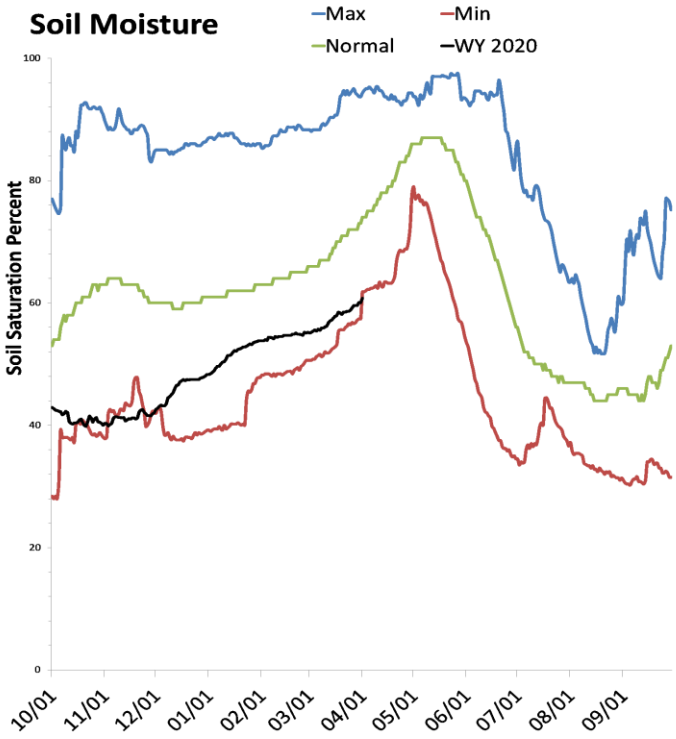
Duchesne River Basin

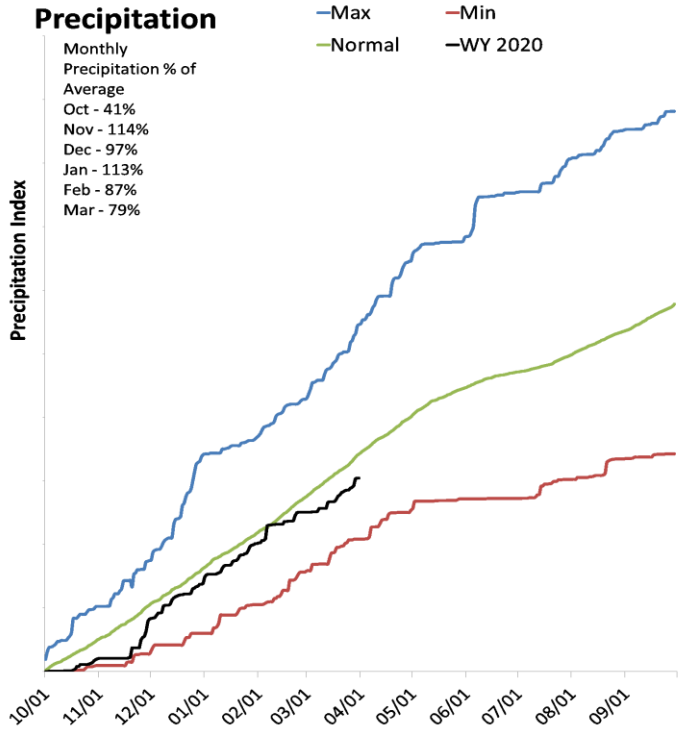
# San Pitch River Basin

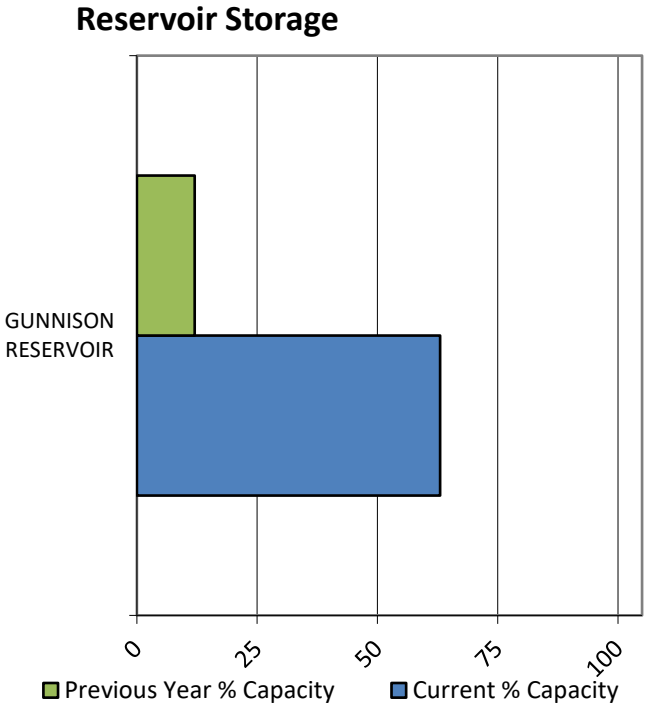
April 1, 2020

Snowpack in the San Pitch River Basin is near normal at 103% of normal, compared to 156% last year. Precipitation in March was below average at 79%, which brings the seasonal accumulation (Oct-Mar) to 89% of average. Soil moisture is at 60% compared to 72% last year. Reservoir storage is at 63% of capacity, compared to 12% last year. The forecast streamflow volume for Manti Creek is 97% of average. The surface water supply index is 56% for the San Pitch.

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# San Pitch River
# Streamflow Forecasts - April 1, 2020

Forecast Exceedance Probabilities for Risk Assessment
Chance that actual volume will exceed forecast

| San Pitch River | Forecast Period | 90% (KAF) | 70% (KAF) | 50% (KAF) | % Avg | 30% (KAF) | 10% (KAF) | 30yr Avg (KAF) |
|---|---|---|---|---|---|---|---|---|
| Manti Ck bl Dugway Ck nr Manti | | | | | | | | |
| | APR-JUL | 10.9 | 14 | 16.2 | 97% | 18.6 | 22 | 16.7 |
| Sevier R nr Gunnison | | | | | | | | |
| | APR-JUL | 60 | 88 | 106 | 107% | 124 | 152 | 99 |

1) 90% and 10% exceedance probabilities are actually 95% and 5%
2) Forecasts are for unimpaired flows. Actual flow will be dependent on management of upstream reservoirs and diversions
3) Median value used in place of average

| Reservoir Storage End of March, 2020 | Current (KAF) | Last Year (KAF) | Average (KAF) | Capacity (KAF) |
|---|---|---|---|---|
| Gunnison Reservoir | 12.7 | 2.5 | 14.7 | 20.3 |
| Basin-wide Total | 12.7 | 2.5 | 14.7 | 20.3 |
| # of reservoirs | 1 | 1 | 1 | 1 |

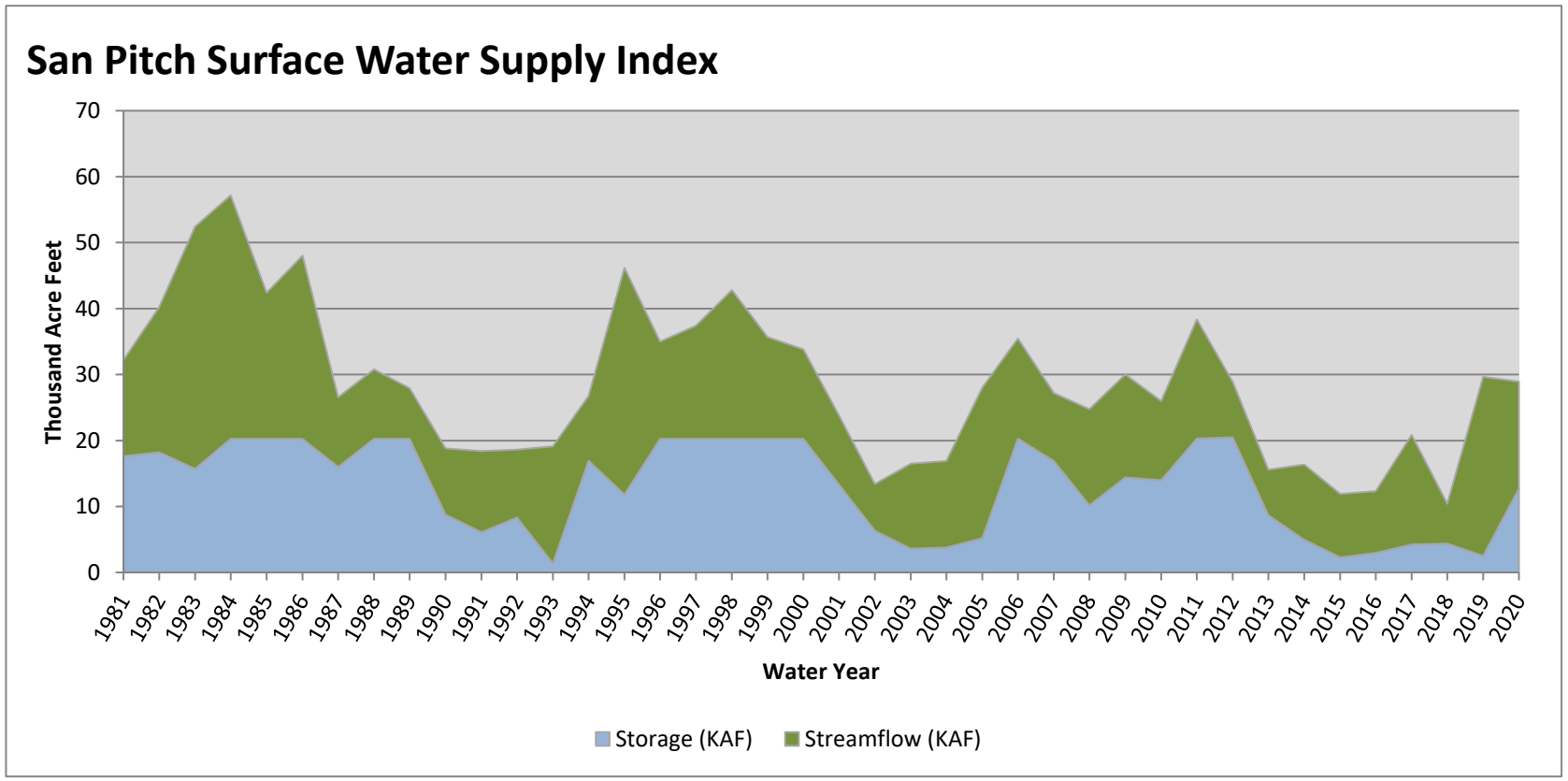
| Watershed Snowpack Analysis April 1, 2020 | # of Sites | % Median | Last Year % Median |
|---|---|---|---|
| Upper San Pitch | 3 | 103% | 135% |
| Lower San Pitch | 8 | 102% | 146% |

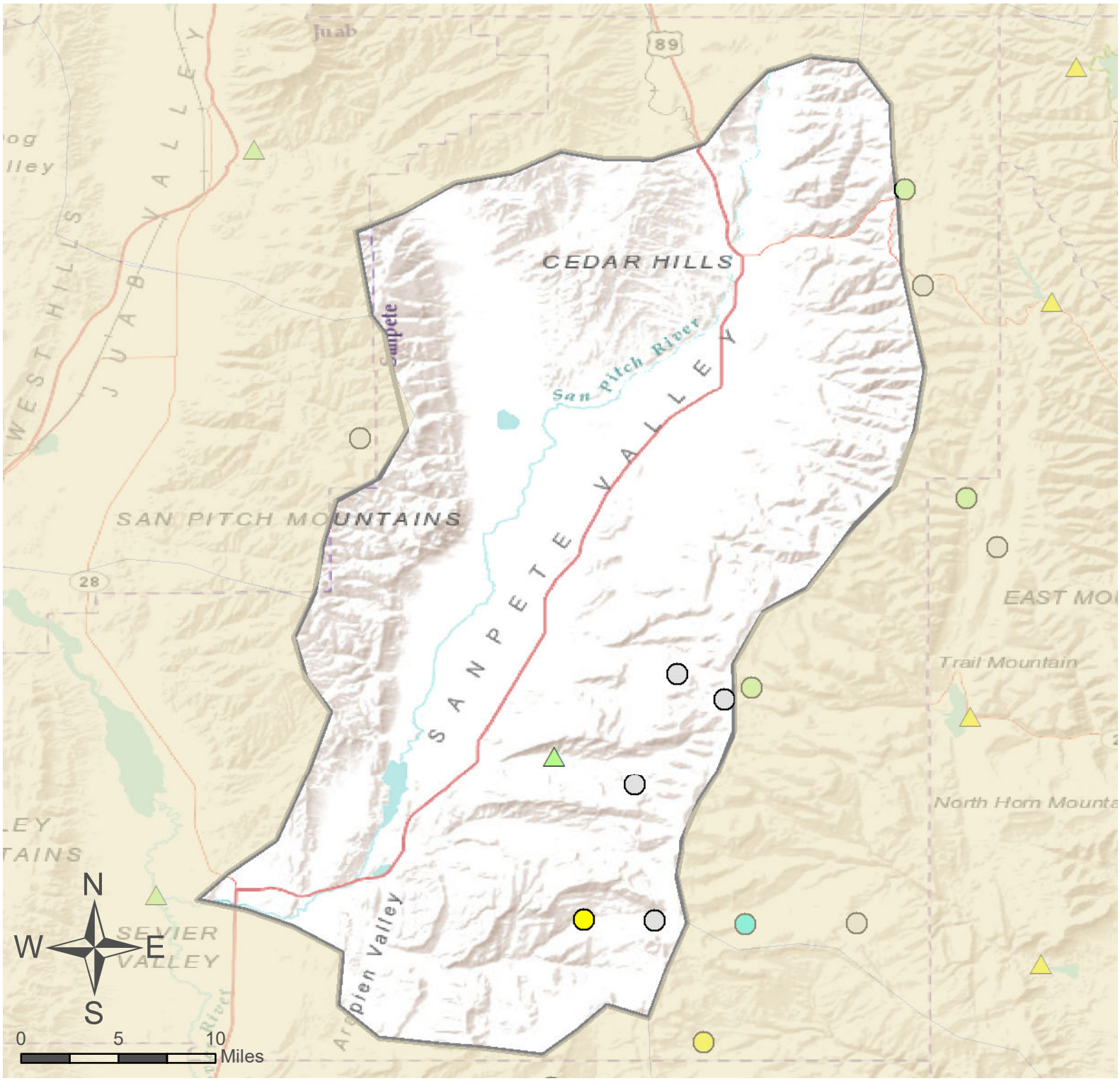
April 1, 2020

# Surface Water Supply Index

| Basin or Region | Mar EOM* Storage | APR-JUL Forecast | Storage + Forecast | Percentile | SWSI# | Years with similiar SWSI |
|---|---|---|---|---|---|---|
| | KAF^ | KAF^ | KAF^ | % | | |
| **San Pitch** | **12.72** | **16.20** | **28.92** | **56** | **0.51** | **05, 12, 19, 09** |

*EOM, end of month; #SWSI, Surface Water Supply Index; ^KAF, thousand acre-feet.





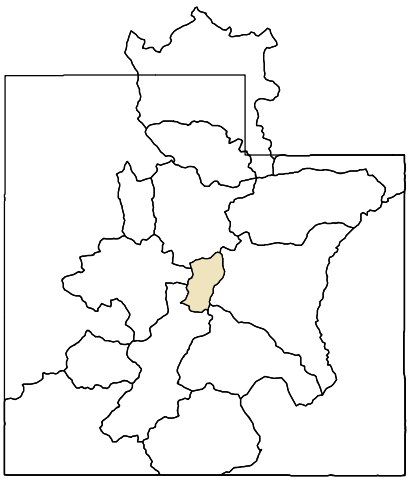

# San Pitch River Basin

SNOTEL Site

Forecast Point

**% of Normal**

- < 50%
- 50 - 69%
- 70 - 89%
- 90 - 109%
- 110 - 129%
- 130 - 149%
- > 150%
- No Normal



As of April 1, 2020:

