

Utah Climate and Water Report

August 1, 2023



View of Utah Lake, taken near Lone Peak

Photo by Joel Burley

Utah General Summary

August 1, 2023

Valley Conditions (SCAN) as of August 1st: July was a disappointing month for precipitation. Utah received 0.4 inches of precipitation in our valley locations, which was well below normal (48%). The only valley region of the state that experienced above normal conditions was North Central Utah at 105%. In contrast, the St. George region only received 18% of its normal precipitation for the month. Still, Utah's valley precipitation remains above normal (144%) for the water year which began last October. Statewide soil moisture at Utah's SCAN sites ended the month at 38% of saturation, which is 2% lower than last year. Finally, as of August 1st, soil temperatures were slightly above normal in Utah's valley locations.

Mountain Conditions (SNOTEL) as of August 1st: While the first couple days of August have started off quite wet in Utah's mountains, the month of July was well below normal (68%). We received 0.8 inches of accumulation during July, which was a disappointing start to our monsoon season. That said, Utah's water year to date precipitation is 136% of median, reflecting the legacy of our amazing winter season. Statewide soil moisture in Utah's mountains is above normal at 36% of saturation, which is very close to last year's value at this time. Utah's reservoir storage is currently at 81% of capacity, which is excellent and is 30% higher than last year's value! Water Availability Indices (WAIs) for Utah basins combine current reservoir conditions with observed streamflow for each region. WAIs are above normal for all of Utah's 18 major basins except for the Lower Sevier, which is heavily influenced by the low water level in Yuba Lake (currently only 24% full). Everywhere else, the above normal WAI values reflect the tremendous, statewide benefit of our record-breaking snowpack last winter.

While Utah's reservoirs have benefited greatly from this year's snowmelt runoff, we continue to be concerned about our largest water bodies. As of August 1st, Bear Lake had risen over 6 feet from its previous low in November but was still only 63% full. The Great Salt Lake was at 4193.2 ft elevation at the Saltair Marina on August 1st compared with the historic low of 4188.7 ft elevation it experienced during the winter. Though that rise of about 4.5 feet is certainly good news, the lake still needs to rise about 7-13 more feet to return to normal conditions, depending on where you put that needle. Lake Powell is currently ~60 feet above its recent low, which is certainly noteworthy, but the lake is still only 38% full and has passed its peak from earlier this summer. We can be hopeful that next winter provides another above average snowpack! In the meantime, it will continue to be critically important to conserve Utah's precious water resources.

*This report is organized to 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 (**SNOW TELemetry**). Questions, comments and suggestions are welcome and should be directed to jordan.clayton@usda.gov.*

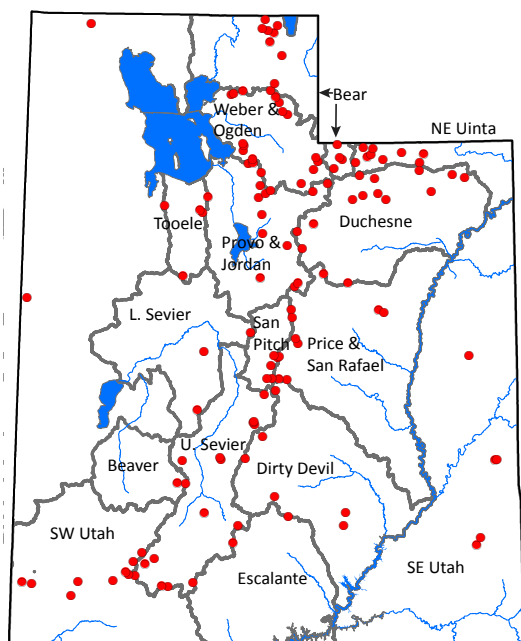
Utah Climate and Water Report

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.



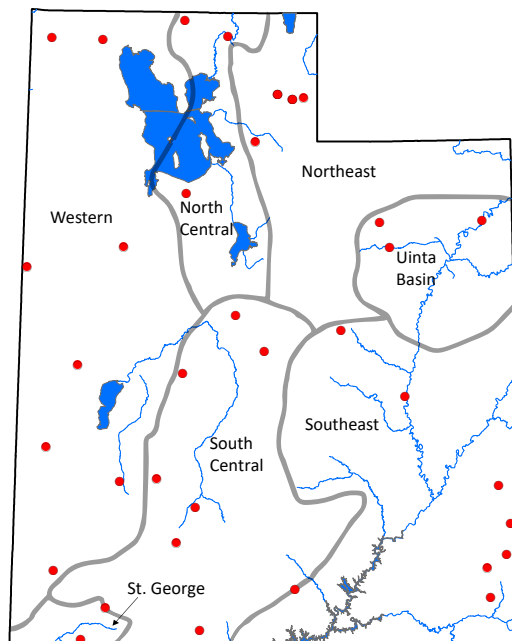
SNOTEL

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

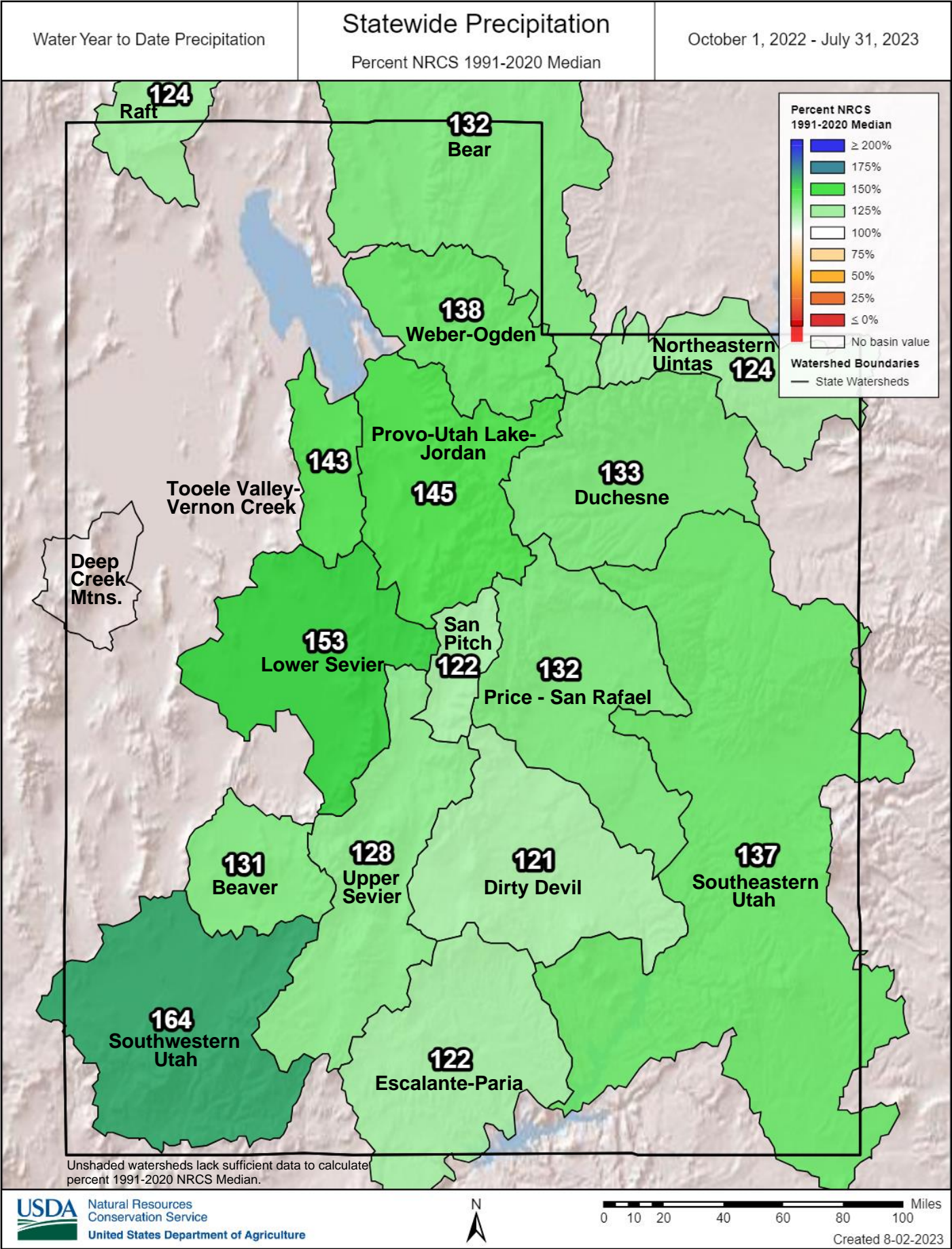


SCAN

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



Utah Precipitation (Snotel)



Aug 1, 2023 | Utah Reservoir Summary

Watershed/Region	Current Storage (Basinwide KAF)	Reservoir Capacity (Basinwide KAF)	Last Yr % Capacity (Basinwide)	This Yr % Capacity (Basinwide)
Utah (Statewide)	4459	5465	51	81
Utah (Statewide) Incl. Flaming G. & Lk. Powell	17110	33536	35	51
Bear	905	1389	37	65
Weber-Ogden	513	547	54	93
Northeastern Uintas	3417	3852	73	88
Tooele Valley	3	4	39	79
Duchesne	1248	1379	74	90
Provo	1234	1334	53	92
San Pitch	15	20	0	74
Price	152	158	52	95
Upper Sevier	171	382	8	44
Southeast UT	2	2	78	109
Beaver	18	23	10	79
Southwest Utah	100	118	60	84

Red (green) shading indicates >5% decrease (increase) in % capacity from this time last year.

Reservoir	Current Storage (KAF)	Reservoir Capacity (KAF)	Last Yr % Capacity	This Yr % Capacity
Bear Lake	823	1302	37	63
Big Sand Wash Reservoir	21	25	41	82
Causey Reservoir	6	7	80	94
Cleveland Lake	5	5	68	96
Currant Creek Reservoir	15	15	95	97
Deer Creek Reservoir	146	149	66	97
East Canyon Reservoir	46	49	65	93
Echo Reservoir	61	73	68	83
Flaming Gorge Reservoir	3322	3749	74	88
Grantsville Reservoir	2	3	44	81
Gunlock	8	10	45	77
Gunnison Reservoir	15	20	0	74
Huntington North Reservoir	2	4	49	70
Hyrum Reservoir	12	15	56	80
Joes Valley Reservoir	58	61	60	94
Jordanelle Reservoir	286	314	71	91
Ken's Lake	2	2	78	109
Kolob Reservoir	5	5	95	99
Lake Powell	9327	24322	25	38
Lost Creek Reservoir	20	22	53	89
Lower Enterprise	0	2	32	30
Meeks Cabin Reservoir	25	32	56	79
Miller Flat Reservoir	4	5	64	94
Millsite	17	16	86	102
Minersville Reservoir	18	23	10	79
Moon Lake Reservoir	31	35	50	89
Otter Creek Reservoir	47	52	16	90
Panguitch Lake	21	22	36	94
Pineview Reservoir	102	110	51	93
Piute Reservoir	45	71	0	63
Porcupine Reservoir	11	11	76	102
Quail Creek	29	40	60	74
Red Fleet Reservoir	24	25	51	93
Rockport Reservoir	57	60	82	94
Sand Hollow Reservoir	47	50	72	95
Scofield Reservoir	63	65	34	97
Settlement Canyon Reservoir	0	1	23	74
Sevier Bridge Reservoir	57	236	6	24
Smith and Morehouse	8	8	95	100
Starvation Reservoir	154	164	73	94
Stateline Reservoir	12	12	86	103
Steinaker Reservoir	32	33	53	96
Strawberry Reservoir	998	1105	75	90
Upper Enterprise	8	10	5	82
Upper Stillwater Reservoir	26	32	79	81
Utah Lake	801	870	44	92
Willard Bay	209	215	39	97
Woodruff Creek	2	4	28	56
Woodruff Narrows Reservoir	55	57	25	97

Red (green) shading indicates >5% decrease (increase) in % capacity from this time last year.