103% of Normal SWE

89% of Normal Precipitation

79% of Normal Precipitation Last Month

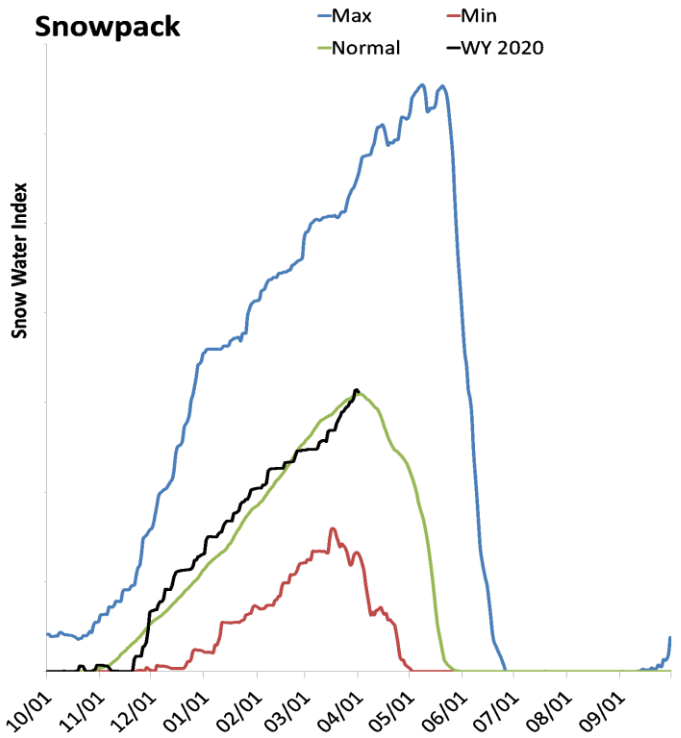
60% Saturation Soil Moisture

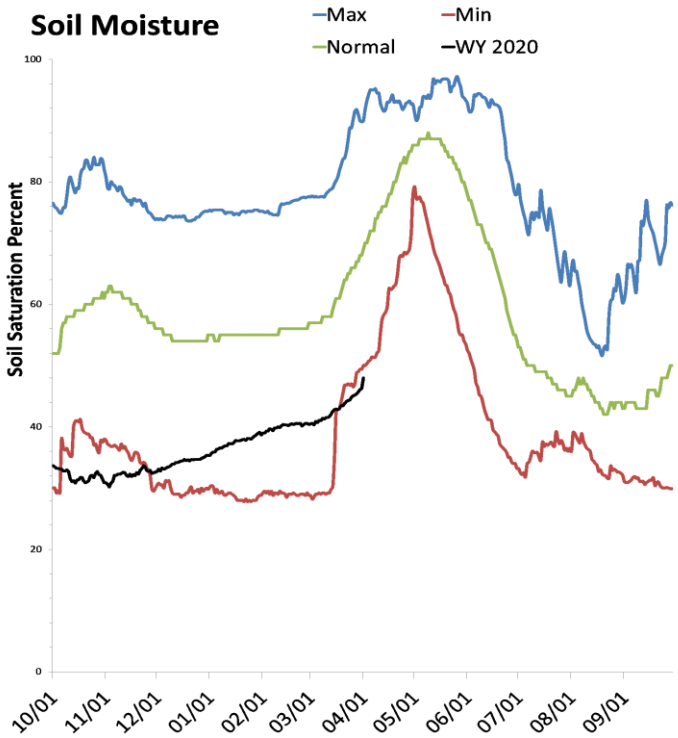
San Pitch River Basin

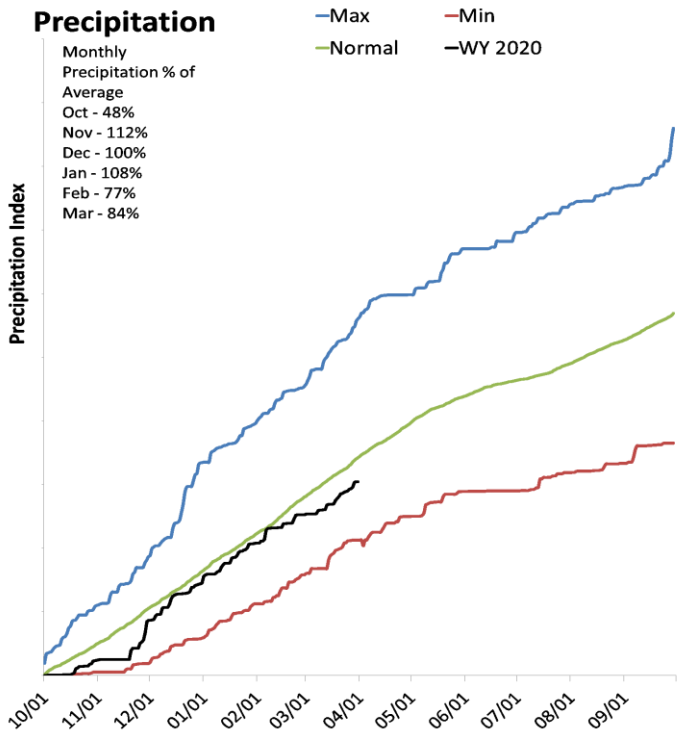
# Price & San Rafael Basins

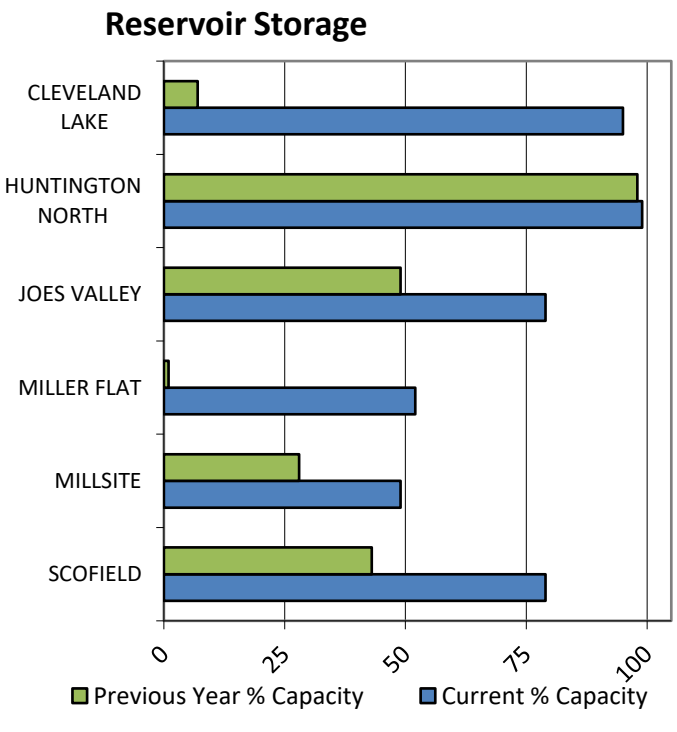
April 1, 2020

Snowpack in the Price & San Rafael Basins is near normal at 101% of normal, compared to 144% last year. Precipitation in March was below average at 84%, which brings the seasonal accumulation (Oct-Mar) to 89% of average. Soil moisture is at 47% compared to 66% last year. Reservoir storage is at 76% of capacity, compared to 45% last year. Forecast streamflow volumes range from 70% to 93% of average. The surface water supply index is 68% for the Price River, 59% for Joe's Valley, 41% for Ferron Creek.




SNOTEL Data

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# Price San Rafael Rivers
# Streamflow Forecasts - April 1, 2020

Forecast Exceedance Probabilities for Risk Assessment
Chance that actual volume will exceed forecast

| Price San Rafael Rivers | Forecast Period | 90% (KAF) | 70% (KAF) | 50% (KAF) | % Avg | 30% (KAF) | 10% (KAF) | 30yr Avg (KAF) |
|---|---|---|---|---|---|---|---|---|
| Fish Ck ab Reservoir nr Scofield | APR-JUL | 12.8 | 17.6 | 21 | 70% | 26 | 32 | 30 |
| Price R nr Scofield Reservoir[2] | APR-JUL | 16 | 24 | 30 | 73% | 37 | 48 | 41 |
| White R bl Tabbyune Creek | APR-JUL | 7 | 9.3 | 11 | 71% | 12.9 | 15.9 | 15.5 |
| Green R at Green River, UT [2] | APR-JUL | 1770 | 2330 | 2750 | 93% | 3200 | 3930 | 2960 |
| Electric Lake Inflow [2] | APR-JUL | 5.8 | 8.2 | 10.2 | 77% | 12.3 | 15.8 | 13.3 |
| Huntington Ck nr Huntington [2] | APR-JUL | 23 | 29 | 33 | 83% | 38 | 46 | 40 |
| Joes Valley Reservoir Inflow[2] | APR-JUL | 30 | 40 | 47 | 84% | 55 | 67 | 56 |
| Ferron Ck (Upper Station) nr Ferron | APR-JUL | 22 | 27 | 30 | 79% | 34 | 39 | 38 |

1) 90% and 10% exceedance probabilities are actually 95% and 5%
2) Forecasts are for unimpaired flows. Actual flow will be dependent on management of upstream reservoirs and diversions
3) Median value used in place of average

| Reservoir Storage End of March, 2020 | Current (KAF) | Last Year (KAF) | Average (KAF) | Capacity (KAF) |
|---|---|---|---|---|
| Joes Valley Reservoir | 48.5 | 30.0 | 40.0 | 61.6 |
| Millsite | 8.3 | 4.7 | 10.4 | 16.7 |
| Huntington North Reservoir | 4.1 | 4.1 | 3.8 | 4.2 |
| Cleveland Lake | 5.1 | 0.4 | | 5.4 |
| Miller Flat Reservoir | 2.7 | 0.1 | | 5.2 |
| Scofield Reservoir | 52.2 | 28.6 | 30.7 | 65.8 |
| Basin-wide Total | 113.1 | 67.4 | 84.9 | 148.3 |
| # of reservoirs | 4 | 4 | 4 | 4 |

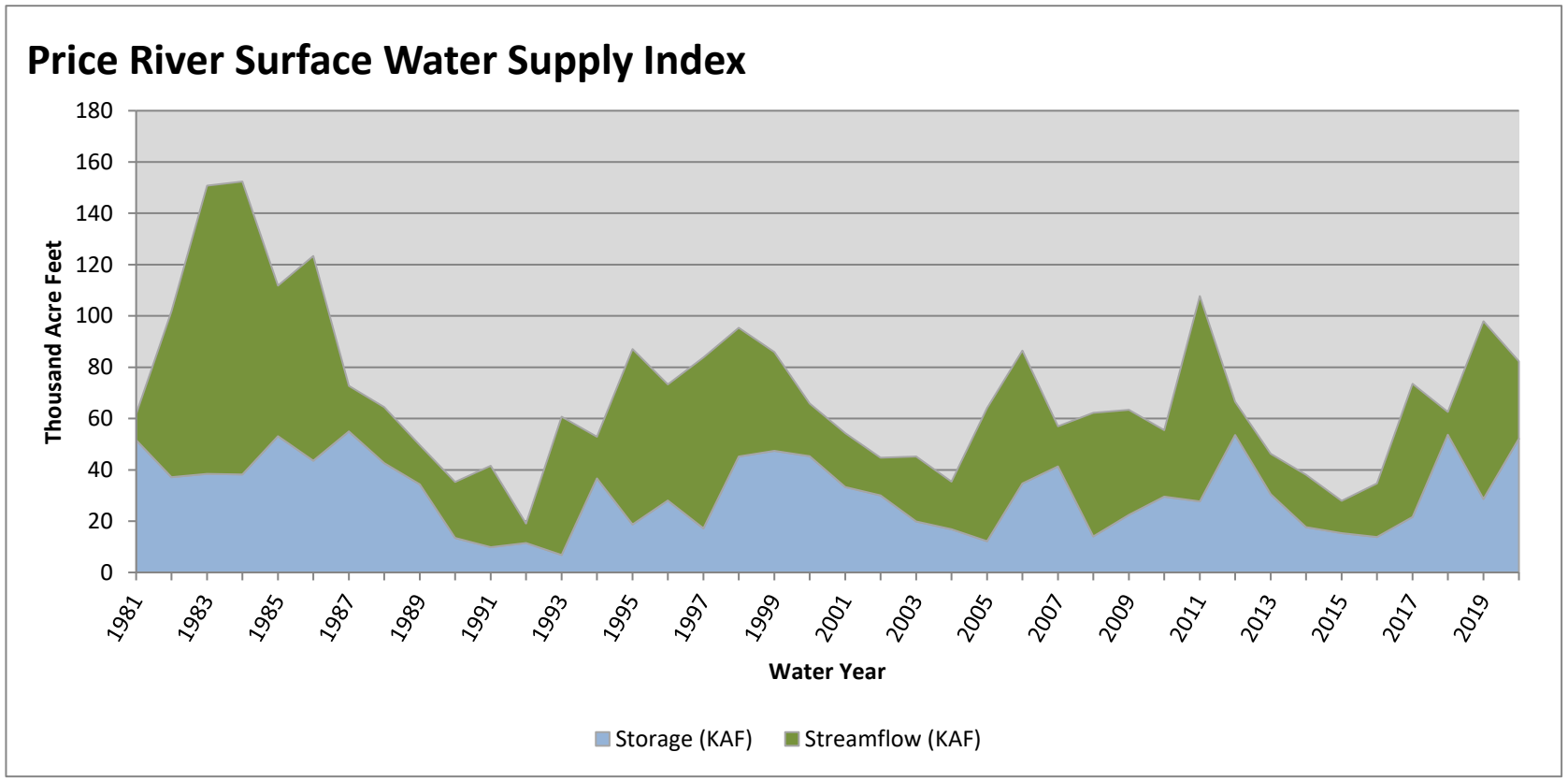
| Watershed Snowpack Analysis April 1, 2020 | # of Sites | % Median | Last Year % Median |
|---|---|---|---|
| Price River | 4 | 105% | 146% |
| San Rafael | 6 | 102% | 137% |

April 1, 2020

# Surface Water Supply Index

| Basin or Region | Mar EOM* Storage | APR-JUL Forecast | Storage + Forecast | Percentile | SWSI# | Years with similiar SWSI |
|---|---|---|---|---|---|---|
| | KAF^ | KAF^ | KAF^ | % | | |
| **Price River** | **52.24** | **30.00** | **82.24** | **68** | **1.52** | **96, 17, 97, 99** |

*EOM, end of month; #SWSI, Surface Water Supply Index; ^KAF, thousand acre-feet.

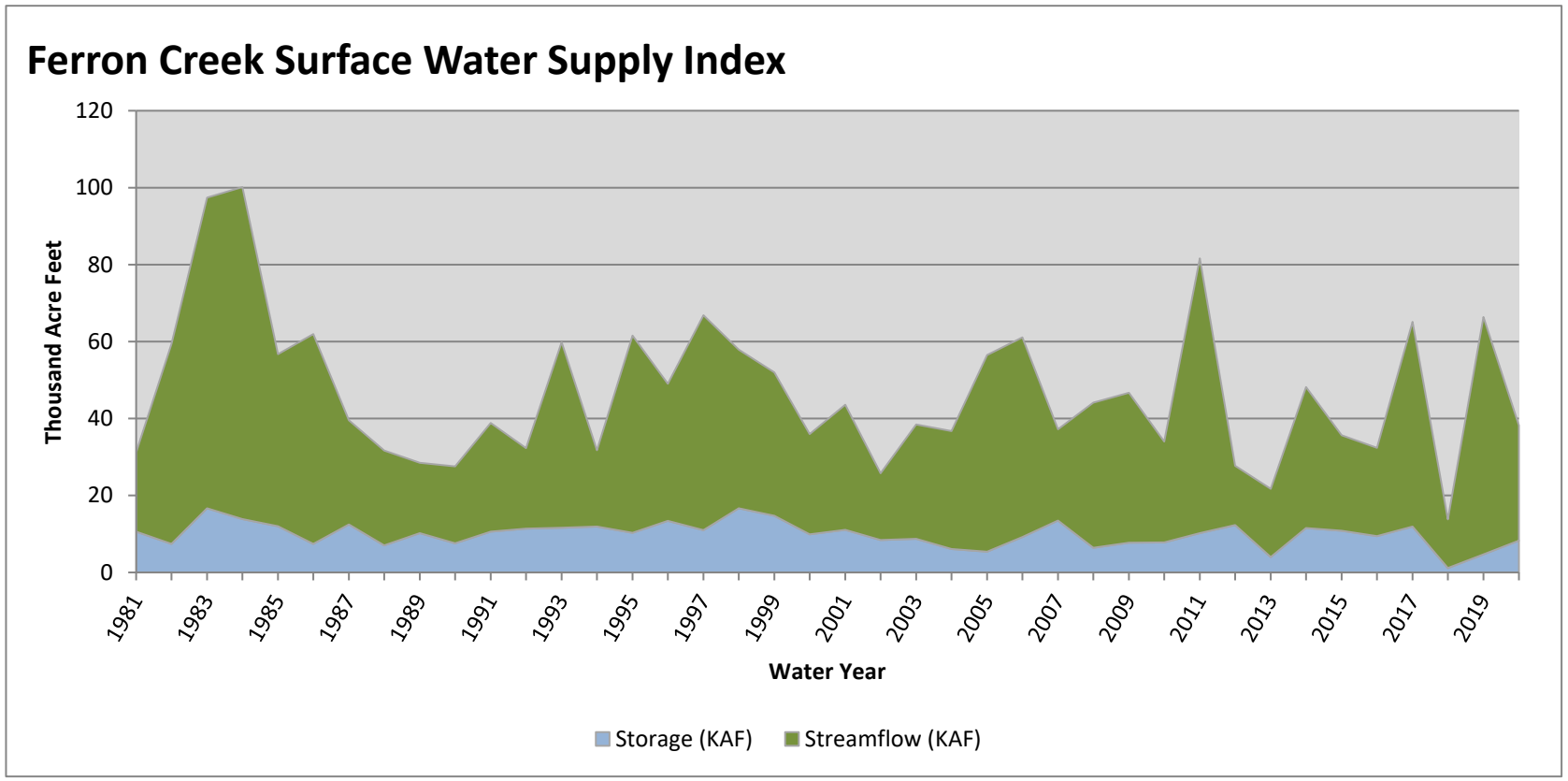


April 1, 2020

# Surface Water Supply Index

| Basin or Region | Mar EOM* Storage | APR-JUL Forecast | Storage + Forecast | Percentile | SWSI# | Years with similiar SWSI |
|---|---|---|---|---|---|---|
| | KAF^ | KAF^ | KAF^ | % | | |
| **Ferron Creek** | **8.25** | **30.00** | **38.25** | **41** | **-0.71** | **04, 07, 03, 91** |

*EOM, end of month; #SWSI, Surface Water Supply Index; ^KAF, thousand acre-feet.

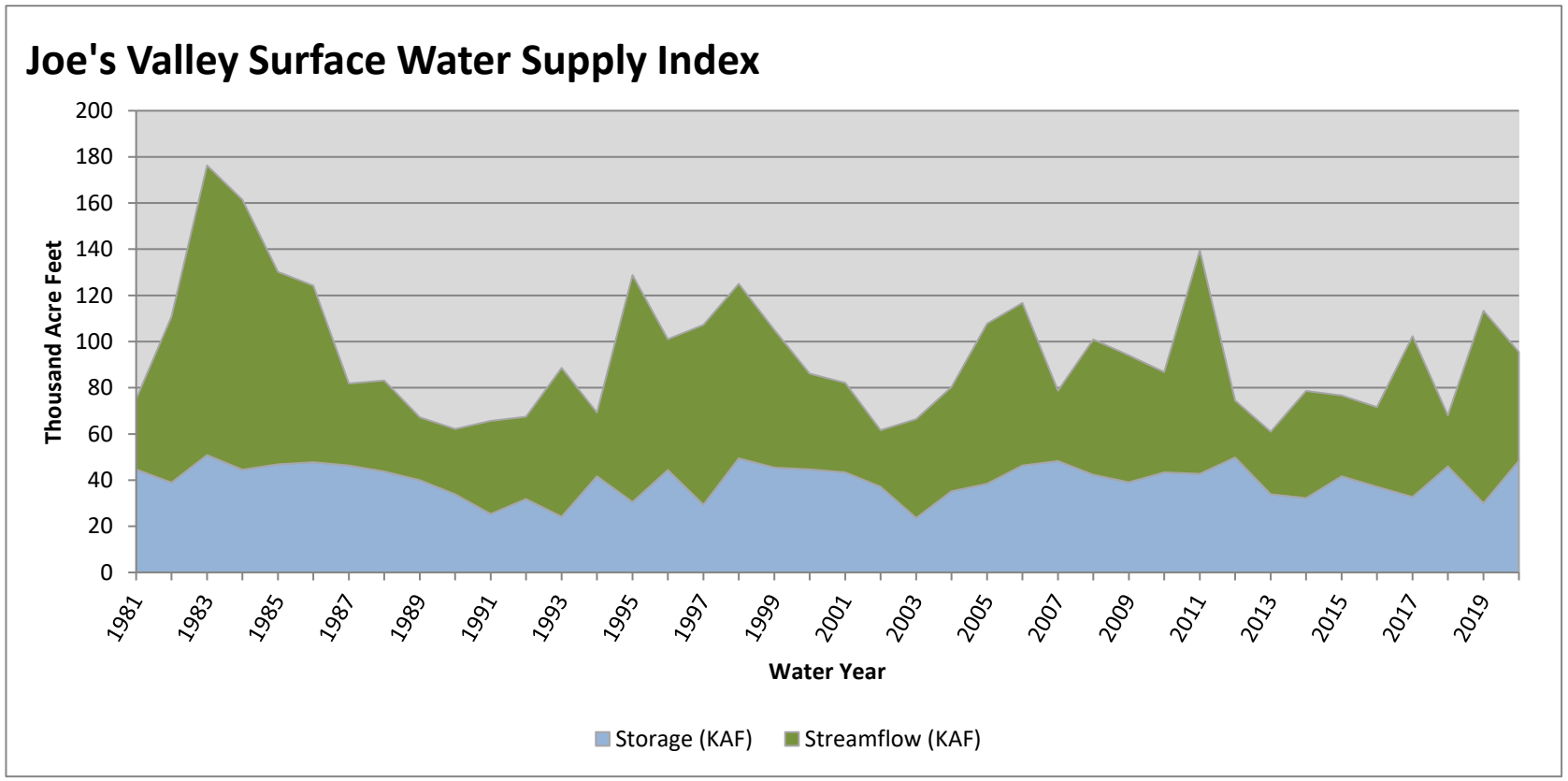


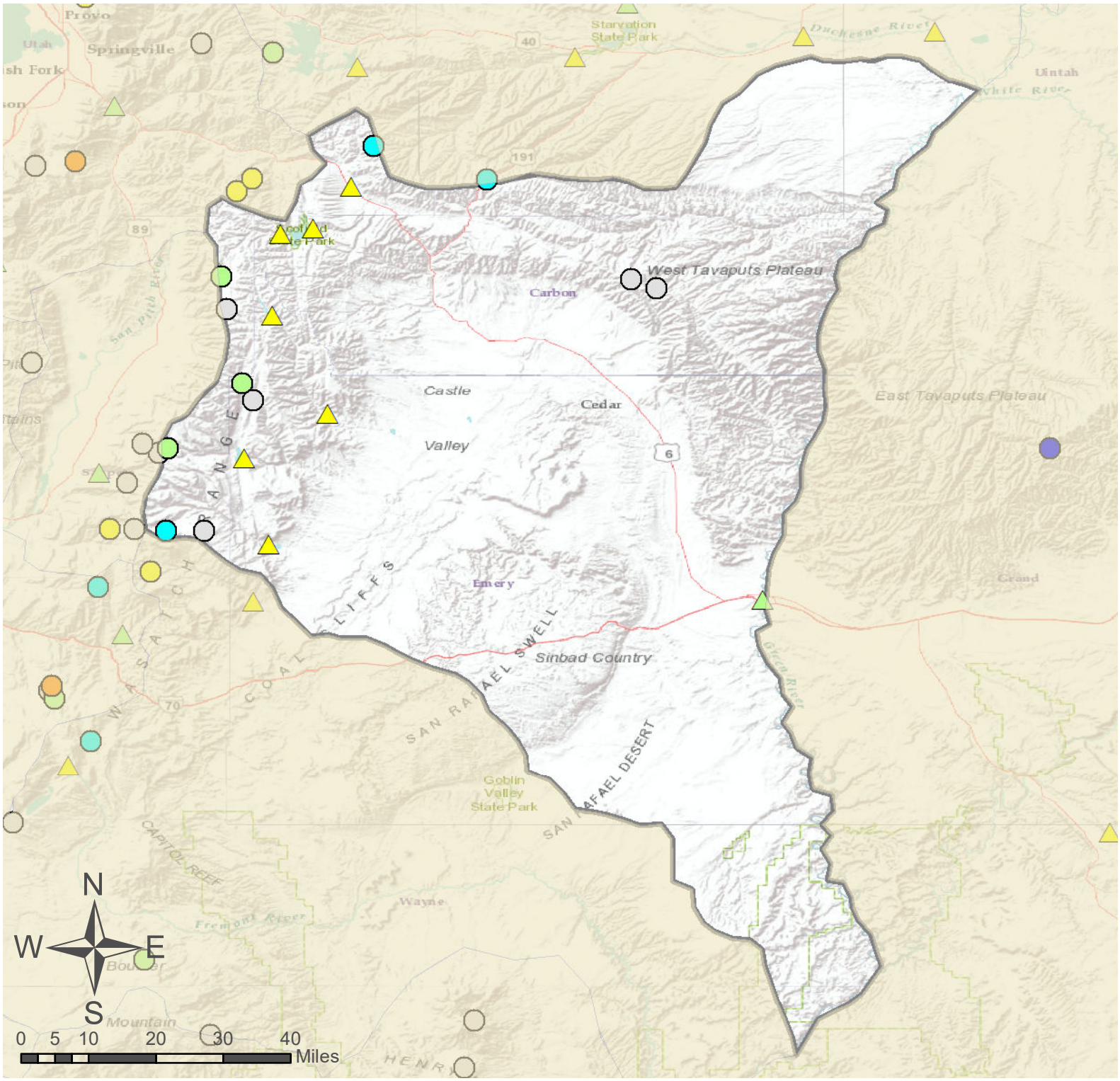
April 1, 2020

# Surface Water Supply Index

| Basin or Region | Mar EOM* Storage | APR-JUL Forecast | Storage + Forecast | Percentile | SWSI# | Years with similiar SWSI |
|---|---|---|---|---|---|---|
| | KAF^ | KAF^ | KAF^ | % | | |
| **Joe's Valley** | **48.46** | **47.00** | **95.46** | **59** | **0.71** | **93, 09, 08, 96** |

*EOM, end of month; #SWSI, Surface Water Supply Index; ^KAF, thousand acre-feet.





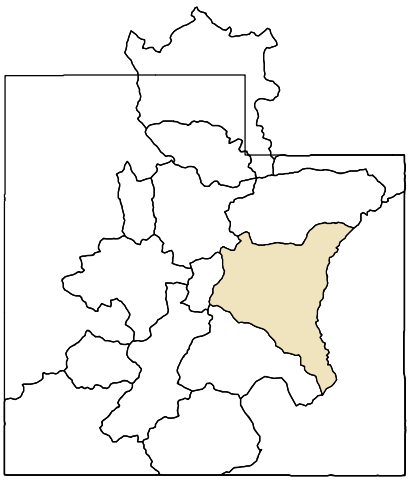

# Price & San Rafael Basins

SNOTEL Site

Forecast Point

**% of Normal**

- < 50%
- 50 - 69%
- 70 - 89%
- 90 - 109%
- 110 - 129%
- 130 - 149%
- > 150%
- No Normal



As of April 1, 2020:

101% of Normal SWE

89% of Normal Precipitation

84% of Normal Precipitation Last Month

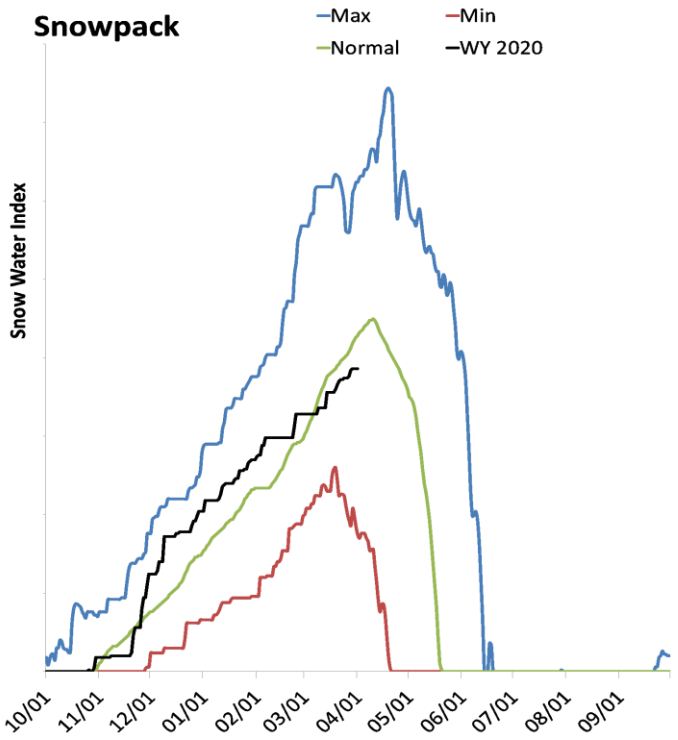
47% Saturation Soil Moisture

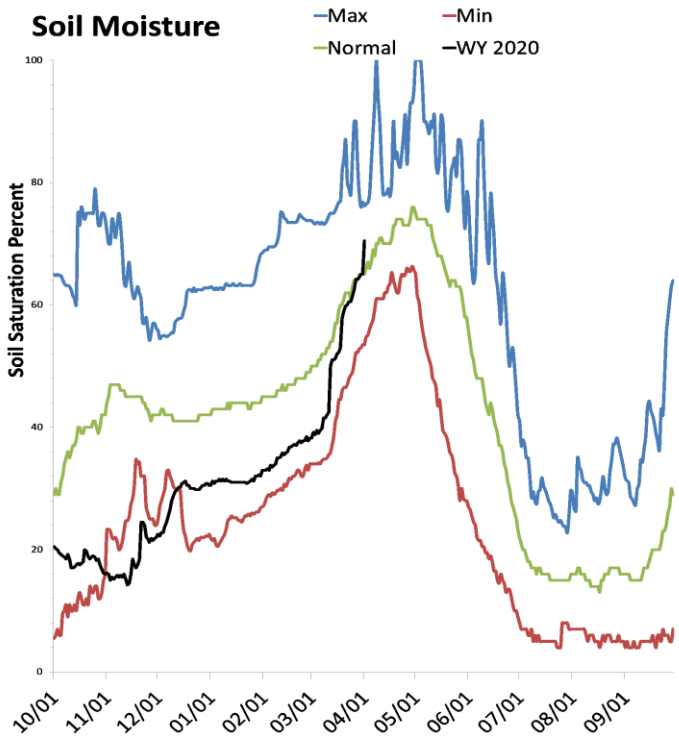
Price & San Rafael Basins

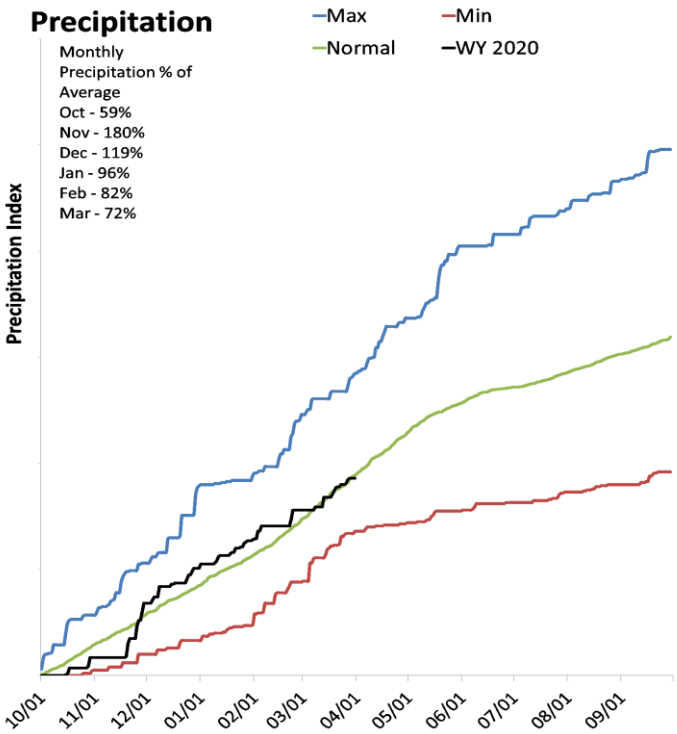
# Lower Sevier Basin

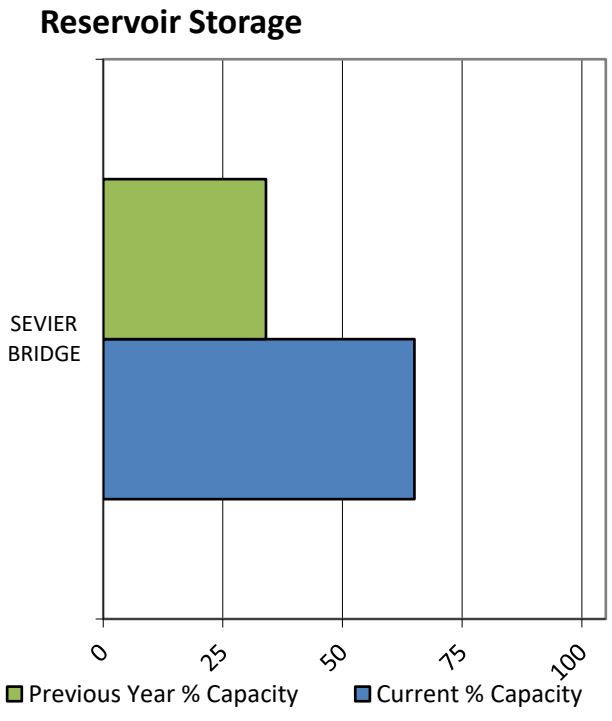
April 1, 2020

Snowpack in the Lower Sevier Basin is near normal at 90% of normal, compared to 130% last year. Precipitation in March was below average at 71%, which brings the seasonal accumulation (Oct-Mar) to 98% of average. Soil moisture is at 66% compared to 57% last year. Reservoir storage is at 65% of capacity, compared to 34% last year. The forecast streamflow volume for the Lower Sevier River near Gunnison is 107% of average. The surface water supply index is 59% for the Lower Sevier.




SNOTEL Data

Data Current as of: 4/3/2020 2:45:54 PM

# Lower Sevier
## Streamflow Forecasts - April 1, 2020

| Lower Sevier | Forecast Period | 90% (KAF) | 70% (KAF) | 50% (KAF) | % Avg | 30% (KAF) | 10% (KAF) | 30yr Avg (KAF) |
|---|---|---|---|---|---|---|---|---|
| | | Forecast Exceedance Probabilities for Risk Assessment<br>Chance that actual volume will exceed forecast | | | | | | |
| Chicken Ck nr Levan<br>Sevier R nr Gunnison<br>Oak Ck nr Oak City | APR-JUL | 60 | 88 | 106 | 107% | 124 | 152 | 99 |

1) 90% and 10% exceedance probabilities are actually 95% and 5%
2) Forecasts are for unimpaired flows. Actual flow will be dependent on management of upstream reservoirs and diversions
3) Median value used in place of average

| Reservoir Storage End of March, 2020 | Current (KAF) | Last Year (KAF) | Average (KAF) | Capacity (KAF) |
|---|---|---|---|---|
| Sevier Bridge Reservoir | 154.5 | 79.3 | 181.9 | 236.0 |
| Basin-wide Total | 154.5 | 79.3 | 181.9 | 236.0 |
| # of reservoirs | 1 | 1 | 1 | 1 |

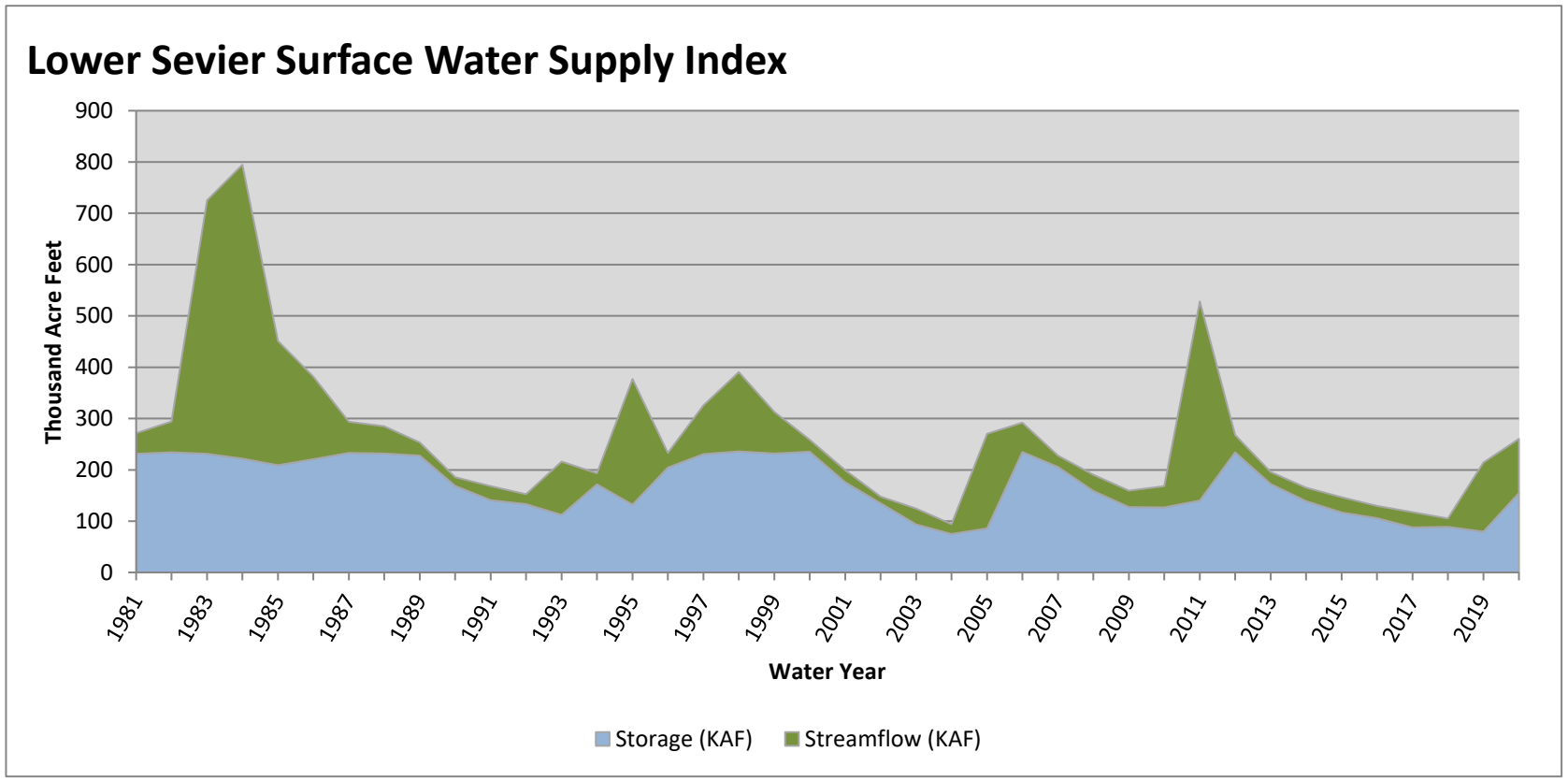
| Watershed Snowpack Analysis April 1, 2020 | # of Sites | % Median | Last Year % Median |
|---|---|---|---|
| Lower Sevier | 1 | 90% | 130% |

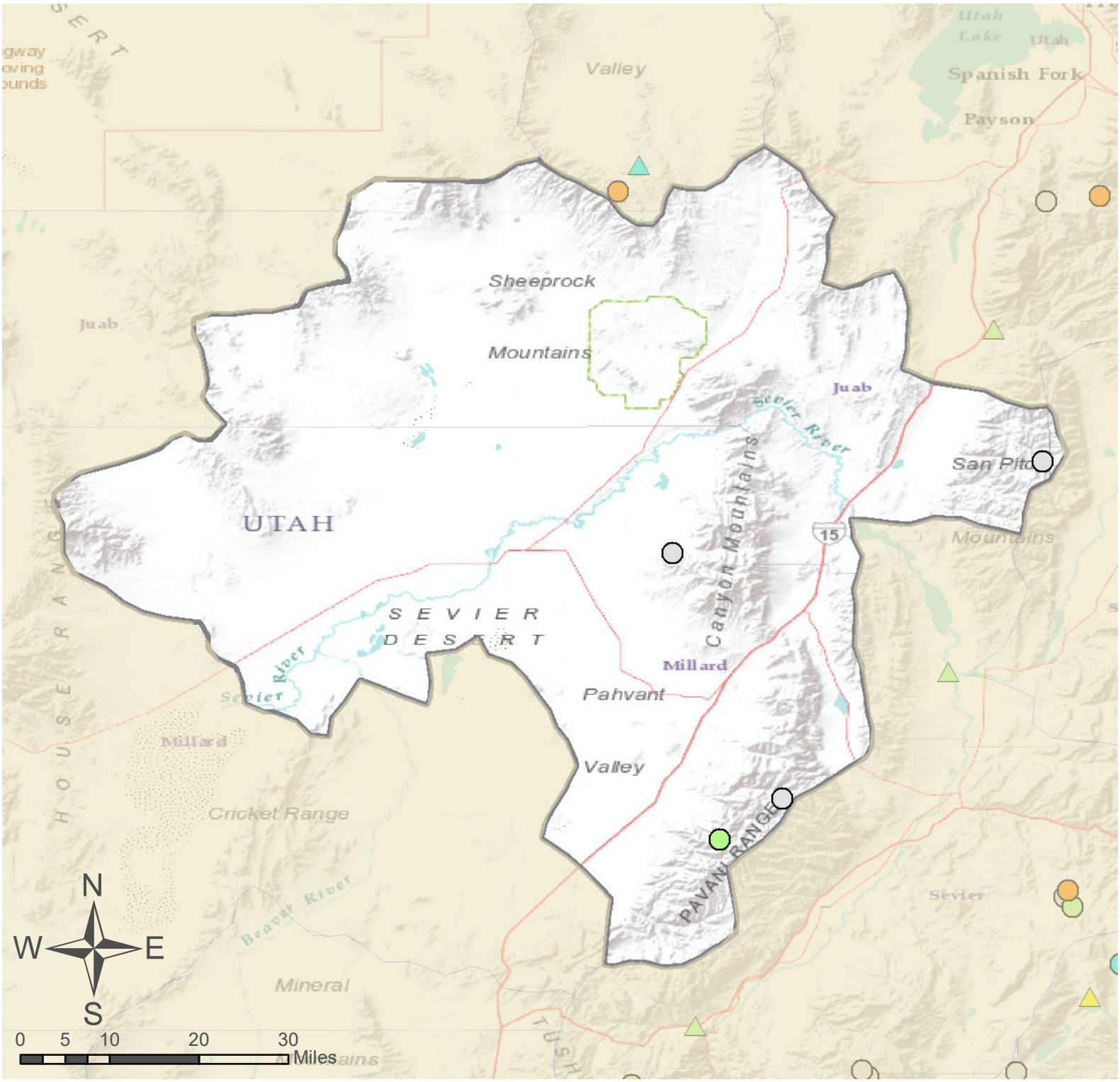
April 1, 2020

# Surface Water Supply Index

| Basin or Region | Mar EOM* Storage | APR-JUL Forecast | Storage + Forecast | Percentile | SWSI# | Years with similiar SWSI |
|---|---|---|---|---|---|---|
| | KAF^ | KAF^ | KAF^ | % | | |
| **Lower Sevier** | **154.52** | **106.00** | **260.52** | **59** | **0.71** | **89, 00, 12, 05** |

*EOM, end of month; #SWSI, Surface Water Supply Index; ^KAF, thousand acre-feet.