August 1, 2023 | Water Availability Index (WAI)

Basin or Region	Reservoir Storage ¹ (KAF) ²	Monthly Flow	Flow + Storage (KAF) ²	WAI ³	Percentile ⁴ (%)	Similar Years
Bear	823.5	21.5	845.0	0.76	59	[1988, 2000]
Woodruff Narrows	56.0	9.1	65.1	2.65	82	[1984, 2009]
Little Bear	12.3	2.9	15.2	2.6	81	[1995, 1999]
Ogden	109.5	4.9	114.4	3.41	91	[1983, 1998]
Weber	194.2	27.7	221.9	3.01	86	[1998, 2019]
Provo	433.0	12.6	445.6	2.6	81	[1999, 2017]
Western Uintas	213.2	36.4	249.6	1.89	73	[1993, 2009]
Eastern Uintas	56.3	24.1	80.3	2.84	84	[1985, 2009]
Blacks Fork	25.7	21.6	47.2	2.74	83	[1999, 2005]
Smiths Fork	12.4	8.2	20.6	2.74	83	[1986, 1999]
Price	63.9	2.4	66.3	3.22	89	[1998, 2019]
Joes Valley	58.3	8.3	66.6	1.52	68	[1996, 2005]
Ferron Creek	17.0	6.3	23.4	3.22	89	[1983, 2019]
Moab	2.5	1.2	3.8	2.82	84	[1993, 1998]
Upper Sevier	93.4	3.8	97.3	2.65	82	[1985, 1993]
San Pitch	15.1	2.4	17.5	2.27	77	[1985, 1999]
Lower Sevier	57.3	1.7	59.0	-1.89	27	[2014, 2020]
Beaver River	18.5	6.0	24.5	2.65	82	[1984, 1986]
Virgin River	37.8	7.8	45.6	1.3	66	[2010, 2017]

¹ End of Month Reservoir Storage; ² KAF, Thousand Acre-Feet; ³ WAI, Water Availability Index; ⁴ Threshold for coloring: >75% Green, <25% Red

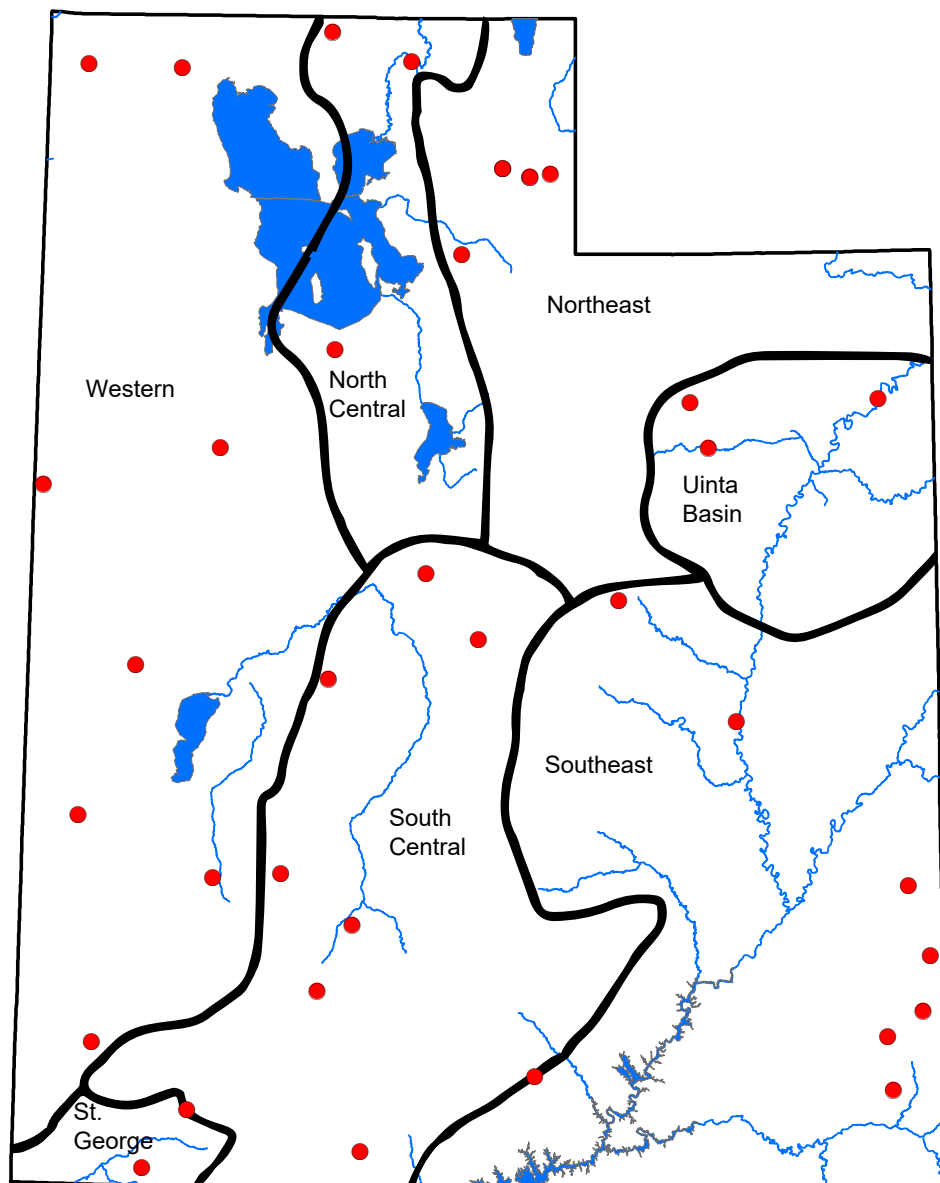
What is a Water Availability Index?

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 month's streamflow. Note that starting in June, 2022, un-adjusted streamflow values are used in this calculation. Prior to this date, 'naturalized' or 'adjusted' values were used. Please contact Jordan Clayton for details and rationale concerning this methodological change. See Appendix A for details on specific stream gauges and reservoirs used in WAI calculations.

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.

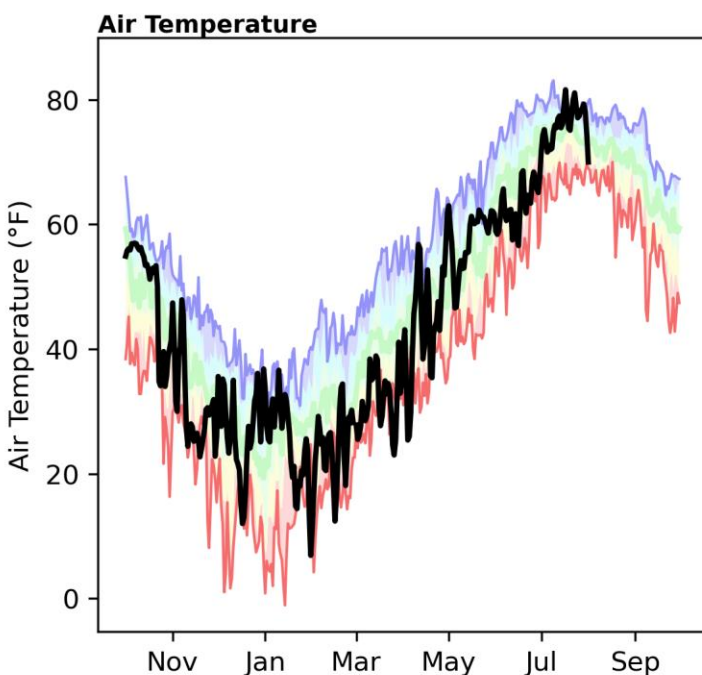
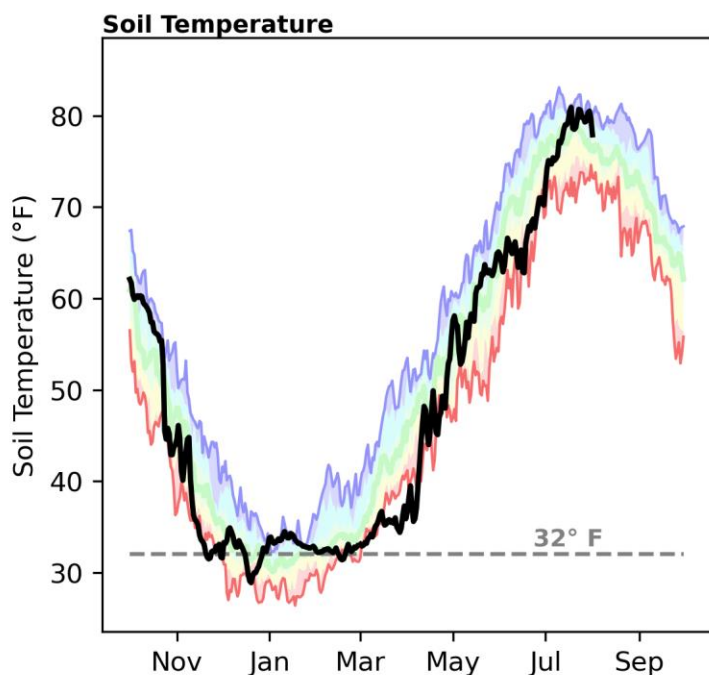
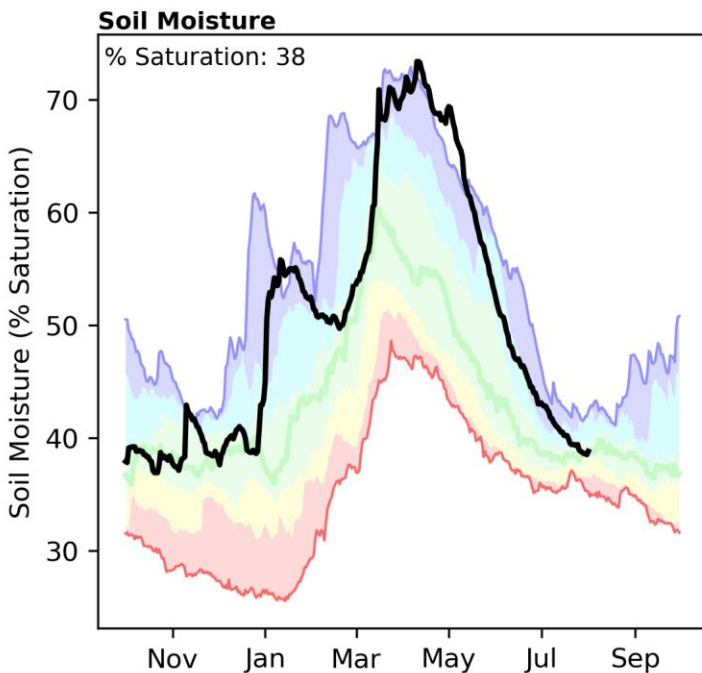
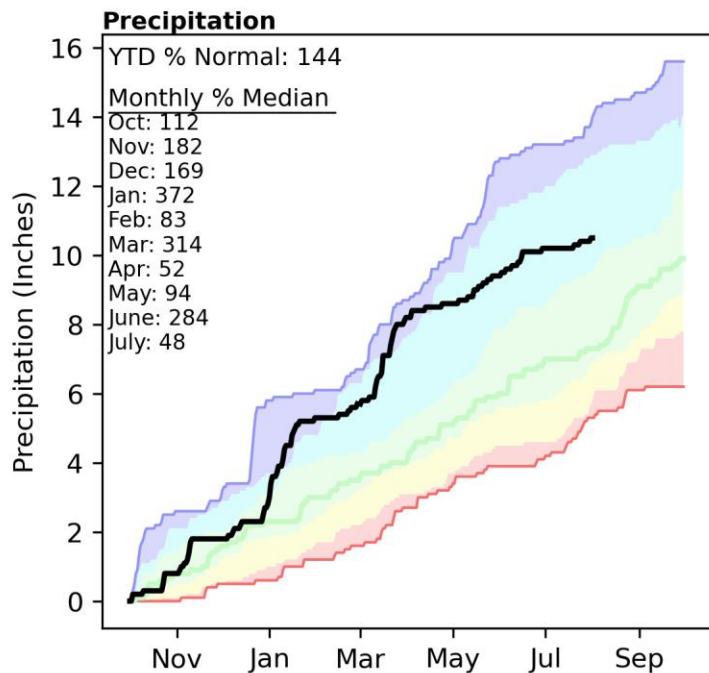
The Utah Snow Survey has also chosen to display the WAI value as well as a PERCENT CHANCE OF NON-EXCEEDANCE. While this is a cumbersome name, it has a simple application. It can be best thought of as a scale of 1 to 99 with 1 being the drought of record (driest possible conditions) and 99 being the flood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