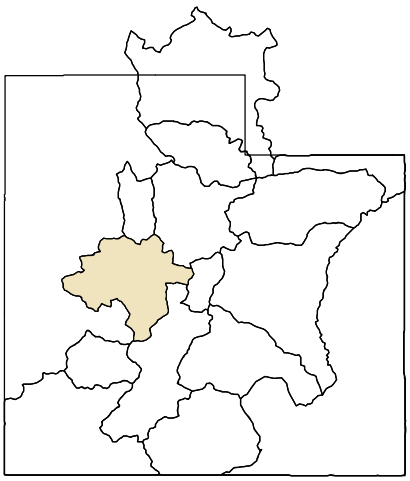

# Lower Sevier Basin

SNOTEL Site

Forecast Point

**% of Normal**

- < 50%
- 50 - 69%
- 70 - 89%
- 90 - 109%
- 110 - 129%
- 130 - 149%
- > 150%
- No Normal



As of April 1, 2020:

90% of Normal SWE

98% of Normal Precipitation

71% of Normal Precipitation Last Month

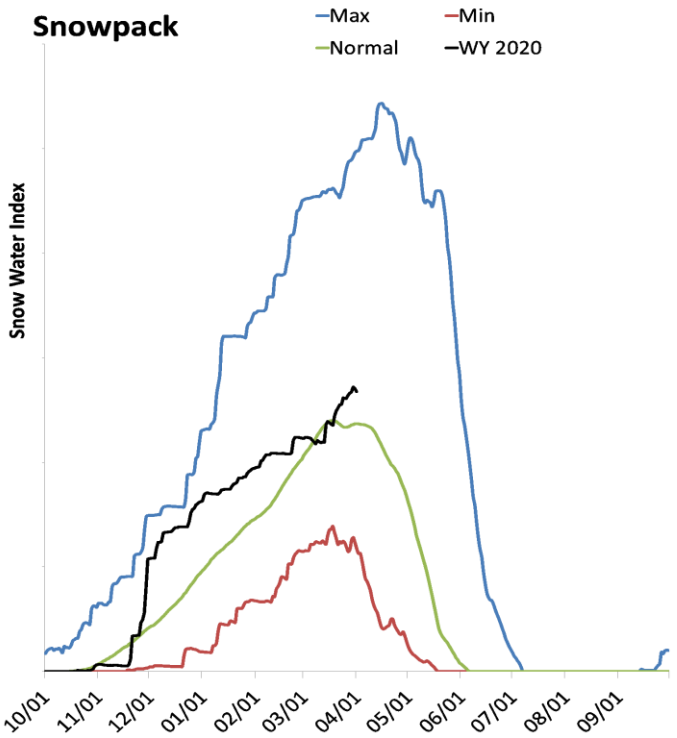
66% Saturation Soil Moisture

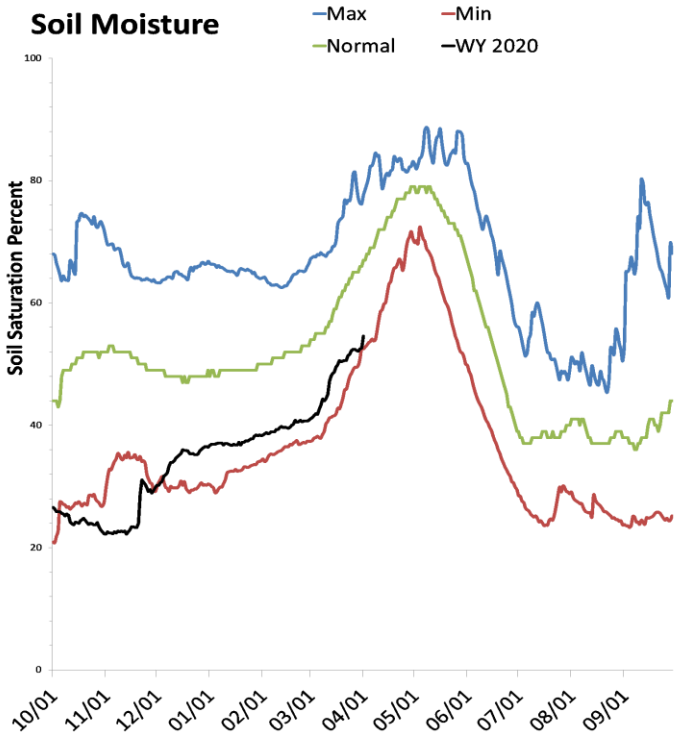
Lower Sevier Basin

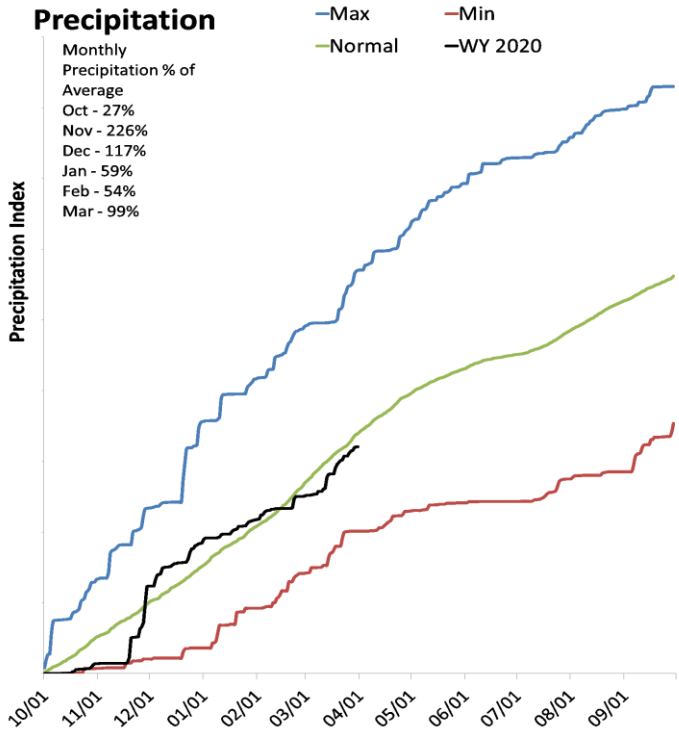
# Upper Sevier Basin

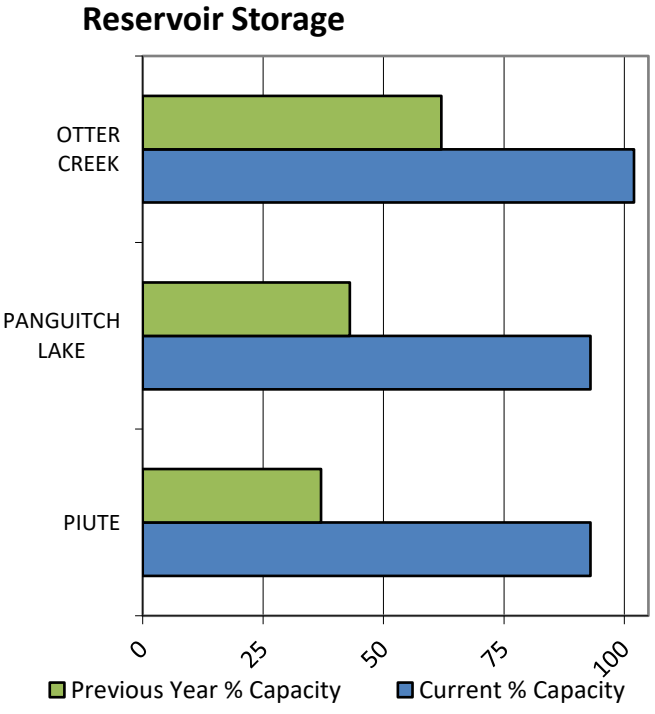
April 1, 2020

Snowpack in the Upper Sevier Basin is above normal at 113% of normal, compared to 163% last year. Precipitation in March was near average at 99%, which brings the seasonal accumulation (Oct-Mar) to 94% of average. Soil moisture is at 53% compared to 54% last year. Reservoir storage is at 96% of capacity, compared to 47% last year. Forecast streamflow volumes range from 99% to 136% of average. The surface water supply index is 83% for the Upper Sevier.




SNOTEL Data

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# Upper Sevier
# Streamflow Forecasts - April 1, 2020

| | | Forecast Exceedance Probabilities for Risk Assessment<br>Chance that actual volume will exceed forecast | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Upper Sevier** | Forecast Period | 90% (KAF) | 70% (KAF) | 50% (KAF) | % Avg | 30% (KAF) | 10% (KAF) | 30yr Avg (KAF) |
| Mammoth Ck nr Hatch | APR-JUL | 1.62 | 14.7 | 35 | 130% | 43 | 58 | 27 |
| Sevier R at Hatch | APR-JUL | 43 | 52 | 58 | 121% | 64 | 73 | 48 |
| EF Sevier R nr Kingston | APR-JUL | 22 | 33 | 41 | 117% | 49 | 60 | 35 |
| Sevier R nr Kingston | APR-JUL | 23 | 36 | 45 | 136% | 54 | 67 | 33 |
| Sevier R bl Piute Dam | APR-JUL | 33 | 61 | 81 | 123% | 101 | 129 | 66 |
| Clear Ck ab Diversions nr Sevier | APR-JUL | 13.8 | 18.7 | 22 | 105% | 25 | 30 | 21 |
| Salina Ck nr Emery | APR-JUL | 3 | 5.9 | 7.8 | 99% | 9.7 | 12.6 | 7.9 |

1) 90% and 10% exceedance probabilities are actually 95% and 5%
2) Forecasts are for unimpaired flows. Actual flow will be dependent on management of upstream reservoirs and diversions
3) Median value used in place of average

| **Reservoir Storage<br>End of March, 2020** | Current (KAF) | Last Year (KAF) | Average (KAF) | Capacity (KAF) |
|---|---|---|---|---|
| Piute Reservoir | 66.5 | 26.4 | 58.2 | 71.8 |
| Otter Creek Reservoir | 53.5 | 32.5 | 42.2 | 52.5 |
| Panguitch Lake | 20.7 | 9.7 | 14.5 | 22.3 |
| Basin-wide Total | 140.7 | 68.6 | 114.9 | 146.6 |
| # of reservoirs | 3 | 3 | 3 | 3 |

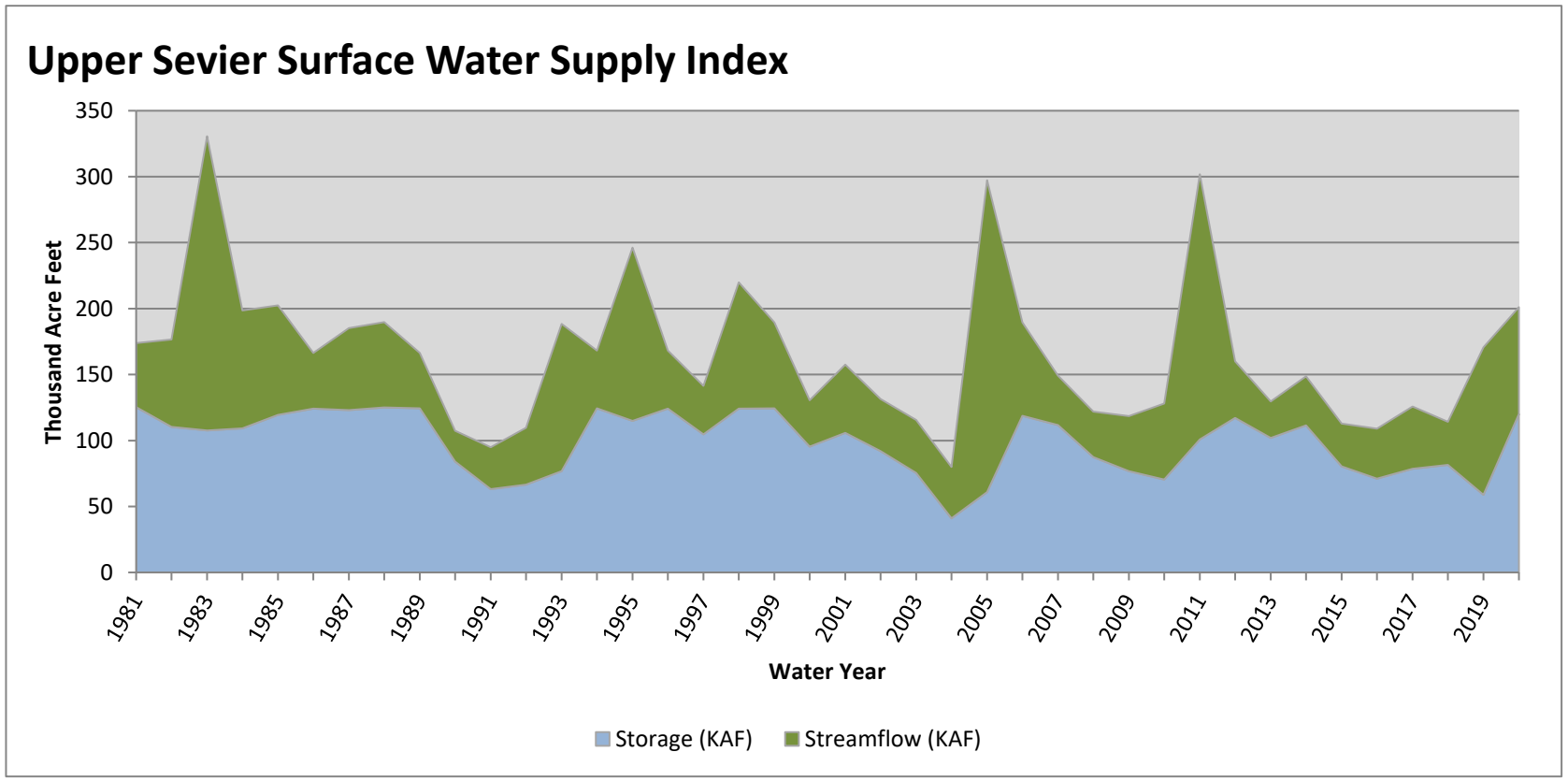
| **Watershed Snowpack Analysis<br>April 1, 2020** | # of Sites | % Median | Last Year % Median |
|---|---|---|---|
| Upper Sevier | 12 | 113% | 163% |
| Middle Sevier | 8 | 94% | 146% |
| East Fork Sevier River | 5 | 148% | 211% |

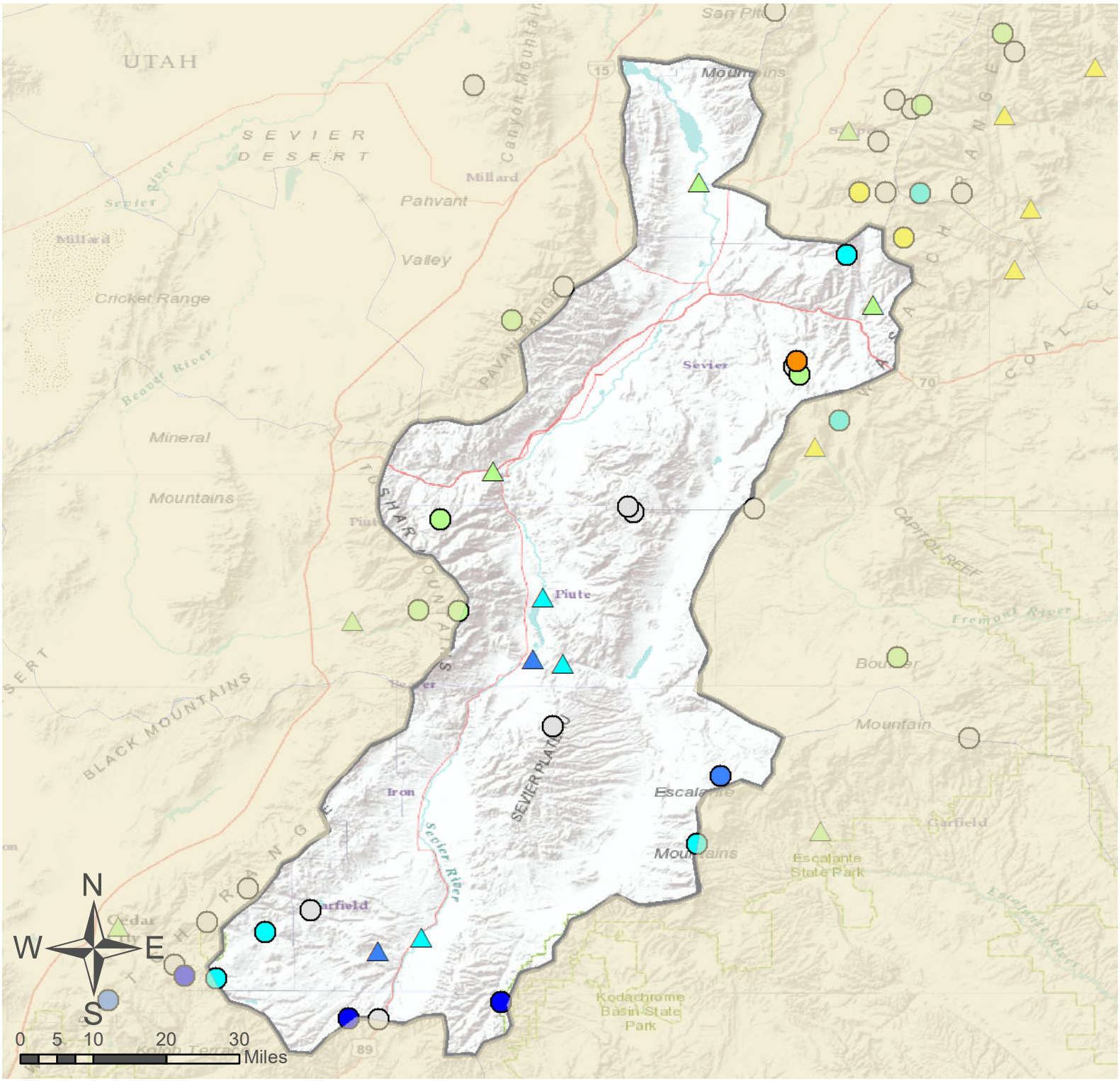
April 1, 2020

# Surface Water Supply Index

| Basin or Region | Mar EOM* Storage | APR-JUL Forecast | Storage + Forecast | Percentile | SWSI# | Years with similiar SWSI |
|---|---|---|---|---|---|---|
| | KAF^ | KAF^ | KAF^ | % | | |
| **Upper Sevier** | **120.00** | **81.00** | **201.00** | **83** | **2.74** | **88, 84, 85, 98** |

*EOM, end of month; #SWSI, Surface Water Supply Index; ^KAF, thousand acre-feet.





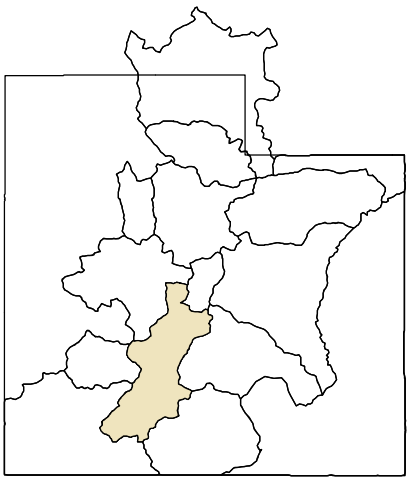

# Upper Sevier Basin

SNOTEL Site

Forecast Point

## % of Normal

- < 50%
- 50 - 69%
- 70 - 89%
- 90 - 109%
- 110 - 129%
- 130 - 149%
- > 150%
- No Normal



As of April 1, 2020:

113% of Normal SWE

94% of Normal Precipitation

99% of Normal Precipitation Last Month

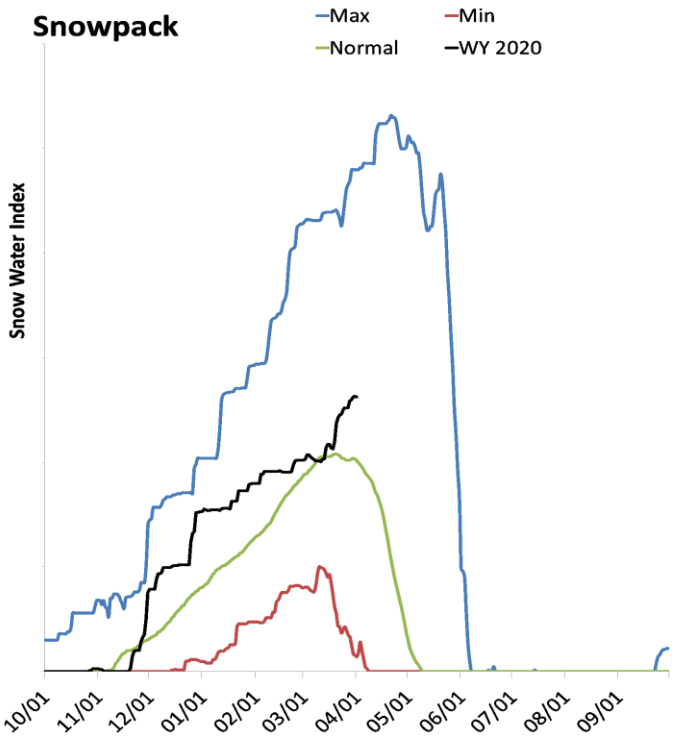
53% Saturation Soil Moisture

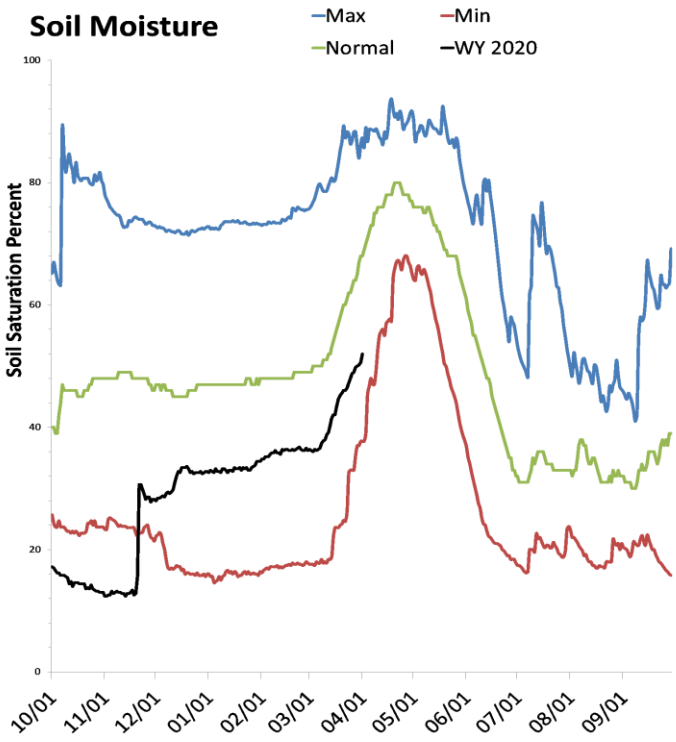
Upper Sevier Basin

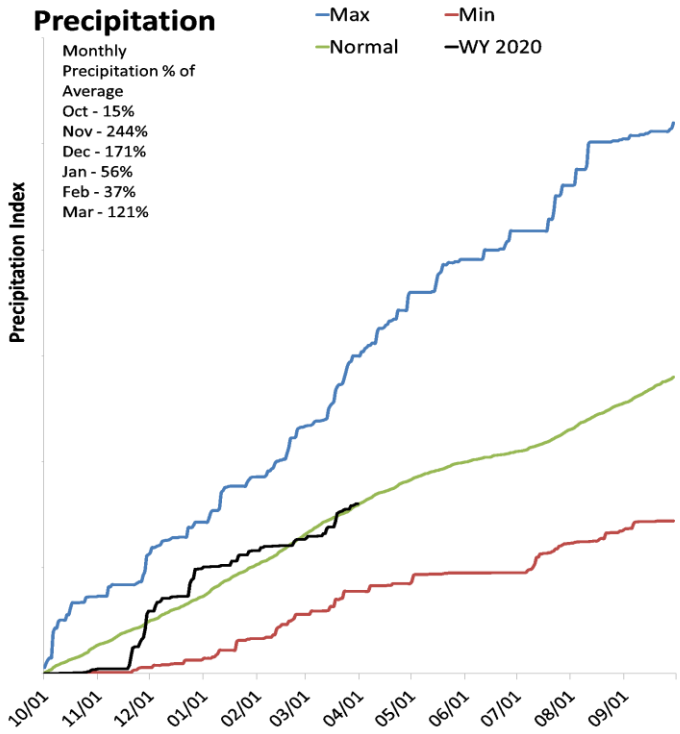
# Southeastern Utah

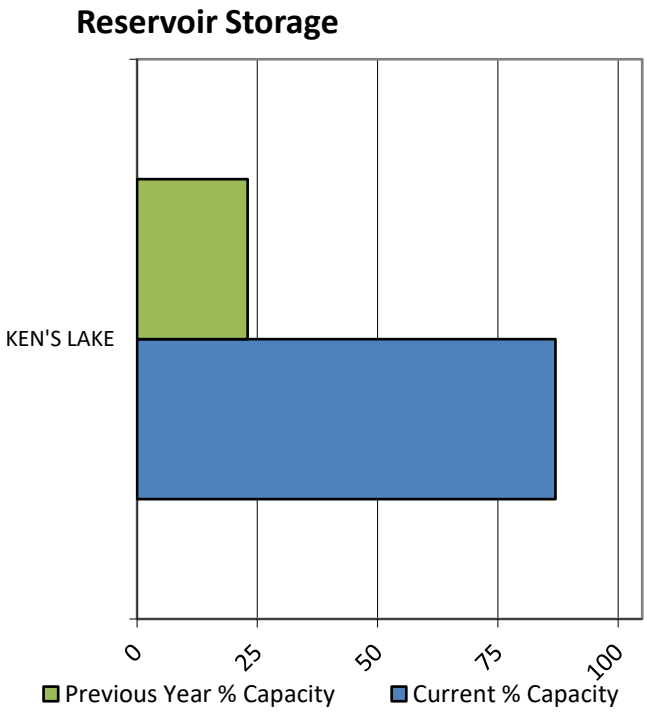
April 1, 2020

Snowpack in the Southeastern Utah is above normal at 130% of normal, compared to 203% last year. Precipitation in March was above average at 122%, which brings the seasonal accumulation (Oct-Mar) to 101% of average. Soil moisture is at 51% compared to 59% last year. Reservoir storage is at 87% of capacity, compared to 23% last year. Forecast streamflow volumes range from 63% to 91% of average. The surface water supply index is 62% for Moab.

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# Southeastern Utah
# Streamflow Forecasts - April 1, 2020

Forecast Exceedance Probabilities for Risk Assessment
Chance that actual volume will exceed forecast

| Southeastern Utah | Forecast Period | 90% (KAF) | 70% (KAF) | 50% (KAF) | % Avg | 30% (KAF) | 10% (KAF) | 30yr Avg (KAF) |
|---|---|---|---|---|---|---|---|---|
| Mill Ck at Sheley Tunnel nr Moab | | | | | | | | |
| | APR-JUL | 1.73 | 2.8 | 3.6 | 84% | 4.4 | 5.5 | 4.3 |
| South Ck ab Resv nr Monticello | | | | | | | | |
| | MAR-JUL | 0.43 | 0.71 | 0.97 | 89% | 1.29 | 1.88 | 1.09 |
| | APR-JUL | 0.36 | 0.64 | 0.9 | 91% | 1.22 | 1.81 | 0.99 |
| Colorado R nr Cisco [2] | | | | | | | | |
| | APR-JUL | 2470 | 3020 | 3420 | 80% | 3860 | 4540 | 4280 |
| San Juan R near Bluff [2] | | | | | | | | |
| | APR-JUL | 415 | 575 | 695 | 63% | 830 | 1050 | 1100 |

1) 90% and 10% exceedance probabilities are actually 95% and 5%
2) Forecasts are for unimpaired flows. Actual flow will be dependent on management of upstream reservoirs and diversions
3) Median value used in place of average

| Reservoir Storage End of March, 2020 | Current (KAF) | Last Year (KAF) | Average (KAF) | Capacity (KAF) |
|---|---|---|---|---|
| Ken's Lake | 2.0 | 0.5 | 1.3 | 2.3 |
| Basin-wide Total | 2.0 | 0.5 | 1.3 | 2.3 |
| # of reservoirs | 1 | 1 | 1 | 1 |

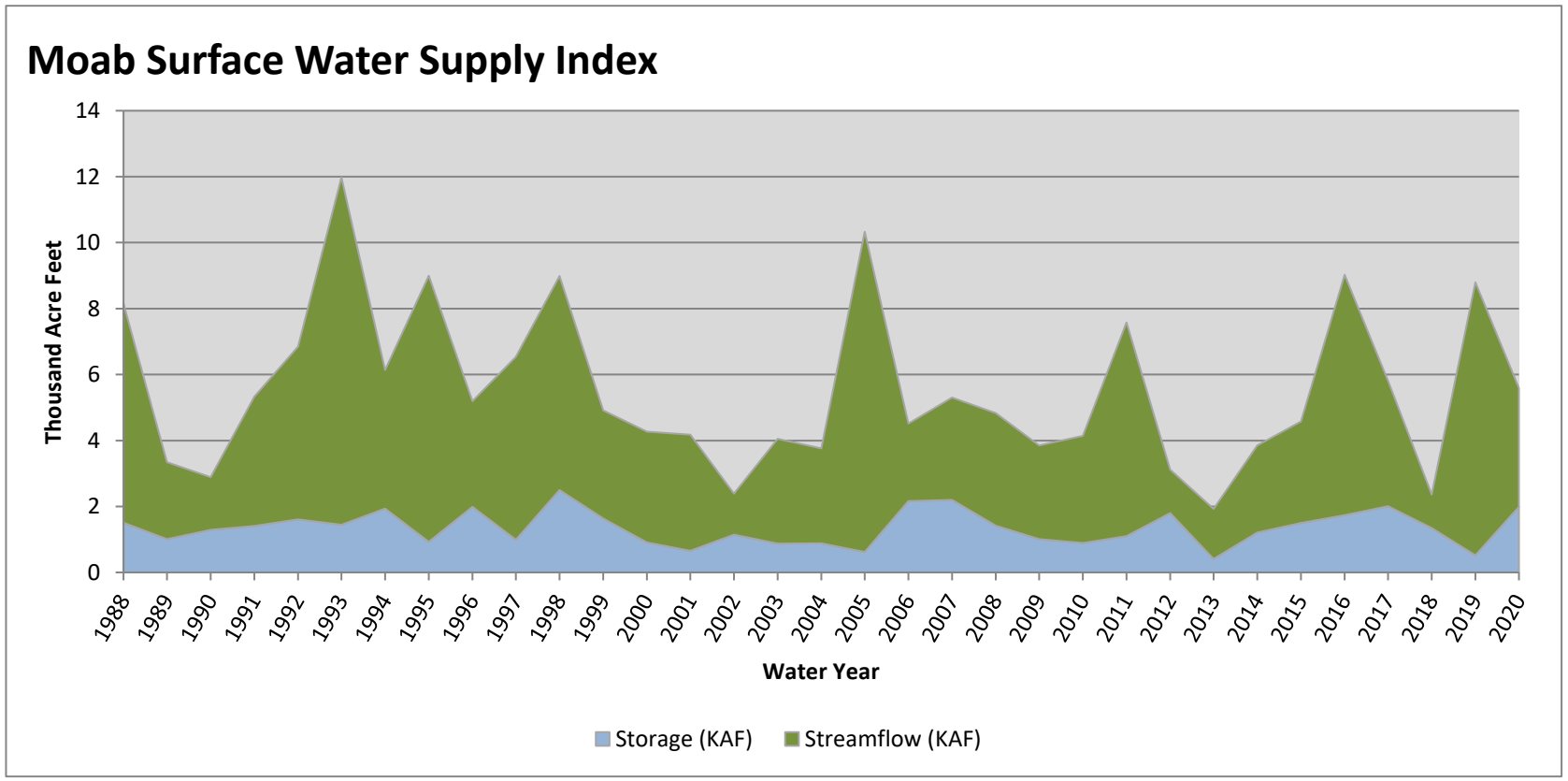
| Watershed Snowpack Analysis April 1, 2020 | # of Sites | % Median | Last Year % Median |
|---|---|---|---|
| Lasal Mountains | 2 | 99% | 187% |
| Lower San Juan | 2 | 139% | 209% |
| Lower Green | 2 | 135% | 166% |
| Henry Mountains | 0 | | |

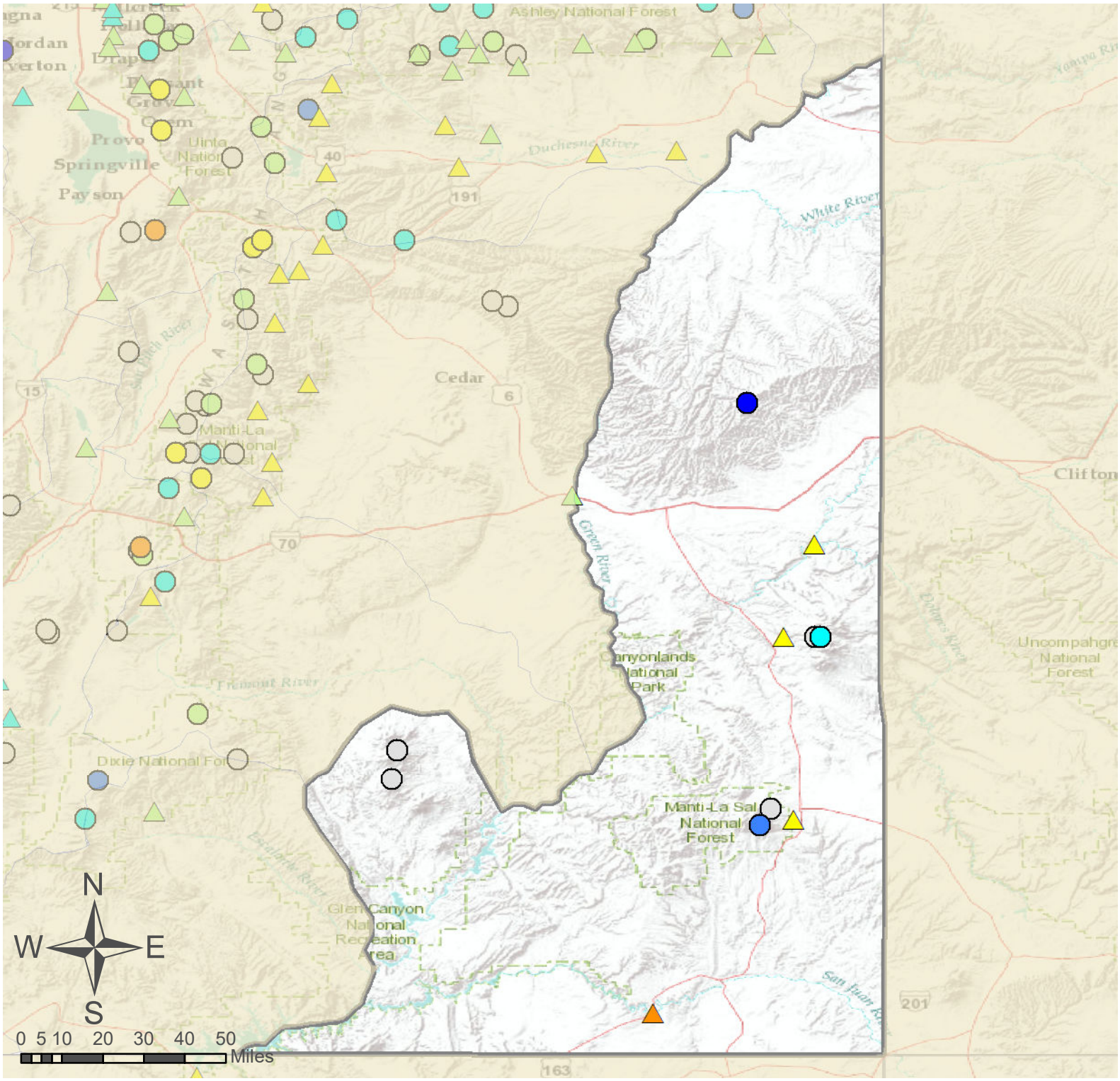
April 1, 2020

# Surface Water Supply Index

| Basin or Region | Mar EOM* Storage | APR-JUL Forecast | Storage + Forecast | Percentile | SWSI# | Years with similiar SWSI |
|---|---|---|---|---|---|---|
| | KAF^ | KAF^ | KAF^ | % | | |
| **Moab** | **1.99** | **3.60** | **5.59** | **62** | **0.98** | **07, 91, 17, 94** |

*EOM, end of month; #SWSI, Surface Water Supply Index; ^KAF, thousand acre-feet.