SCAN portion of report



Statewide SCAN | August 1, 2023

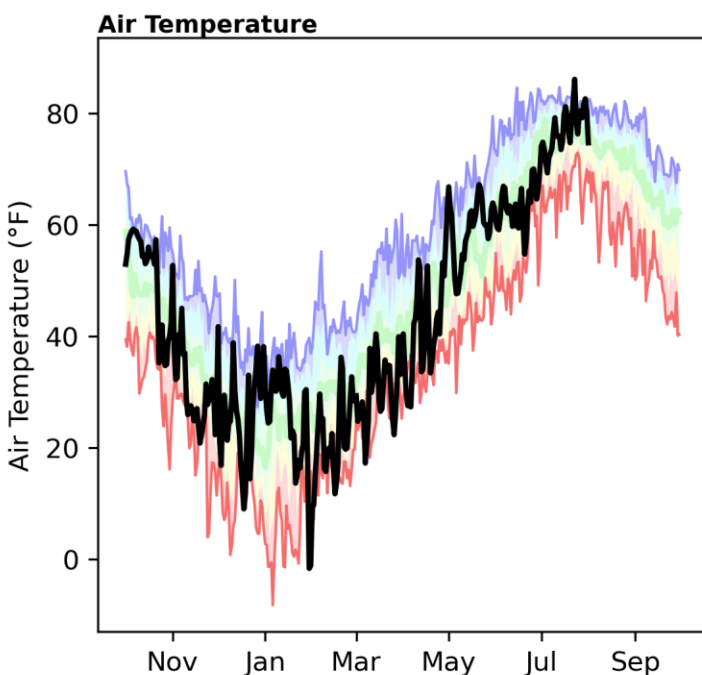
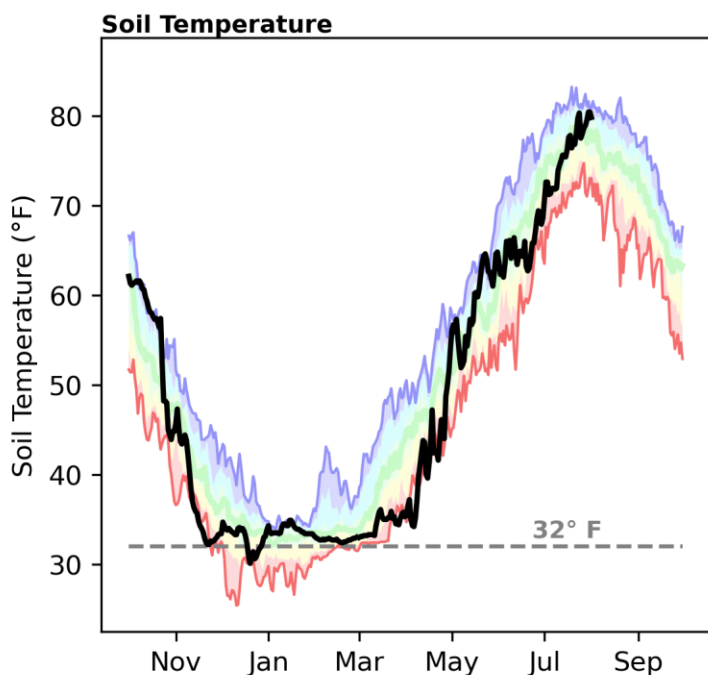
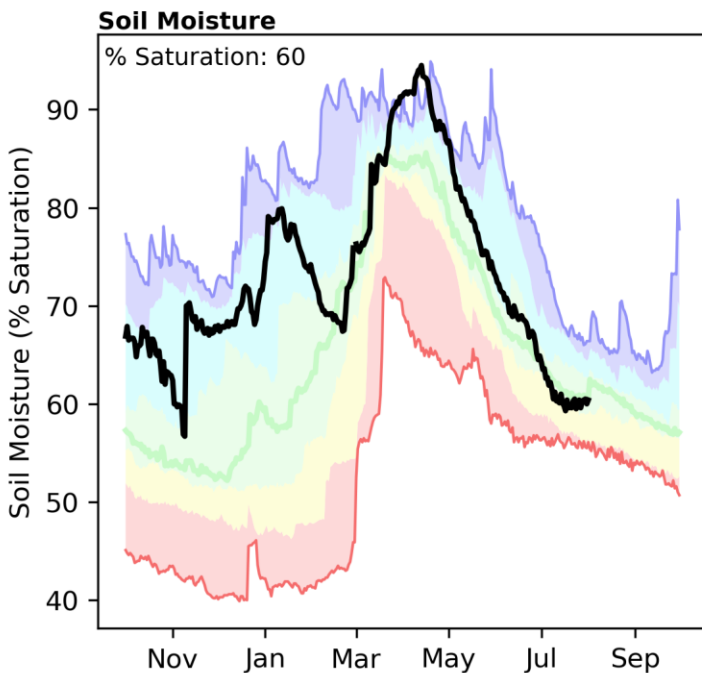
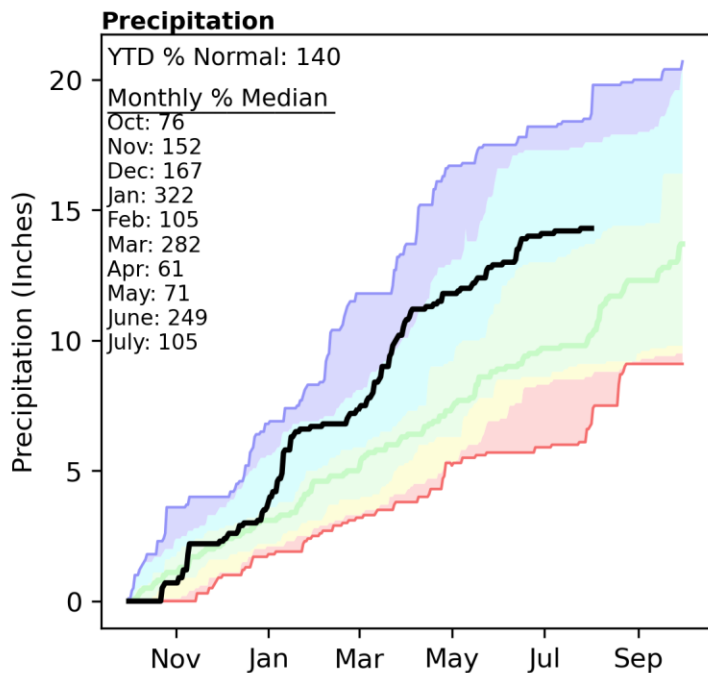
Precipitation in July was well below normal, with an average of 0.4" falling region-wide (48% of normal). This brings the water year accumulation (October-July) to 144% of median. Depth averaged soil moisture was calculated to be 38% of saturation compared to 40% at this time last year.