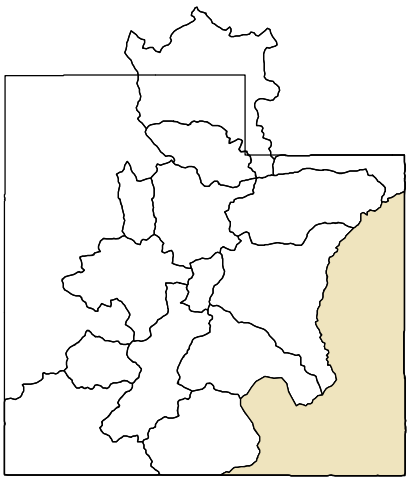

# Southeastern Utah

SNOTEL Site

Forecast Point

## % of Normal

- < 50%
- 50 - 69%
- 70 - 89%
- 90 - 109%
- 110 - 129%
- 130 - 149%
- > 150%
- No Normal



As of April 1, 2020:

130% of Normal SWE

101% of Normal Precipitation

122% of Normal Precipitation Last Month

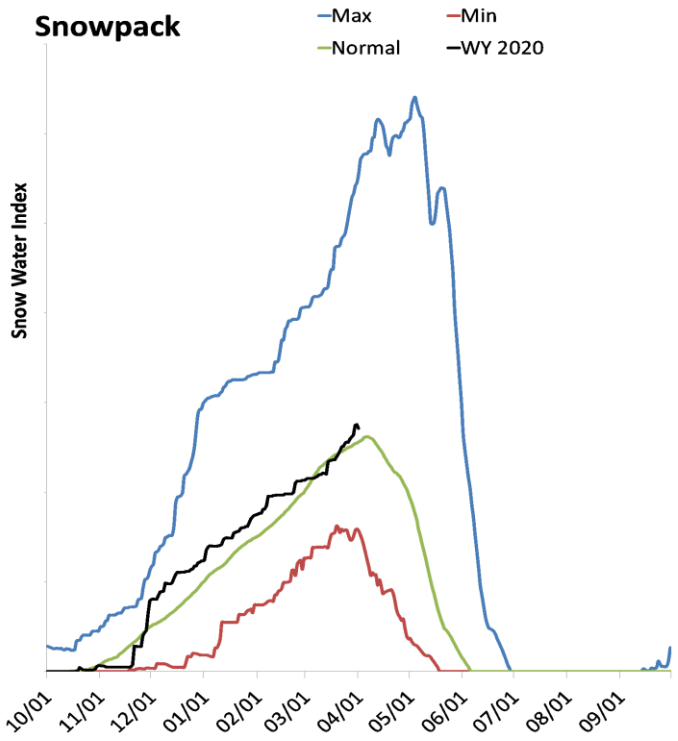
51% Saturation Soil Moisture

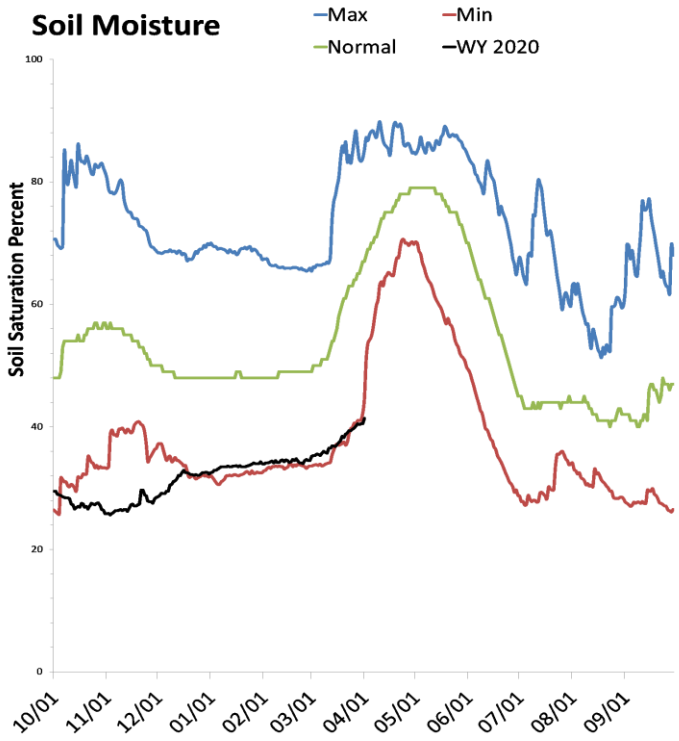
Southeastern Utah

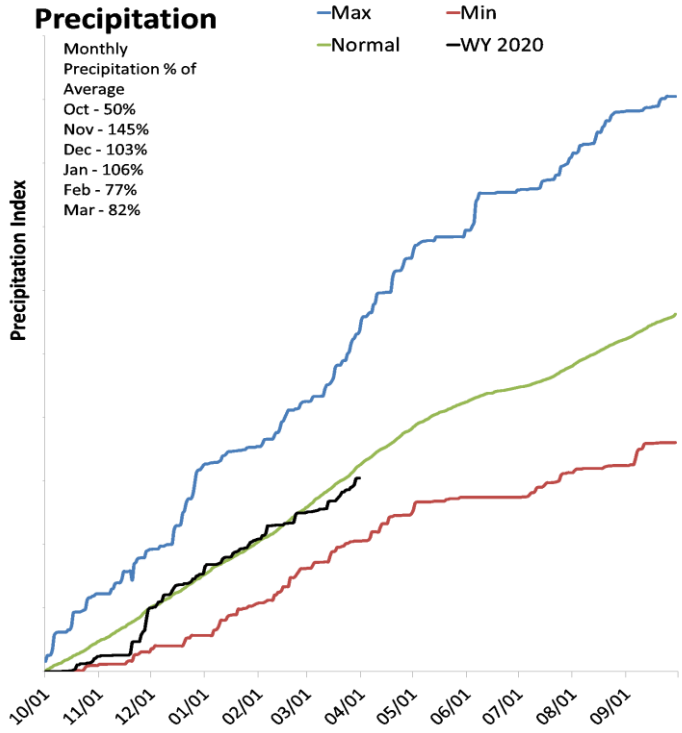
# Dirty Devil Basin

April 1, 2020

Snowpack in the Dirty Devil Basin is near normal at 106% of normal, compared to 142% last year. Precipitation in March was below average at 82%, which brings the seasonal accumulation (Oct-Mar) to 94% of average. Soil moisture is at 41% compared to 49% last year. Forecast streamflow volumes range from 73% to 77% of average.

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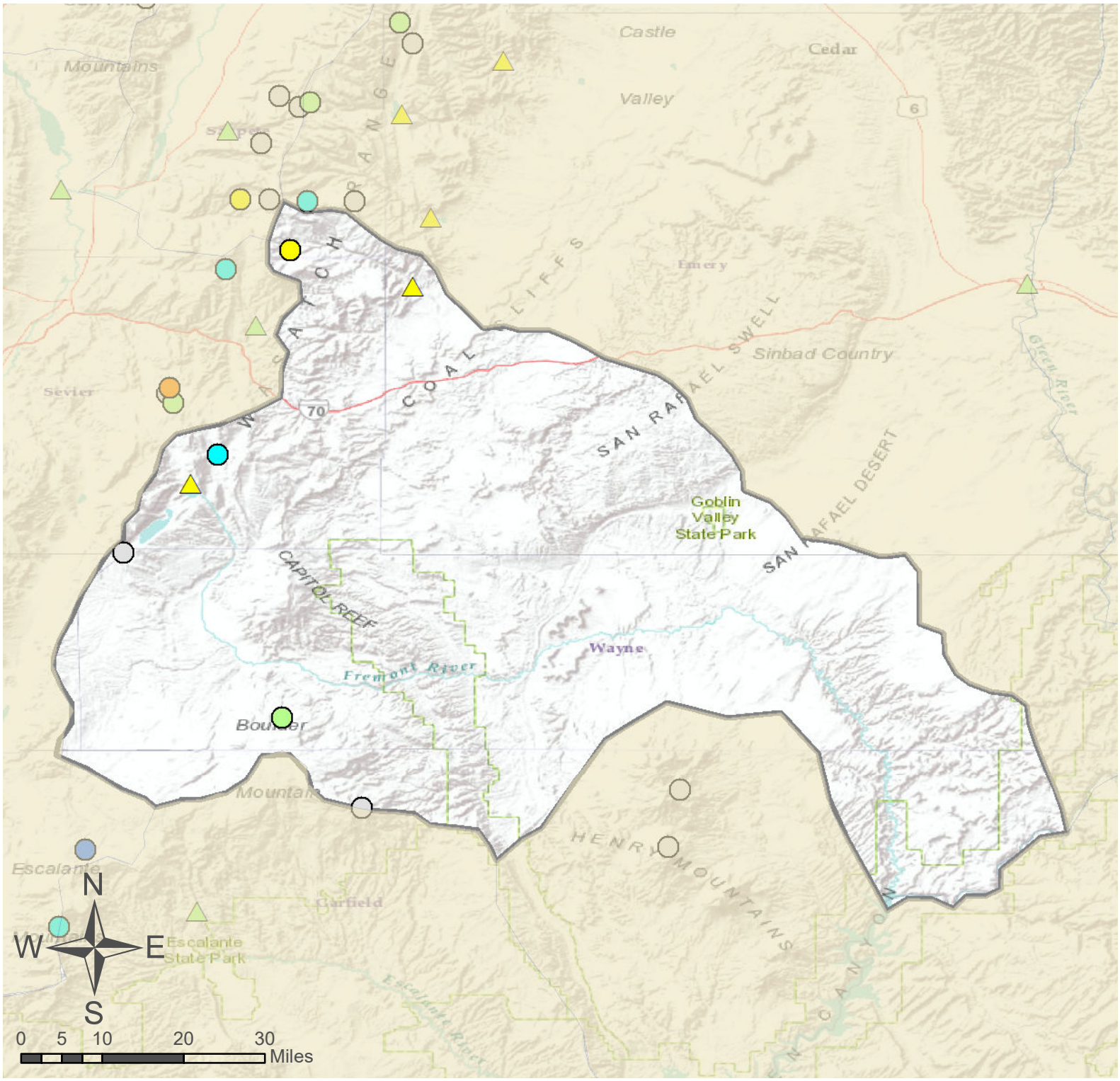
# Dirty Devil
## Streamflow Forecasts - April 1, 2020

| Dirty Devil | Forecast Period | 90% (KAF) | 70% (KAF) | 50% (KAF) | % Avg | 30% (KAF) | 10% (KAF) | 30yr Avg (KAF) |
|---|---|---|---|---|---|---|---|---|
| | | Forecast Exceedance Probabilities for Risk Assessment<br>Chance that actual volume will exceed forecast | | | | | | |
| Muddy Ck nr Emery | | | | | | | | |
| | APR-JUL | 8.5 | 11.9 | 14.5 | 73% | 17.4 | 22 | 19.9 |
| Seven Mile Ck nr Fish Lake | | | | | | | | |
| | APR-JUL | 3.2 | 4.6 | 5.6 | 77% | 6.8 | 8.7 | 7.3 |

1) 90% and 10% exceedance probabilities are actually 95% and 5%
2) Forecasts are for unimpaired flows. Actual flow will be dependent on management of upstream reservoirs and diversions
3) Median value used in place of average

| Watershed Snowpack Analysis<br>April 1, 2020 | # of Sites | % Median | Last Year % Median |
|---|---|---|---|
| Muddy Creek | 3 | 105% | 145% |
| Fremont River | 4 | 110% | 147% |
| Henry Mountains | 0 | | |



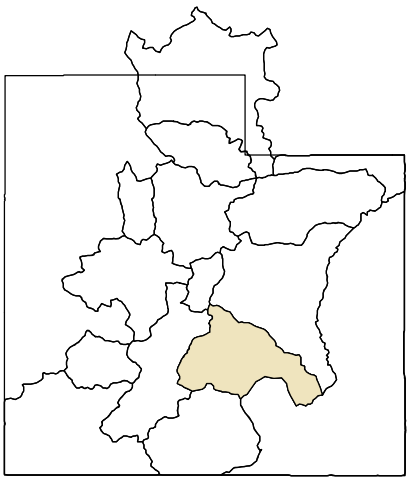

# Dirty Devil Basin

SNOTEL Site

Forecast Point

**% of Normal**

- < 50%
- 50 - 69%
- 70 - 89%
- 90 - 109%
- 110 - 129%
- 130 - 149%
- > 150%
- No Normal



As of April 1, 2020:

106% of Normal SWE

94% of Normal Precipitation

82% of Normal Precipitation Last Month

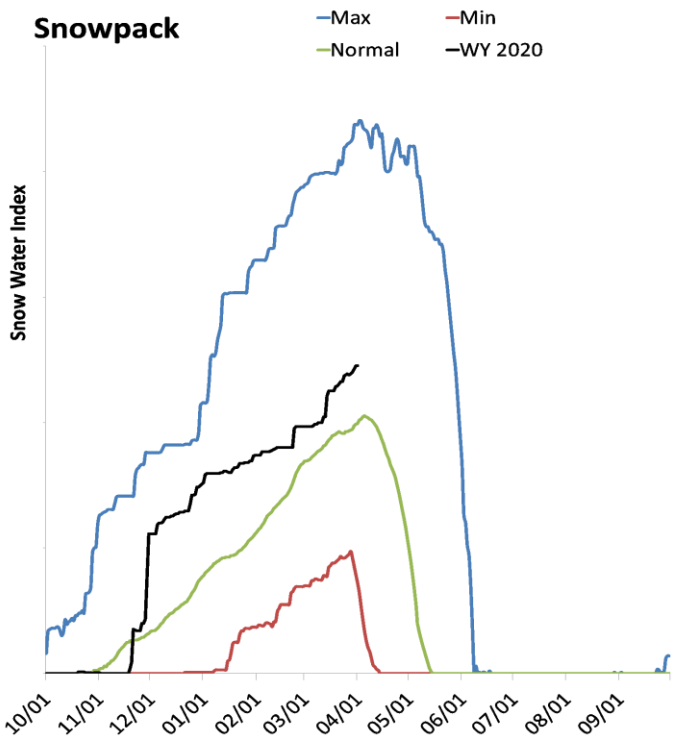
41% Saturation Soil Moisture

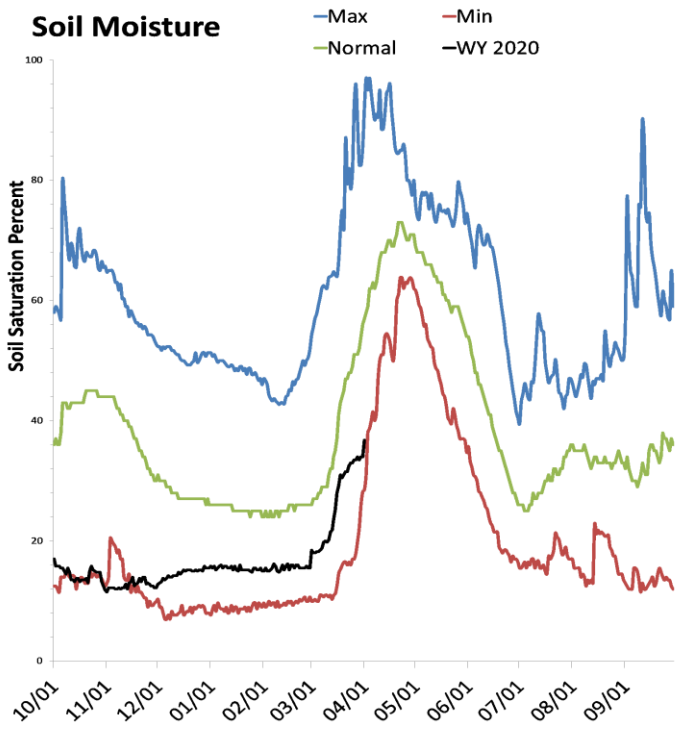
Dirty Devil Basin

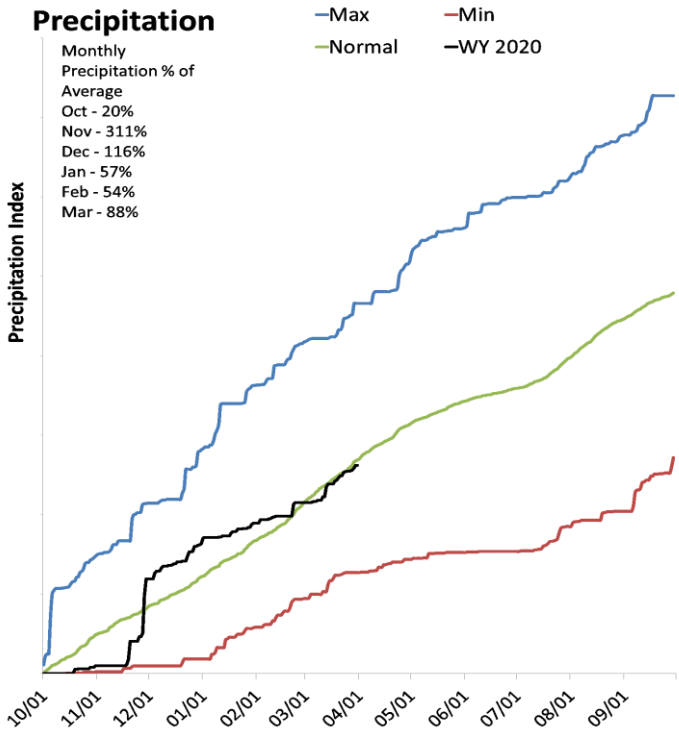
# Escalante River Basin

April 1, 2020

Snowpack in the Escalante River Basin is above normal at 123% of normal, compared to 142% last year. Precipitation in March was below average at 88%, which brings the seasonal accumulation (Oct-Mar) to 98% of average. Soil moisture is at 35% compared to 40% last year. The forecast streamflow volume for Pine Creek is 96% of average.