Statistical shading breaks at 10th, 30th, 50th, 70th, and 90th percentiles.
For more information visit: [30 year normal calculation description](#)

North Central Utah | August 1, 2023

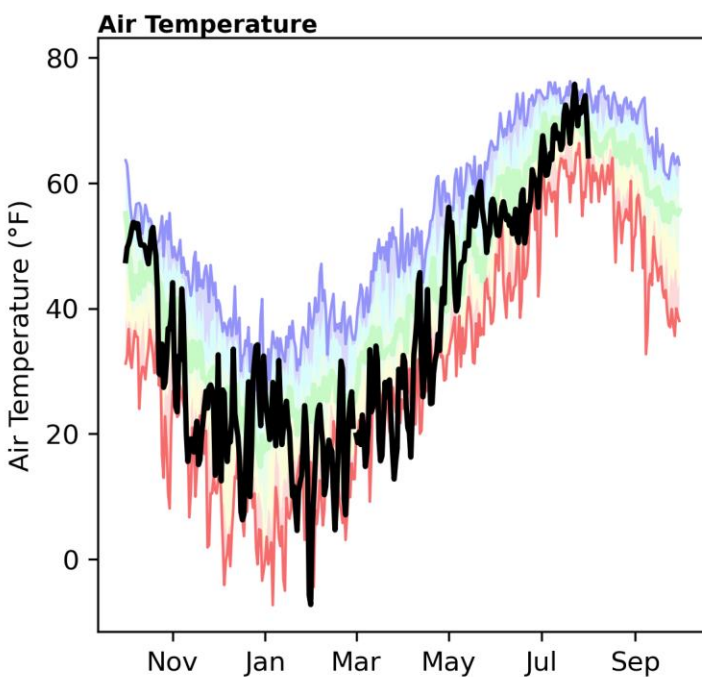
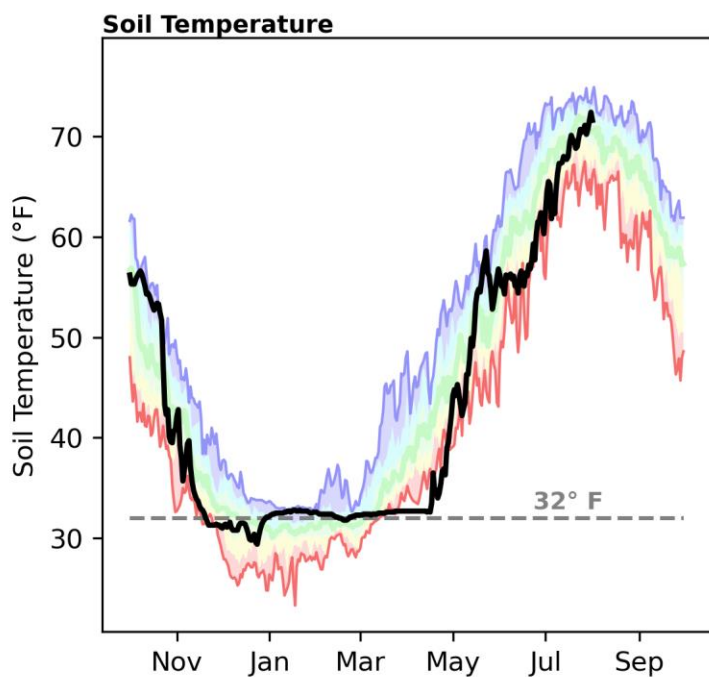
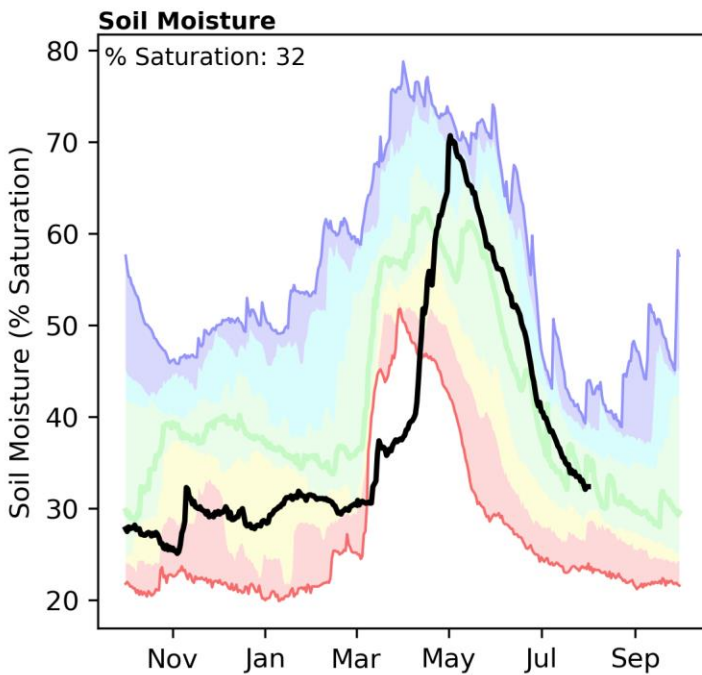
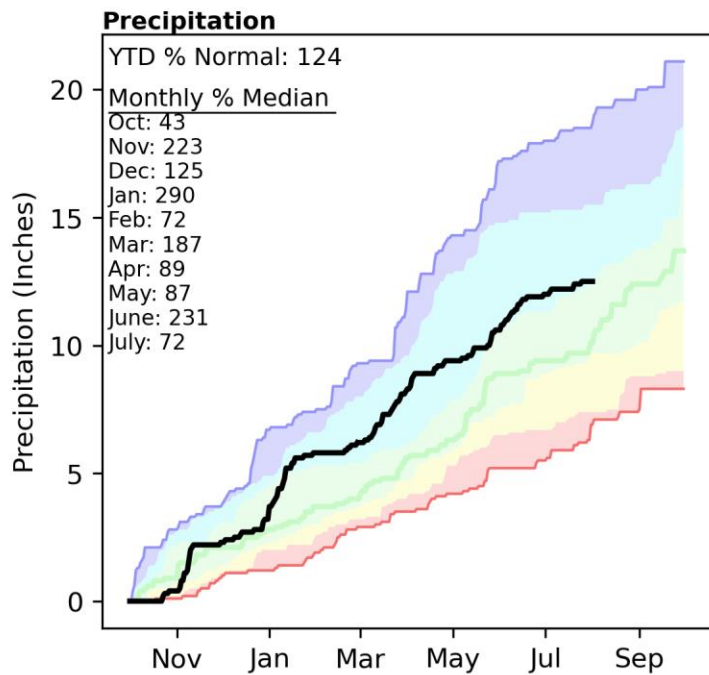
Precipitation in July was about normal, with an average of 0.3" falling region-wide (105% of normal). This brings the water year accumulation (October-July) to 140% of median. Depth averaged soil moisture was calculated to be 60% of saturation compared to 59% at this time last year.



Statistical shading breaks at 10th, 30th, 50th, 70th, and 90th percentiles.
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Northeast Utah | August 1, 2023

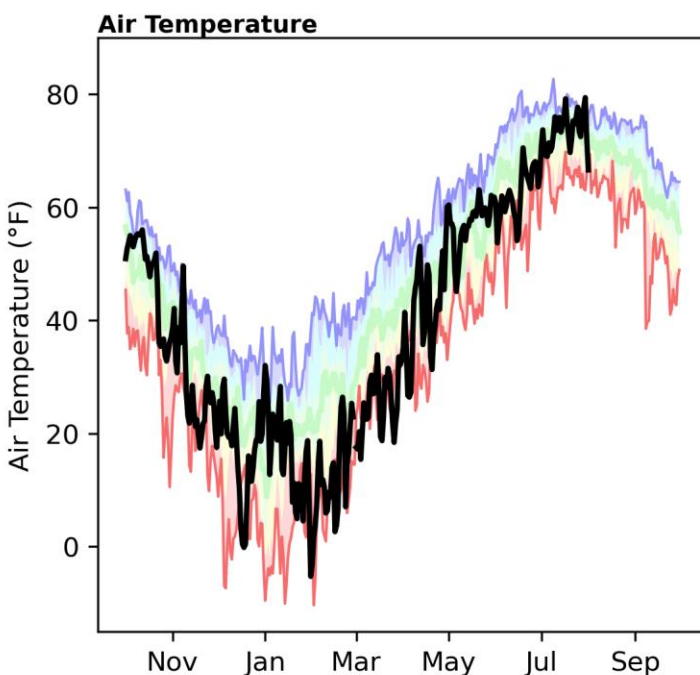
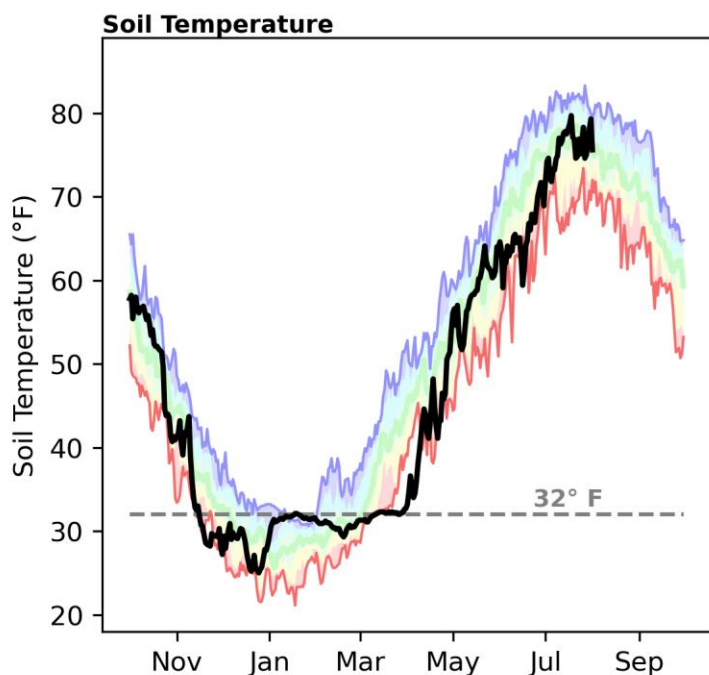
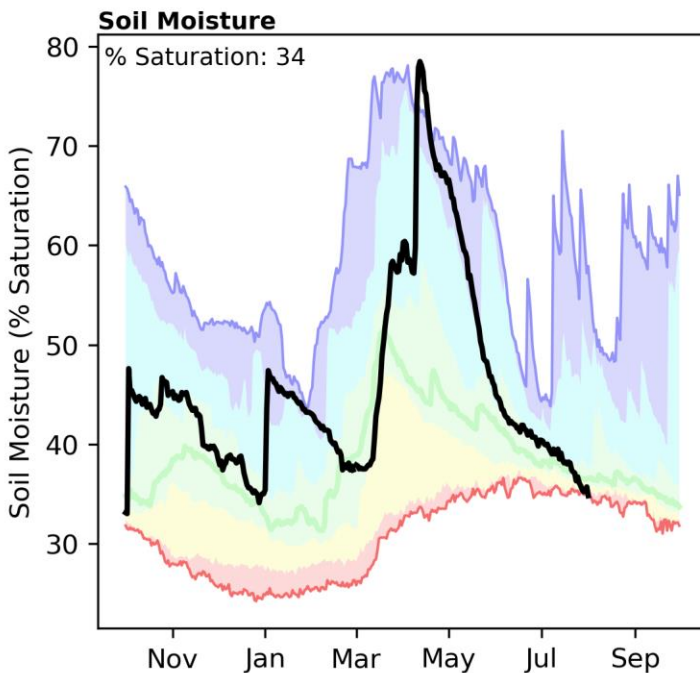
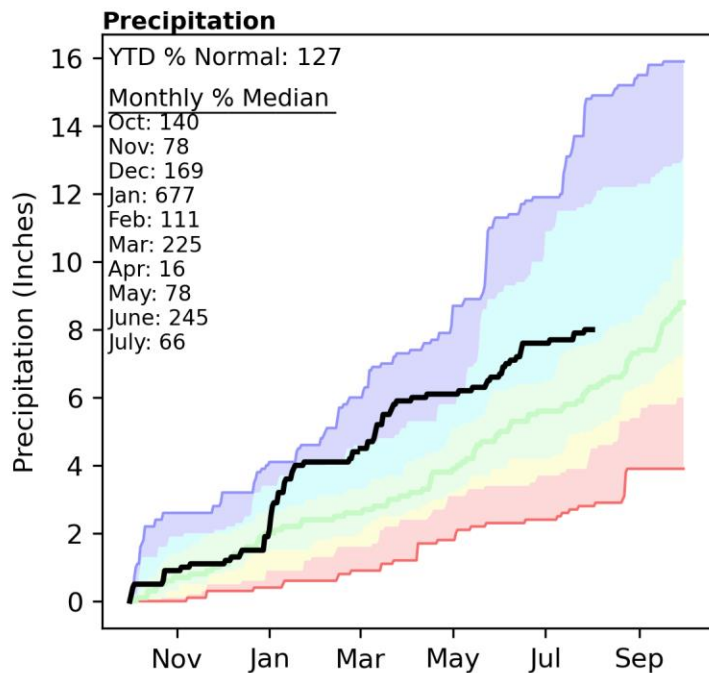
Precipitation in July was below normal, with an average of 0.4" falling region-wide (72% of normal). This brings the water year accumulation (October-July) to 124% of median. Depth averaged soil moisture was calculated to be 32% of saturation compared to 35% at this time last year.



Statistical shading breaks at 10th, 30th, 50th, 70th, and 90th percentiles.
For more information visit: [30 year normal calculation description](#)

Uinta Basin | August 1, 2023

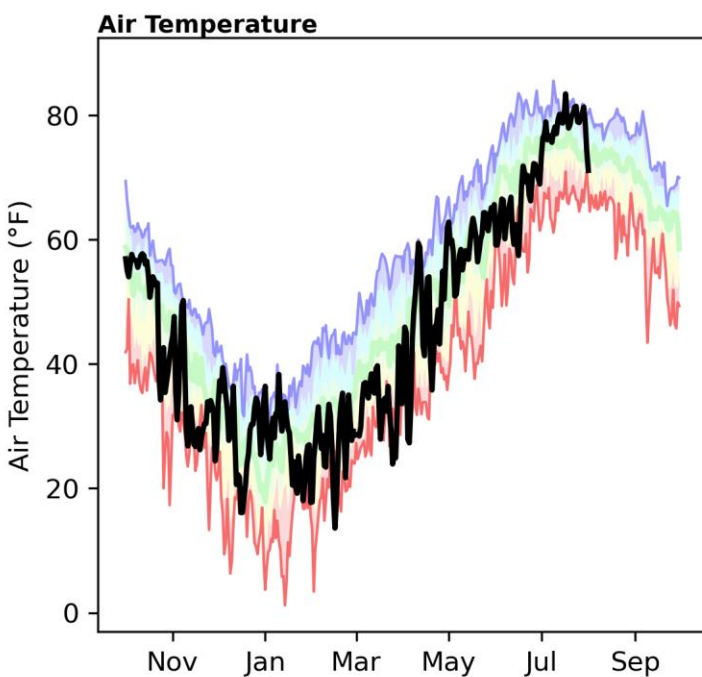
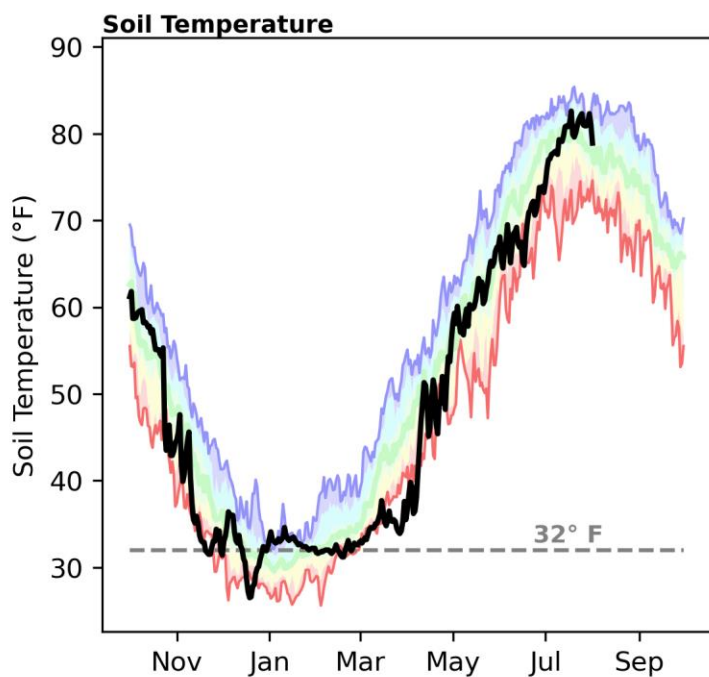
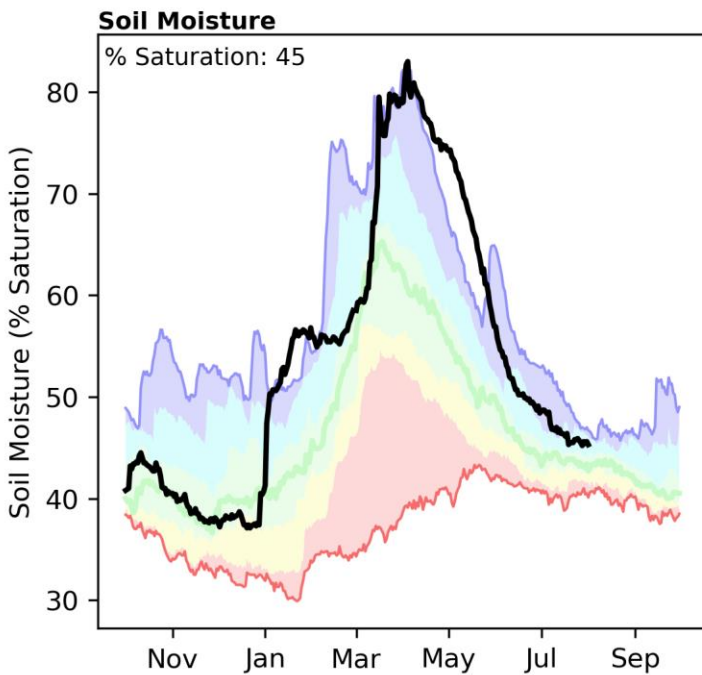
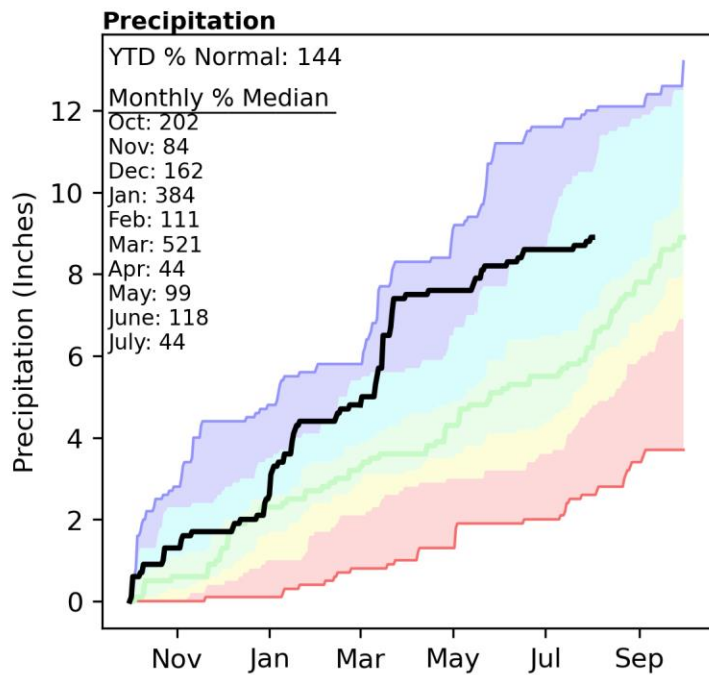
Precipitation in July was well below normal, with an average of 0.4" falling region-wide (66% of normal). This brings the water year accumulation (October-July) to 127% of median. Depth averaged soil moisture was calculated to be 34% of saturation compared to 35% at this time last year.



Statistical shading breaks at 10th, 30th, 50th, 70th, and 90th percentiles.
For more information visit: [30 year normal calculation description](#)