SNOTEL Data

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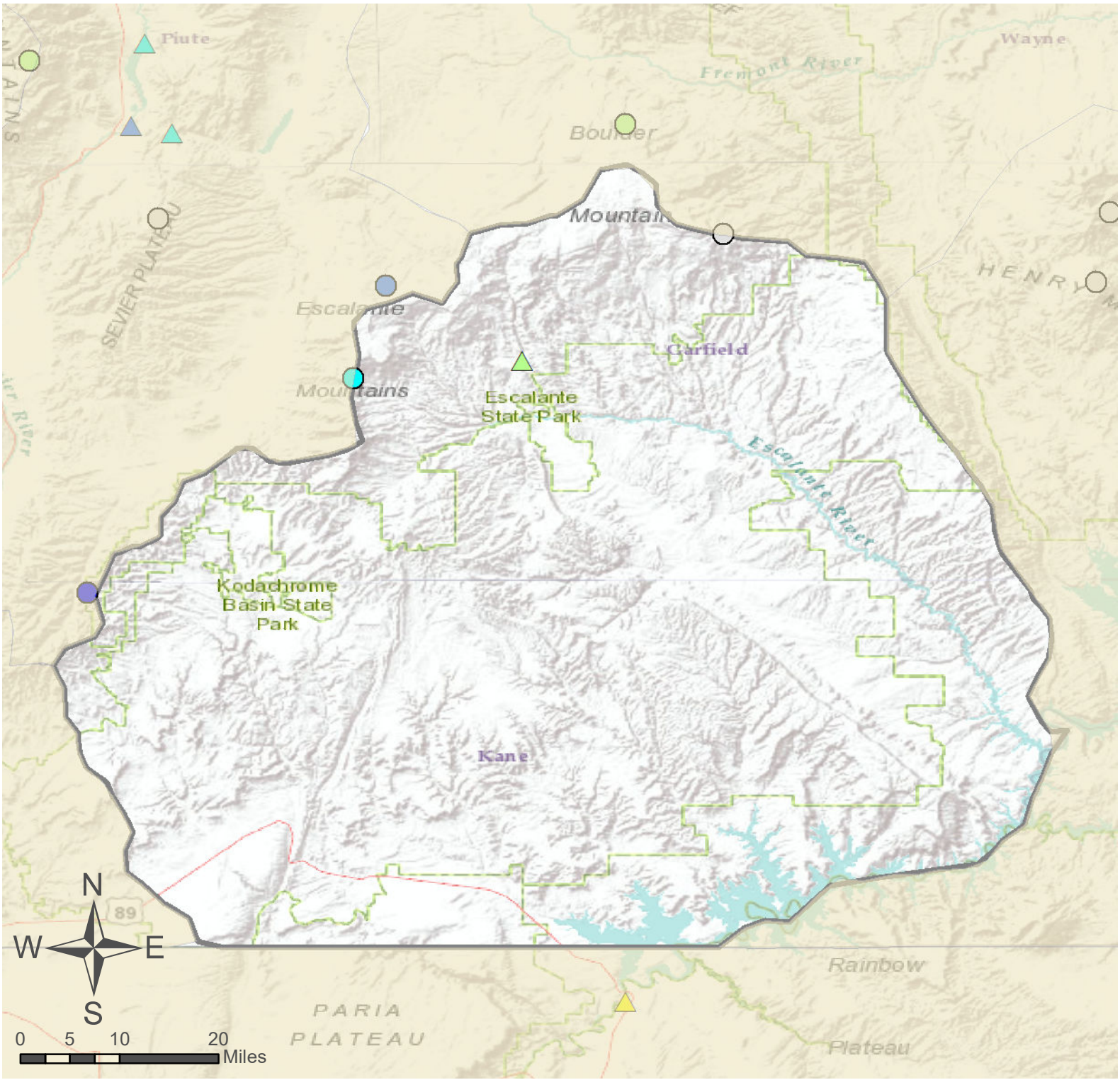
# Escalante River
# Streamflow Forecasts - April 1, 2020

| Escalante River | Forecast Period | 90% (KAF) | 70% (KAF) | 50% (KAF) | % Avg | 30% (KAF) | 10% (KAF) | 30yr Avg (KAF) |
|---|---|---|---|---|---|---|---|---|
| | | Forecast Exceedance Probabilities for Risk Assessment<br>Chance that actual volume will exceed forecast | | | | | | |
| Pine Ck nr Escalante | | | | | | | | |
| | APR-JUL | 1.06 | 1.72 | 2.3 | 96% | 2.9 | 3.9 | 2.4 |

1) 90% and 10% exceedance probabilities are actually 95% and 5%
2) Forecasts are for unimpaired flows. Actual flow will be dependent on management of upstream reservoirs and diversions
3) Median value used in place of average

| Watershed Snowpack Analysis April 1, 2020 | # of Sites | % Median | Last Year % Median |
|---|---|---|---|
| Escalante River | 3 | 123% | 142% |
| Paria River | 3 | 169% | 264% |



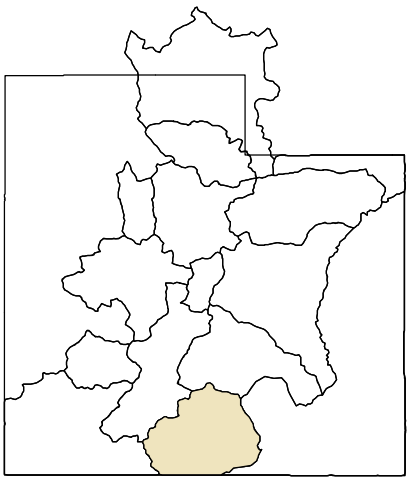

# Escalante River Basin

SNOTEL Site

Forecast Point

**% of Normal**

- < 50%
- 50 - 69%
- 70 - 89%
- 90 - 109%
- 110 - 129%
- 130 - 149%
- > 150%
- No Normal



As of April 1, 2020:

123% of Normal SWE

98% of Normal Precipitation

88% of Normal Precipitation Last Month

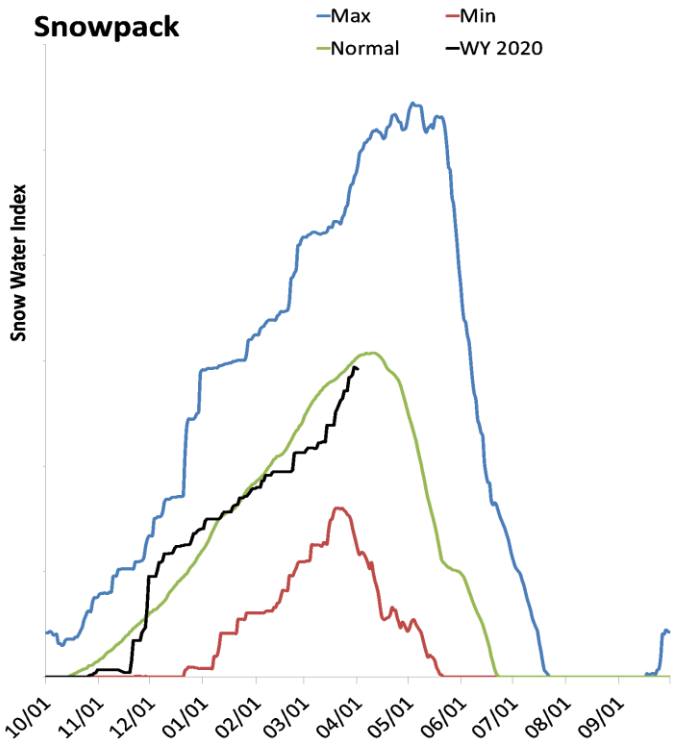
35% Saturation Soil Moisture

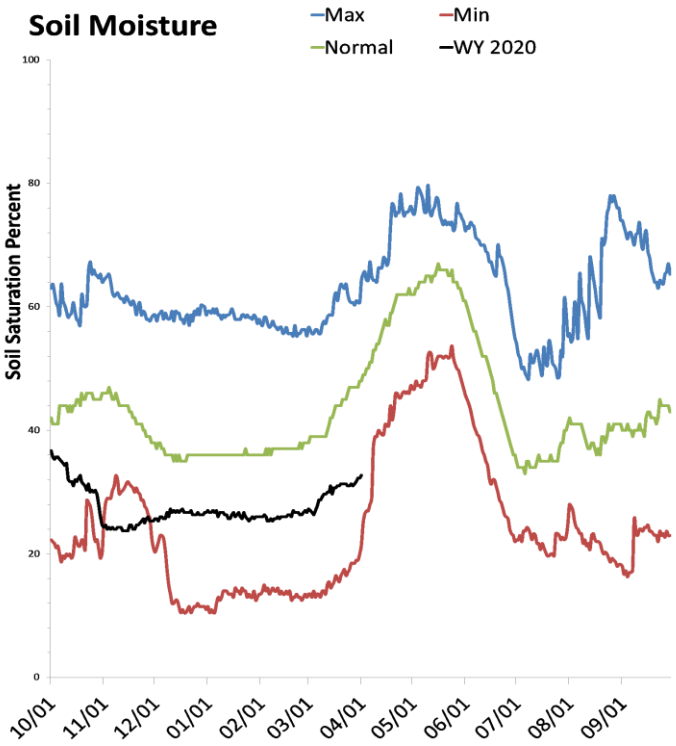
Escalante River Basin

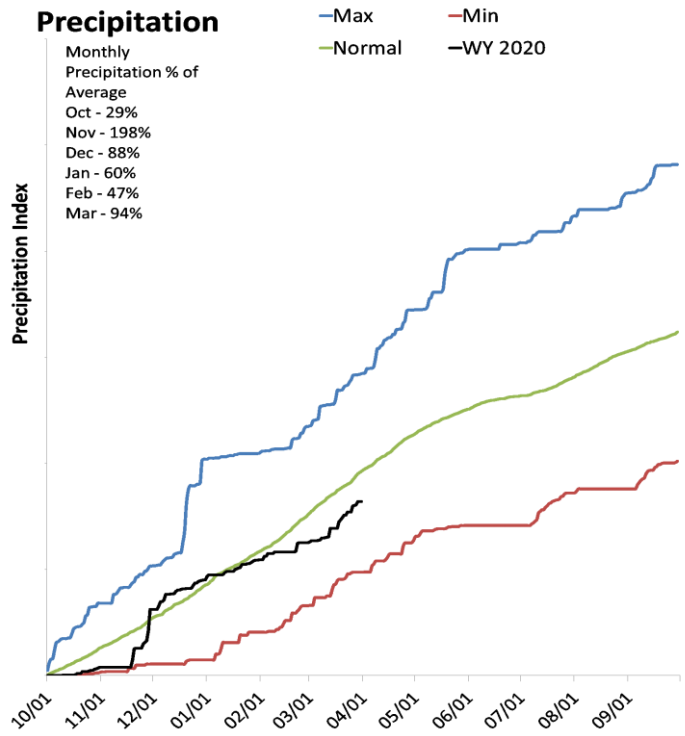
# Beaver River Basin

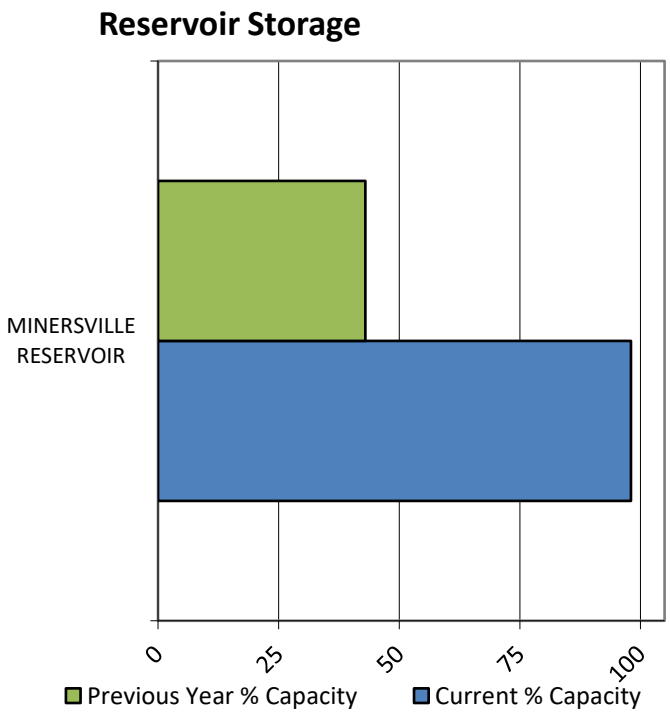
April 1, 2020

Snowpack in the Beaver River Basin is near normal at 96% of normal, compared to 155% last year. Precipitation in March was near average at 94%, which brings the seasonal accumulation (Oct-Mar) to 85% of average. Soil moisture is at 32% compared to 56% last year. Reservoir storage is at 98% of capacity, compared to 43% last year. The forecast streamflow volume for the Beaver River is 108% of average. The surface water supply index is 73% for the Beaver River.




SNOTEL Data

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# Beaver River
## Streamflow Forecasts - April 1, 2020

| | | Forecast Exceedance Probabilities for Risk Assessment<br>Chance that actual volume will exceed forecast | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Beaver River** | Forecast Period | 90% (KAF) | 70% (KAF) | 50% (KAF) | % Avg | 30% (KAF) | 10% (KAF) | 30yr Avg (KAF) |
| Beaver R nr Beaver | | | | | | | | |
| | APR-JUL | 14.7 | 23 | 28 | 108% | 33 | 41 | 26 |

1) 90% and 10% exceedance probabilities are actually 95% and 5%
2) Forecasts are for unimpaired flows. Actual flow will be dependent on management of upstream reservoirs and diversions
3) Median value used in place of average

| **Reservoir Storage<br>End of March, 2020** | Current (KAF) | Last Year (KAF) | Average (KAF) | Capacity (KAF) |
|---|---|---|---|---|
| Minersville Reservoir | 22.7 | 10.1 | 16.8 | 23.3 |
| Basin-wide Total | 22.7 | 10.1 | 16.8 | 23.3 |
| # of reservoirs | 1 | 1 | 1 | 1 |

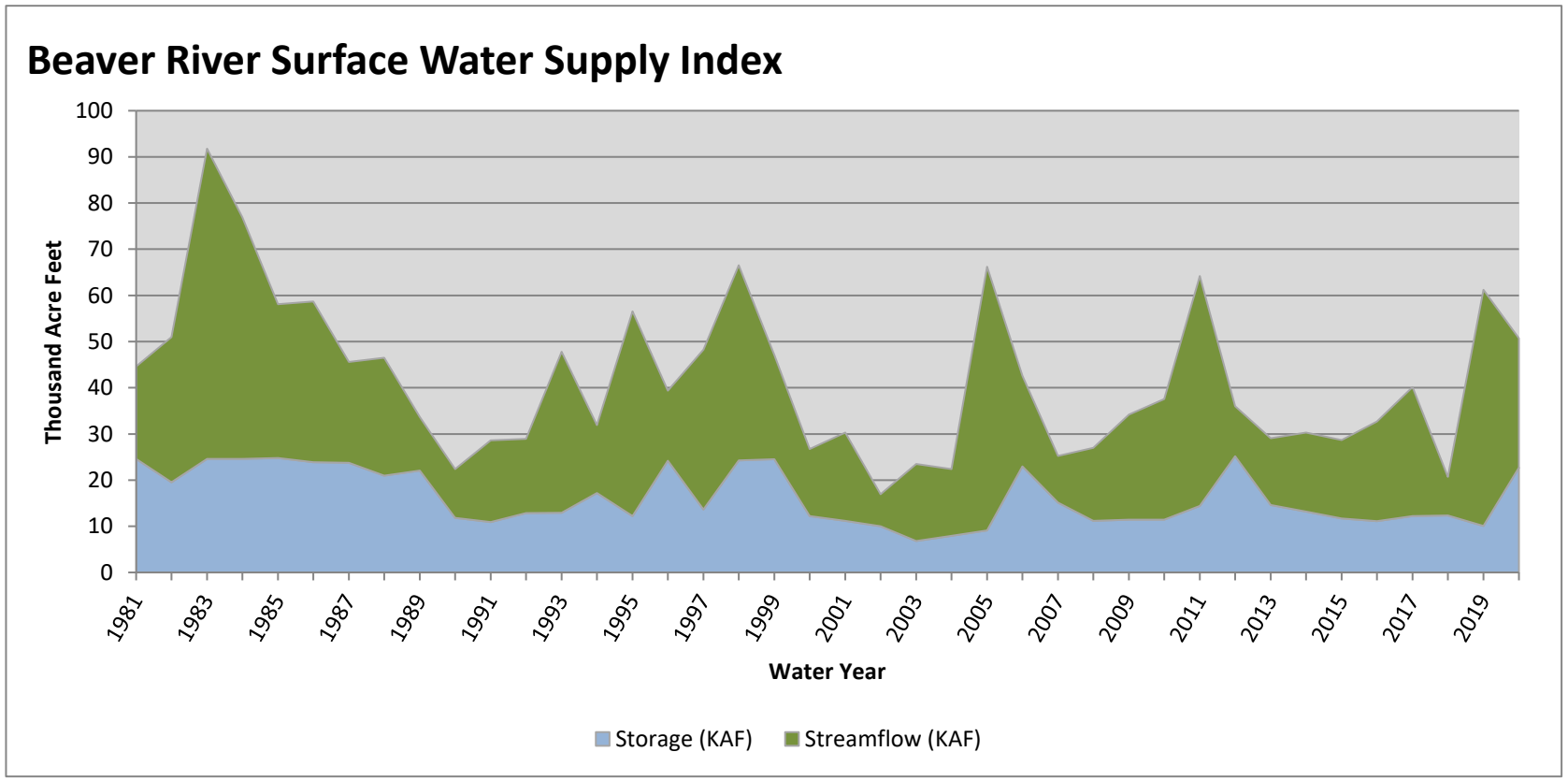
| **Watershed Snowpack Analysis<br>April 1, 2020** | # of Sites | % Median | Last Year % Median |
|---|---|---|---|
| Beaver River | 3 | 96% | 155% |

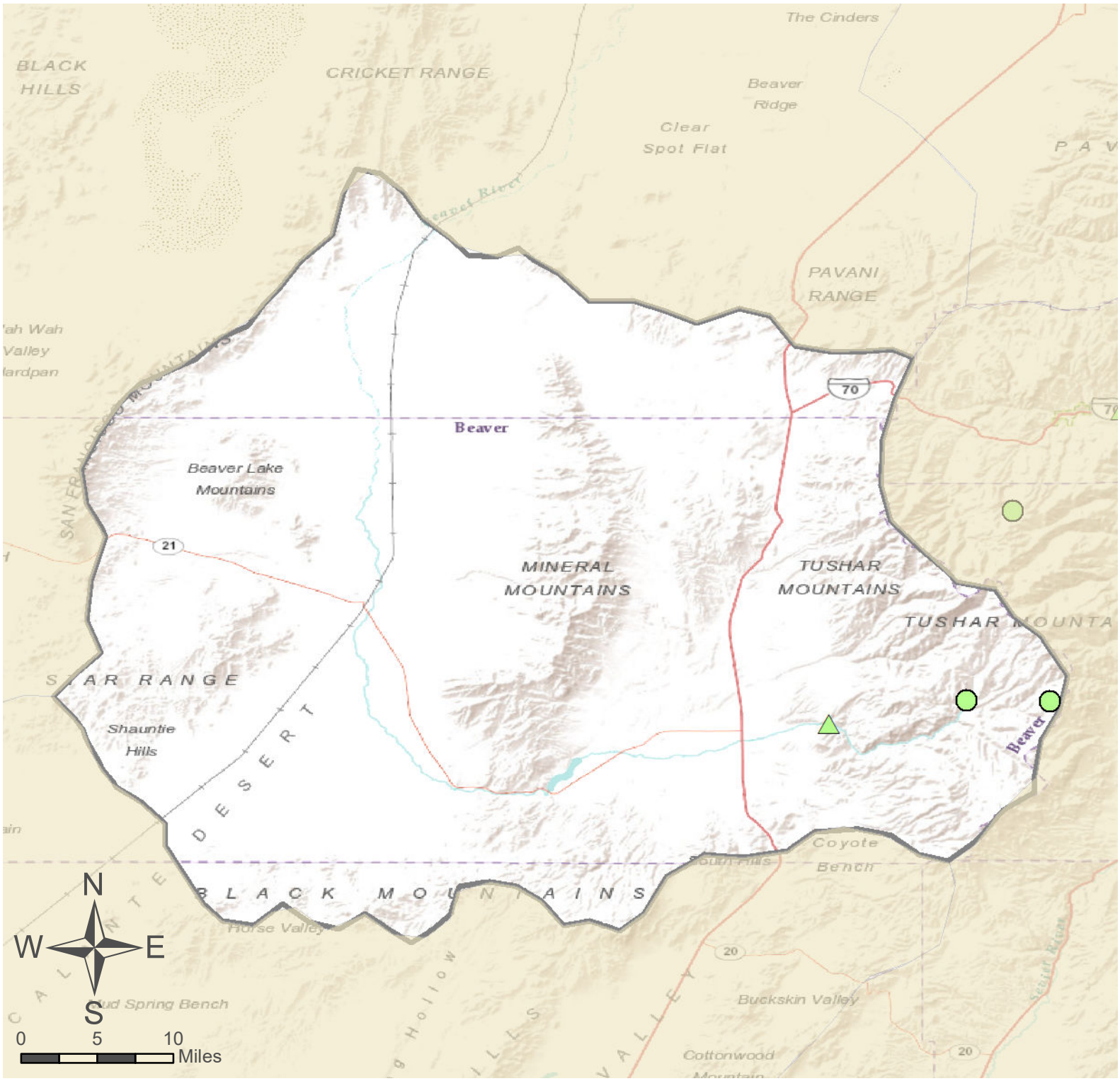
April 1, 2020

# Surface Water Supply Index

| Basin or Region | Mar EOM* Storage | APR-JUL Forecast | Storage + Forecast | Percentile | SWSI# | Years with similiar SWSI |
|---|---|---|---|---|---|---|
| | KAF^ | KAF^ | KAF^ | % | | |
| **Beaver River** | **22.74** | **28.00** | **50.74** | **73** | **1.93** | **93, 97, 82, 95** |

*EOM, end of month; #SWSI, Surface Water Supply Index; ^KAF, thousand acre-feet.