Southeast Utah | August 1, 2023

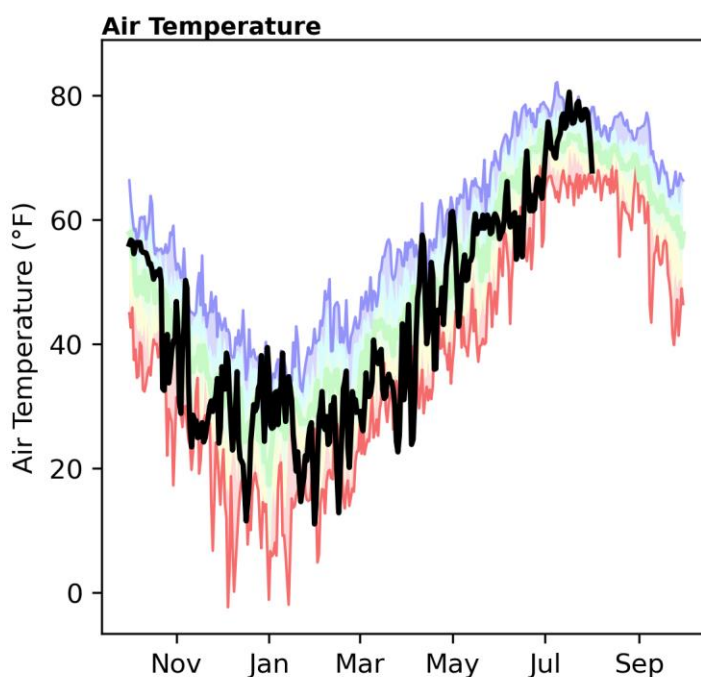
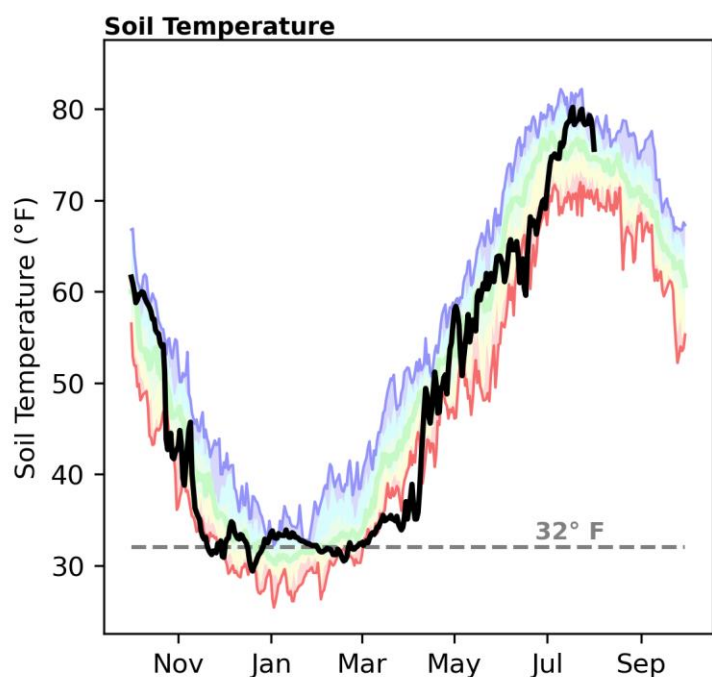
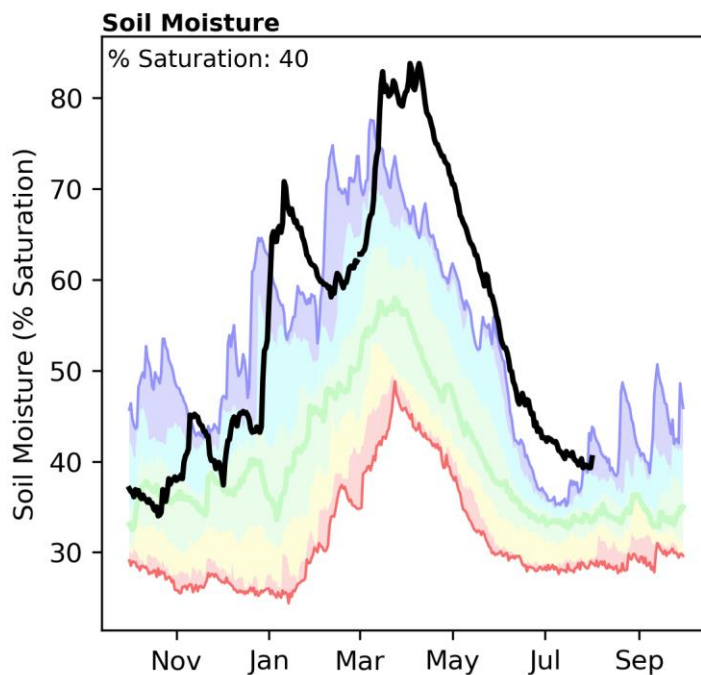
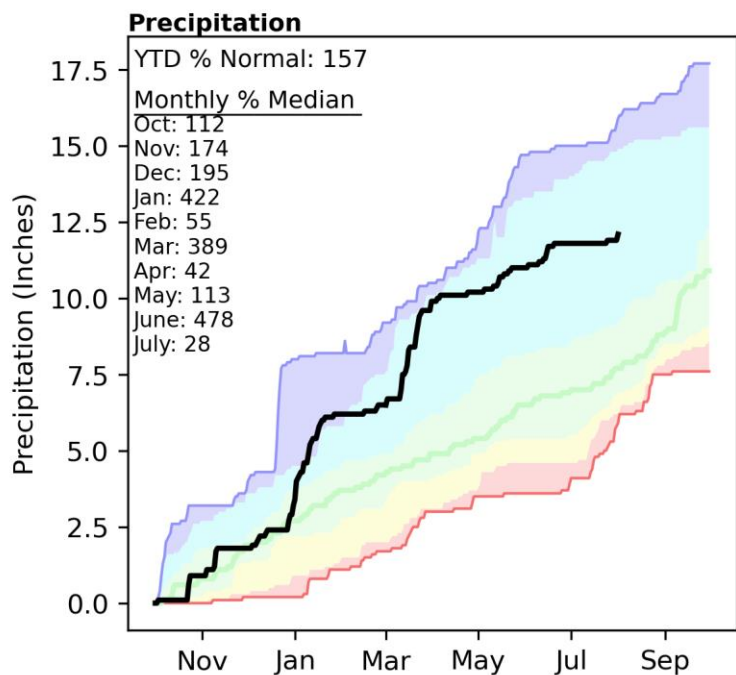
Precipitation in July was well below normal, with an average of 0.4" falling region-wide (44% of normal). This brings the water year accumulation (October-July) to 144% of median. Depth averaged soil moisture was calculated to be 45% of saturation compared to 43% at this time last year.



Statistical shading breaks at 10th, 30th, 50th, 70th, and 90th percentiles.
For more information visit: [30 year normal calculation description](#)

South Central Utah | August 1, 2023

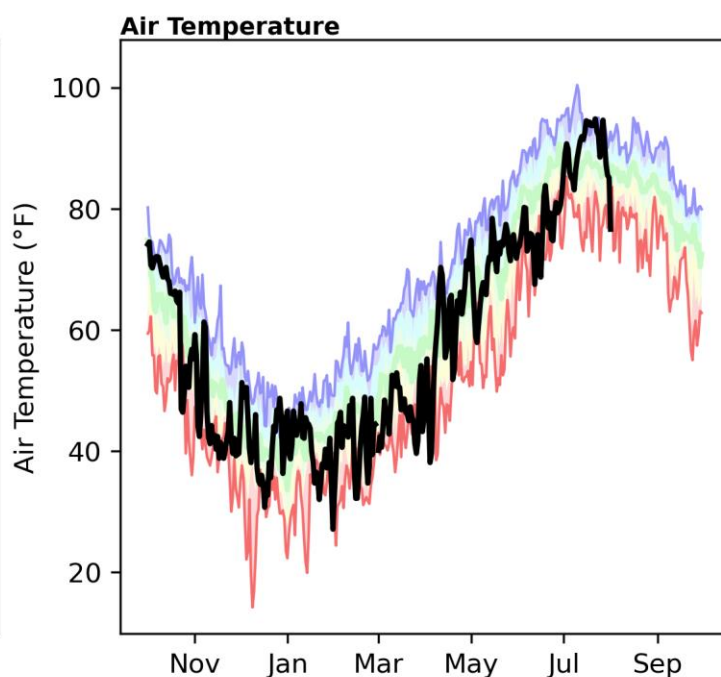
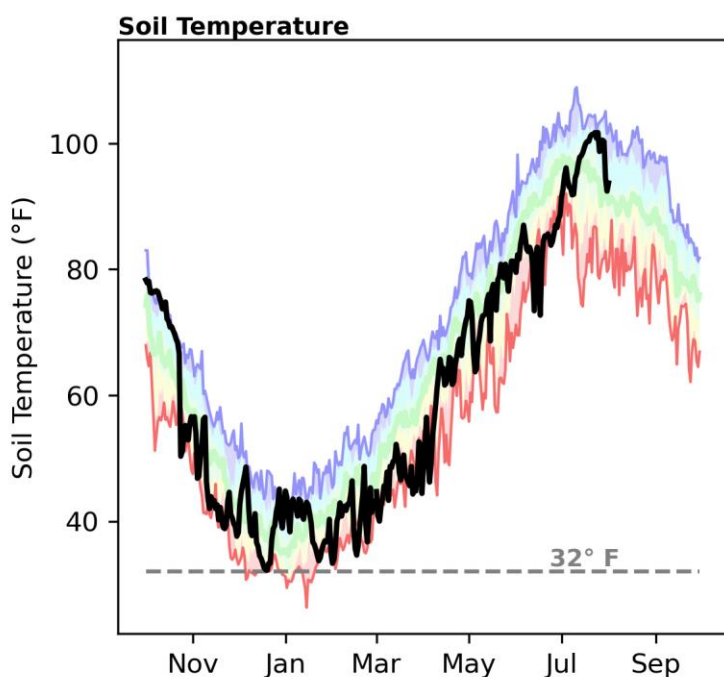
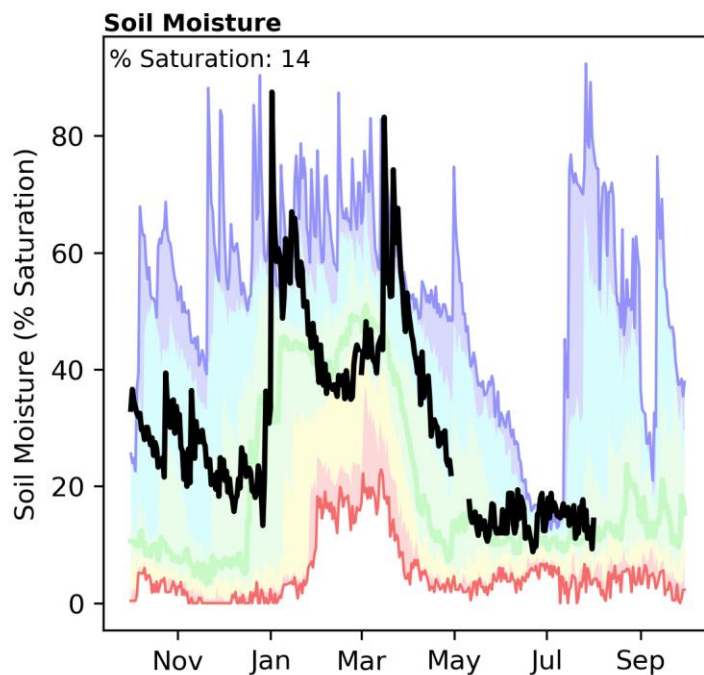
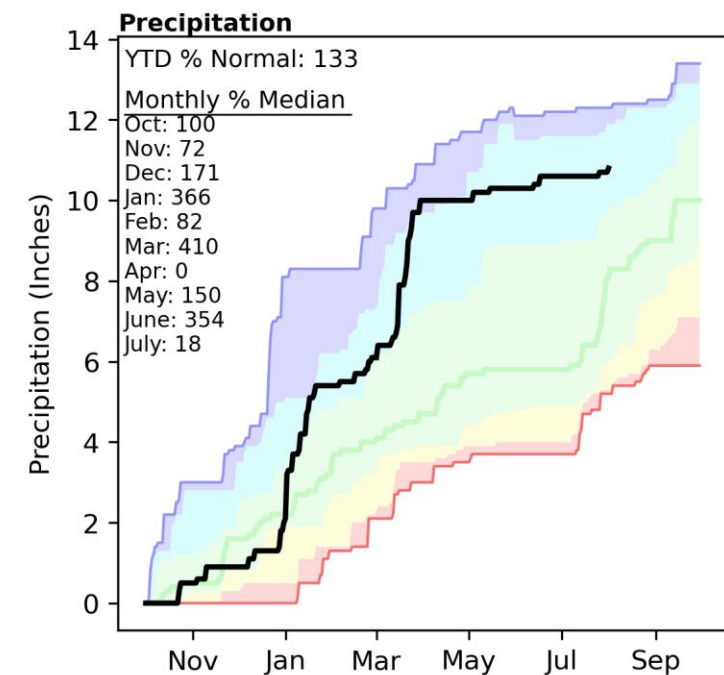
Precipitation in July was well below normal, with an average of 0.3" falling region-wide (28% of normal). This brings the water year accumulation (October-July) to 157% of median. Depth averaged soil moisture was calculated to be 40% of saturation compared to 37% at this time last year.