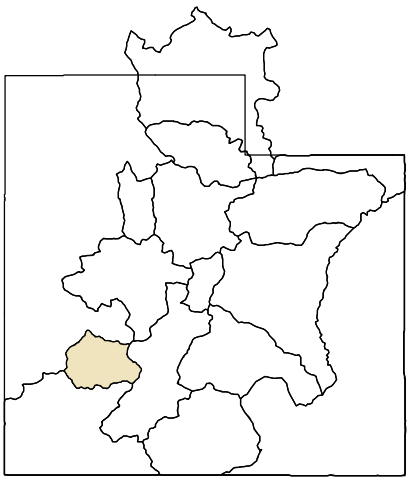

# Beaver River Basin

SNOTEL Site

Forecast Point

## % of Normal

- < 50%
- 50 - 69%
- 70 - 89%
- 90 - 109%
- 110 - 129%
- 130 - 149%
- > 150%
- No Normal



As of April 1, 2020:

96% of Normal SWE

85% of Normal Precipitation

94% of Normal Precipitation Last Month

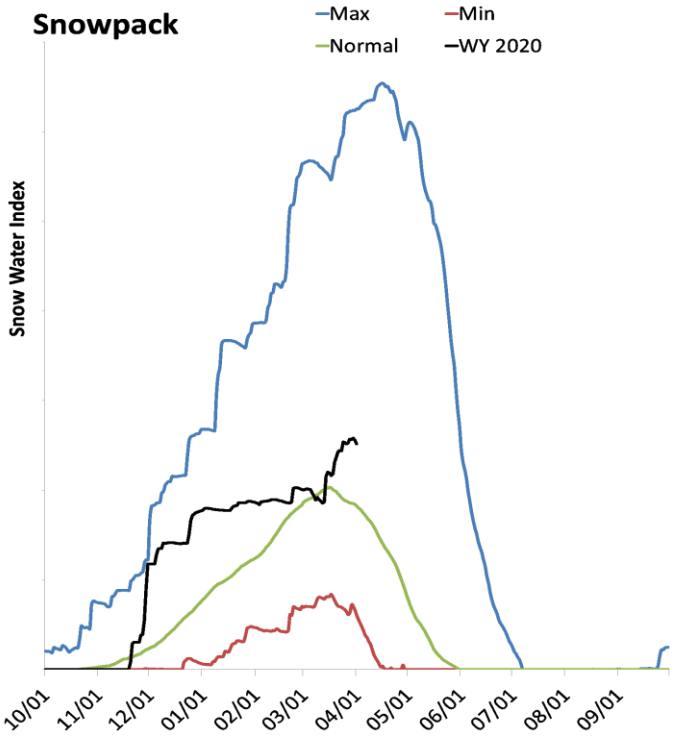
32% Saturation Soil Moisture

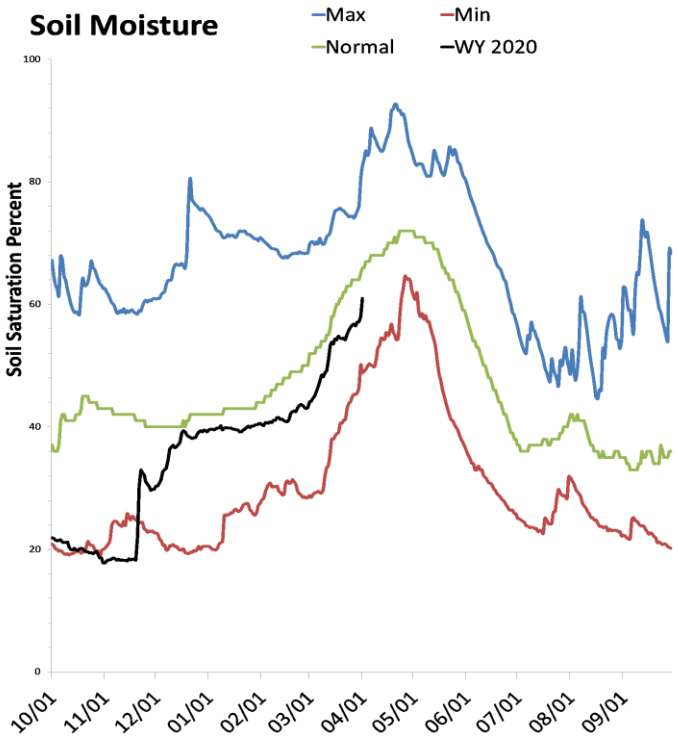
Beaver River Basin

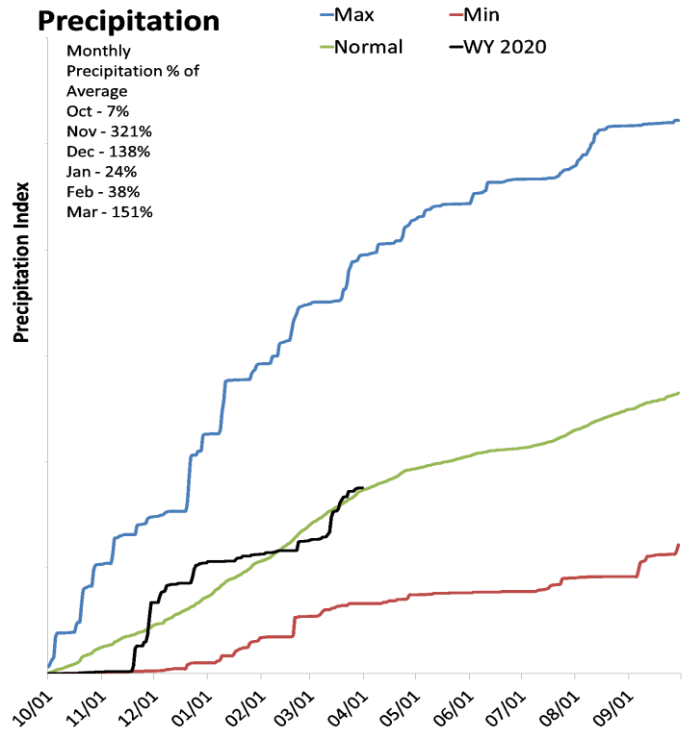
# Southwestern Utah

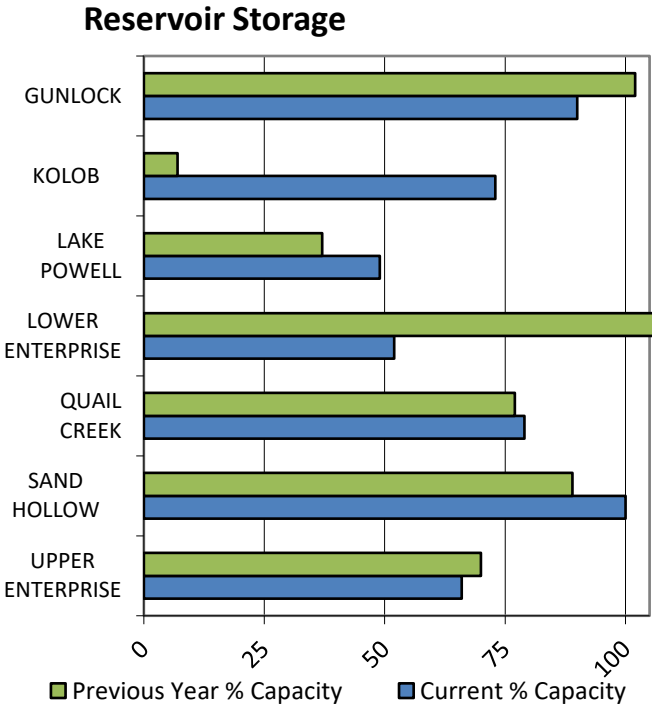
April 1, 2020

Snowpack in the Southwestern Utah is much above normal at 138% of normal, compared to 190% last year. Precipitation in March was much above average at 150%, which brings the seasonal accumulation (Oct-Mar) to 101% of average. Soil moisture is at 59% compared to 62% last year. Reservoir storage is at 49% of capacity, compared to 37% last year. Forecast streamflow volumes range from 78% to 103% of average. The surface water supply index is 66% for the Virgin River.




SNOTEL Data

Data Current as of: 4/3/2020 2:46:09 PM

# Southwestern Utah
# Streamflow Forecasts - April 1, 2020

| | | Forecast Exceedance Probabilities for Risk Assessment<br>Chance that actual volume will exceed forecast | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Southwestern Utah** | Forecast Period | 90% (KAF) | 70% (KAF) | 50% (KAF) | % Avg | 30% (KAF) | 10% (KAF) | 30yr Avg (KAF) |
| Lake Powell Inflow [2] | APR-JUL | 3500 | 4690 | 5600 | 78% | 6590 | 8190 | 7160 |
| Virgin R nr Hurricane | APR-JUL | 33 | 52 | 65 | 103% | 77 | 96 | 63 |
| Virgin R at Virgin | APR-JUL | 41 | 52 | 59 | 102% | 68 | 81 | 58 |
| Santa Clara R nr Pine Valley | APR-JUL | 3.5 | 4.5 | 5.3 | 106% | 6.1 | 7.5 | 5 |
| Coal Ck nr Cedar City | APR-JUL | 12.2 | 16.2 | 19 | 98% | 22 | 26 | 19.4 |

1) 90% and 10% exceedance probabilities are actually 95% and 5%
2) Forecasts are for unimpaired flows. Actual flow will be dependent on management of upstream reservoirs and diversions
3) Median value used in place of average

| **Reservoir Storage<br>End of March, 2020** | Current (KAF) | Last Year (KAF) | Average (KAF) | Capacity (KAF) |
|---|---|---|---|---|
| Lake Powell | 11817.9 | 9049.0 | 16942.0 | 24322.0 |
| Lower Enterprise | 1.4 | 2.8 | 1.4 | 2.6 |
| Upper Enterprise | 6.6 | 7.0 | 5.3 | 10.0 |
| Kolob Reservoir | 4.1 | 0.4 | | 5.6 |
| Gunlock | 9.3 | 10.6 | 6.8 | 10.4 |
| Sand Hollow Reservoir | 49.8 | 44.5 | | 50.0 |
| Quail Creek | 31.5 | 30.8 | 31.1 | 40.0 |
| Basin-wide Total | 11866.7 | 9100.2 | 16986.6 | 24385.0 |
| # of reservoirs | 5 | 5 | 5 | 5 |

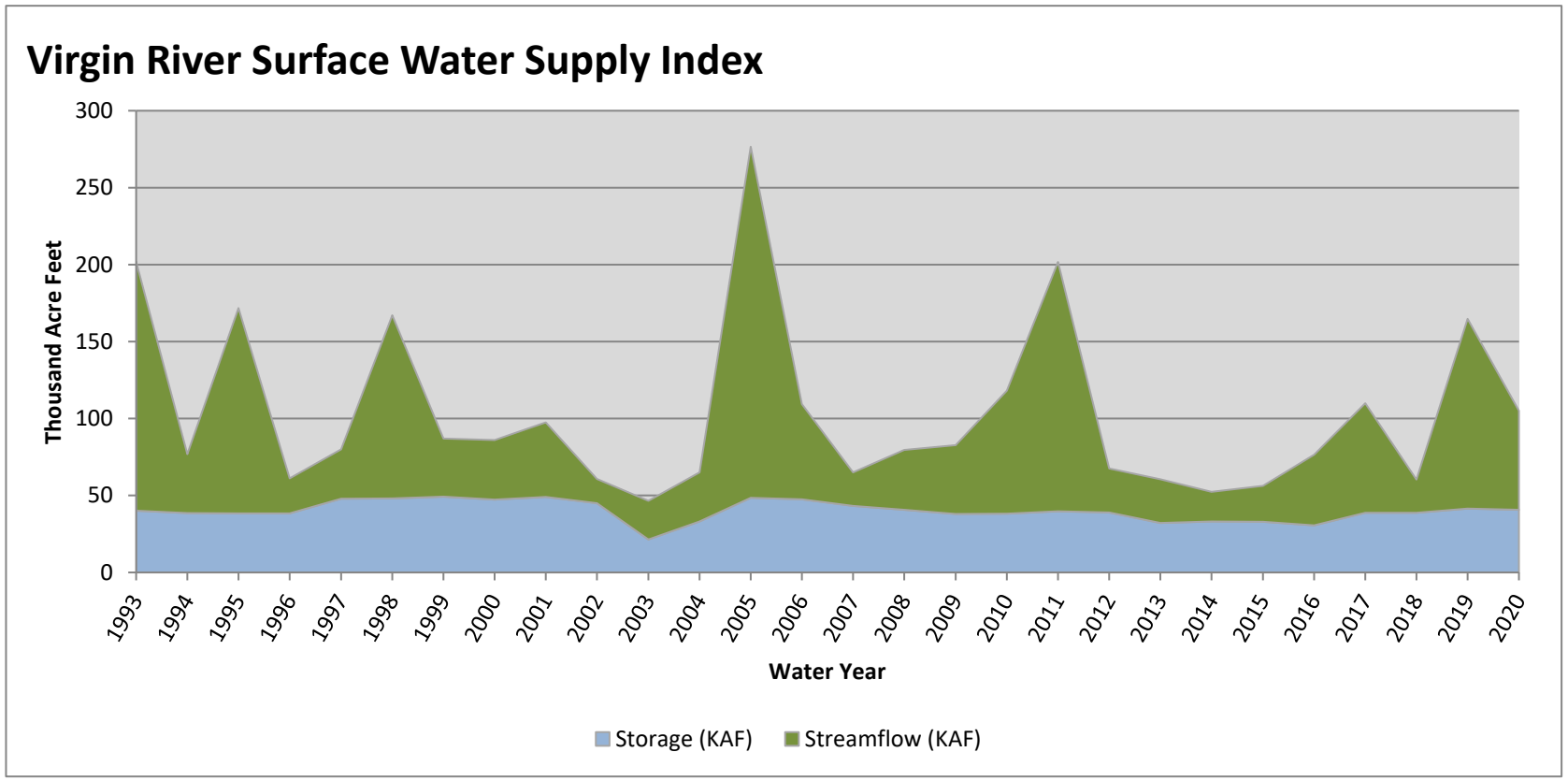
| **Watershed Snowpack Analysis<br>April 1, 2020** | # of Sites | % Median | Last Year % Median |
|---|---|---|---|
| Upper Virgin | 8 | 138% | 196% |
| Lower Virgin | 2 | 146% | 187% |
| Coal Parowan Creeks | 4 | 127% | 157% |

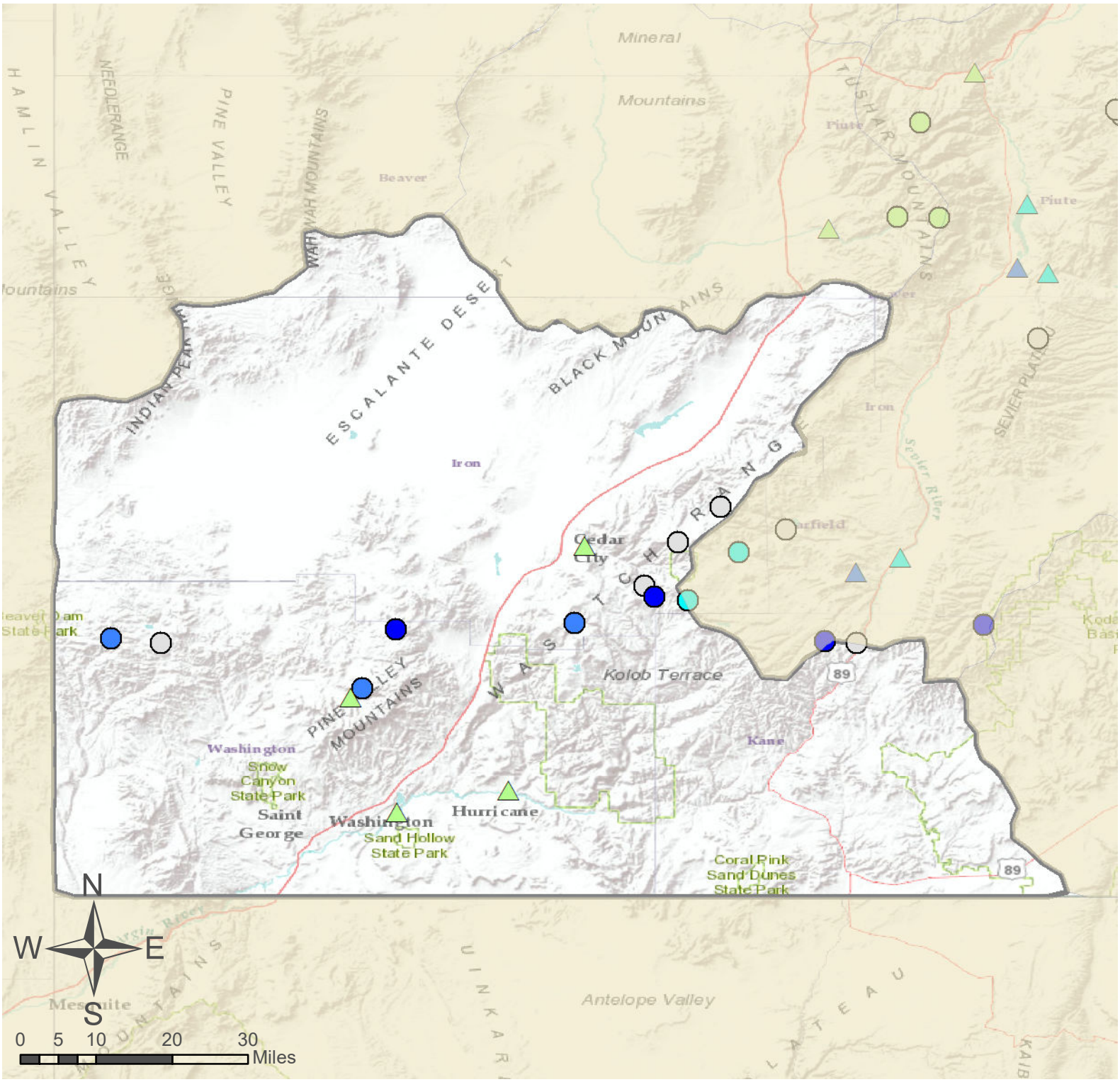
April 1, 2020

# Surface Water Supply Index

| Basin or Region | Mar EOM* Storage | APR-JUL Forecast | Storage + Forecast | Percentile | SWSI# | Years with similiar SWSI |
|---|---|---|---|---|---|---|
| | KAF^ | KAF^ | KAF^ | % | | |
| **Virgin River** | **40.78** | **64.30** | **105.08** | **66** | **1.29** | **99, 01, 06, 17** |

*EOM, end of month; #SWSI, Surface Water Supply Index; ^KAF, thousand acre-feet.






# Southwestern Utah

SNOTEL Site

Forecast Point

## % of Normal

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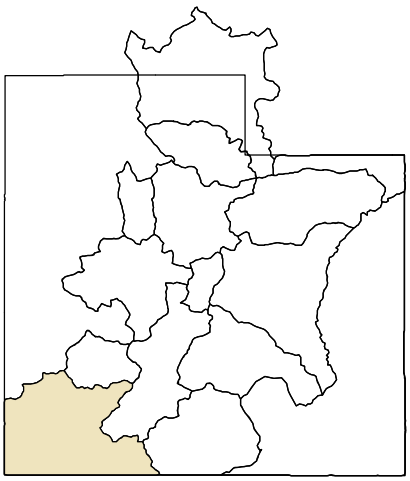

As of April 1, 2020:

138% of Normal SWE

101% of Normal Precipitation

150% of Normal Precipitation Last Month

59% Saturation Soil Moisture

Southwestern Utah

*Issued by*

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

*Released by*

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

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

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

# Utah Water Supply Outlook Report

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