Statistical shading breaks at 10th, 30th, 50th, 70th, and 90th percentiles.
For more information visit: [30 year normal calculation description](#)

St. George Region | August 1, 2023

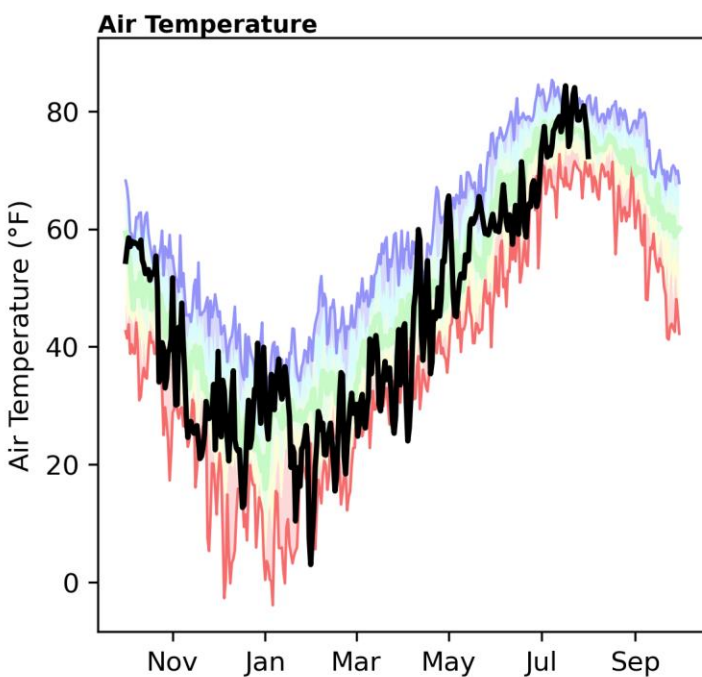
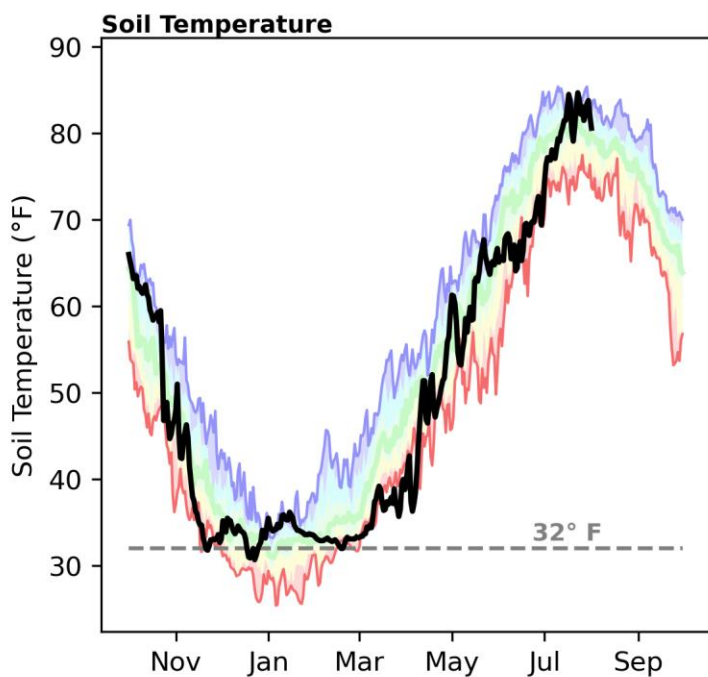
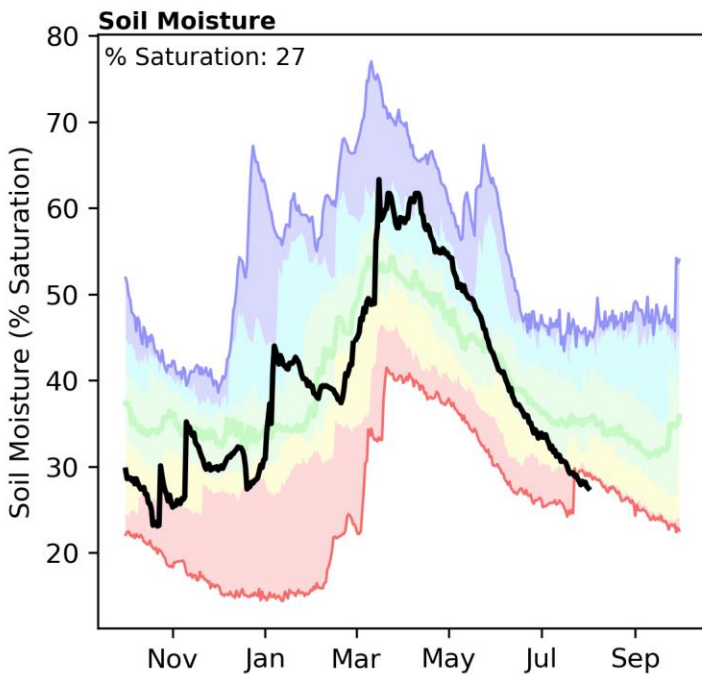
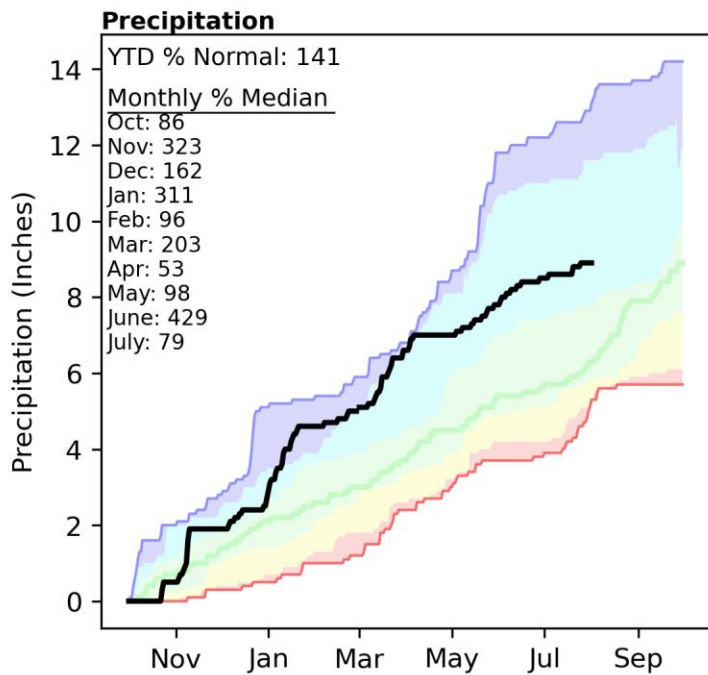
Precipitation in July was well below normal, with an average of 0.2" falling region-wide (18% of normal). This brings the water year accumulation (October-July) to 133% of median. Depth averaged soil moisture was calculated to be 14% of saturation compared to 35% at this time last year.



Statistical shading breaks at 10th, 30th, 50th, 70th, and 90th percentiles.
For more information visit: [30 year normal calculation description](#)

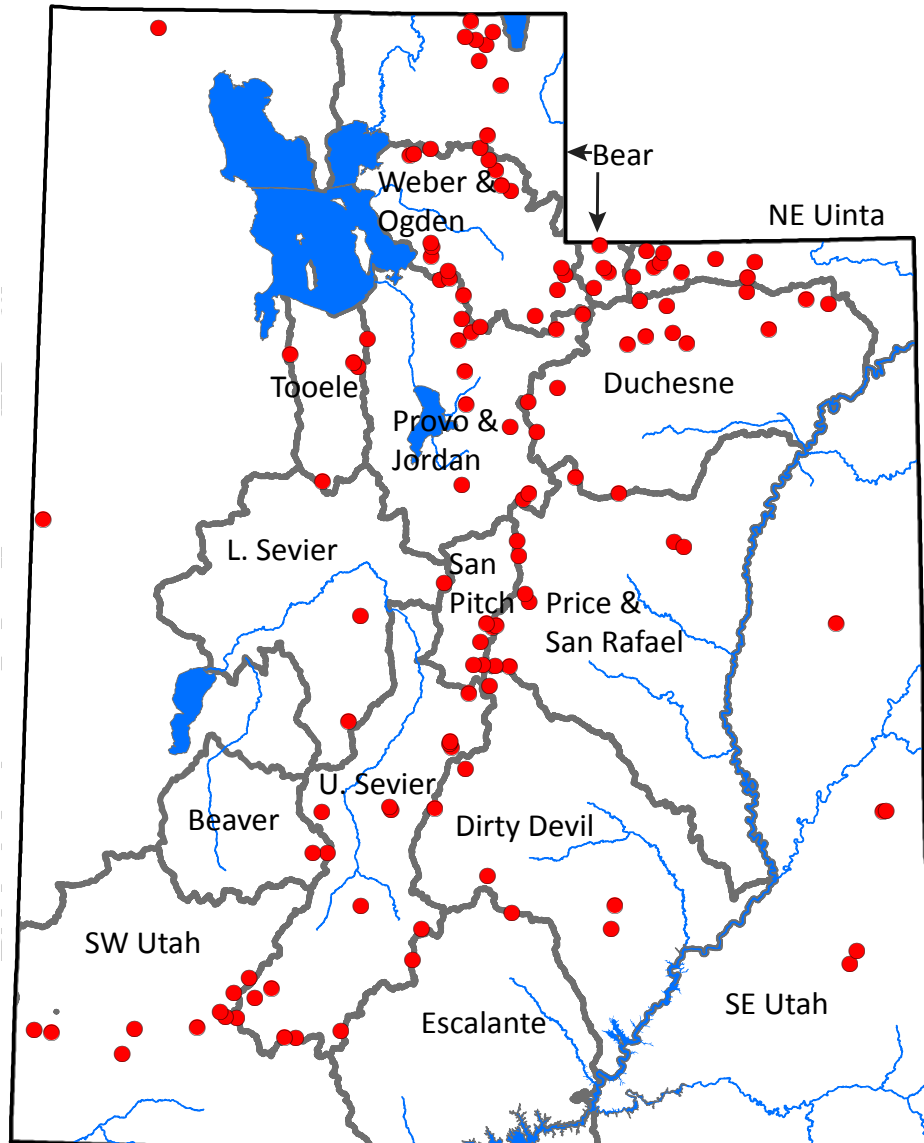
Western Utah | August 1, 2023

Precipitation in July was below normal, with an average of 0.4" falling region-wide (79% of normal). This brings the water year accumulation (October-July) to 141% of median. Depth averaged soil moisture was calculated to be 27% of saturation compared to 39% at this time last year.



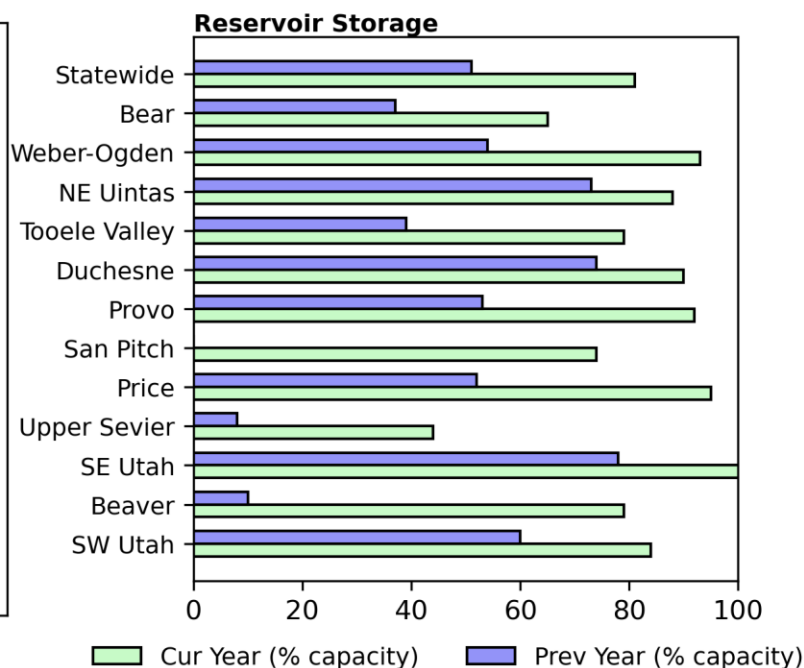
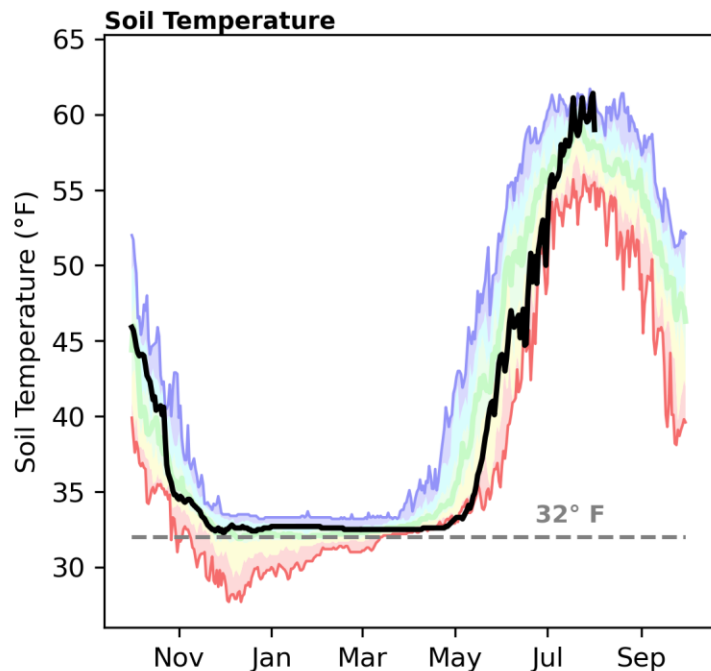
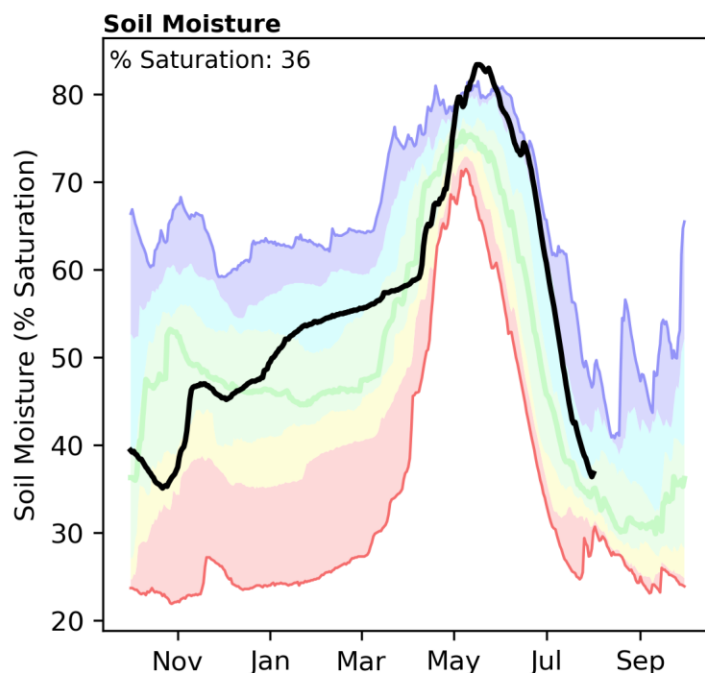
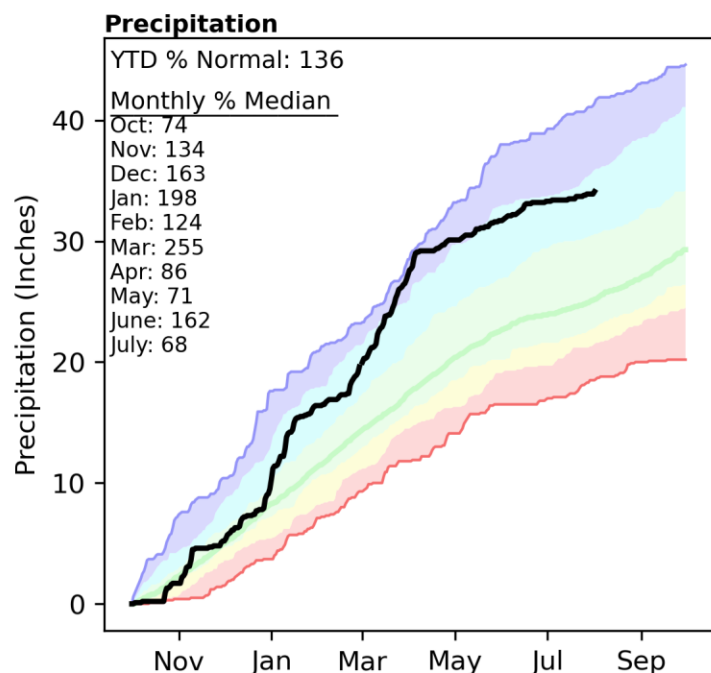
Statistical shading breaks at 10th, 30th, 50th, 70th, and 90th percentiles.
For more information visit: [30 year normal calculation description](#)

SNOTEL portion of report



Statewide Snotel | August 1, 2023

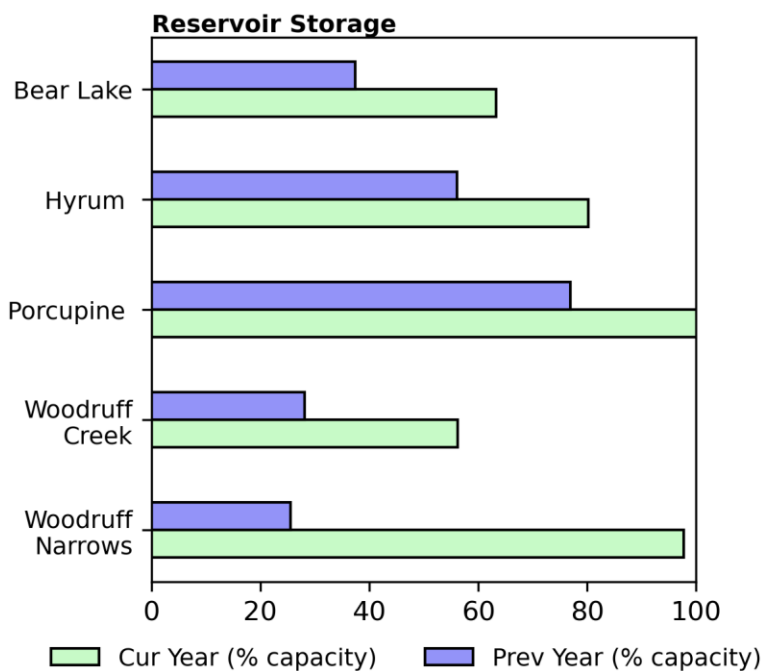
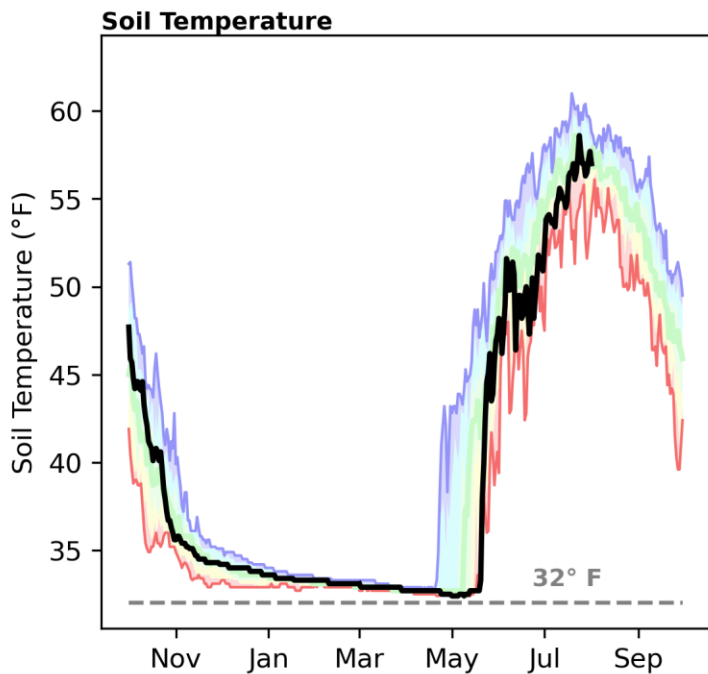
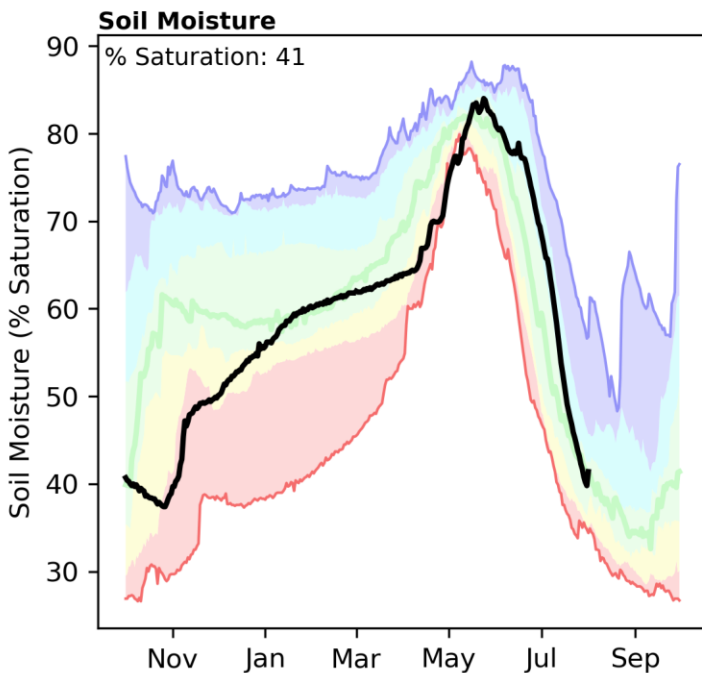
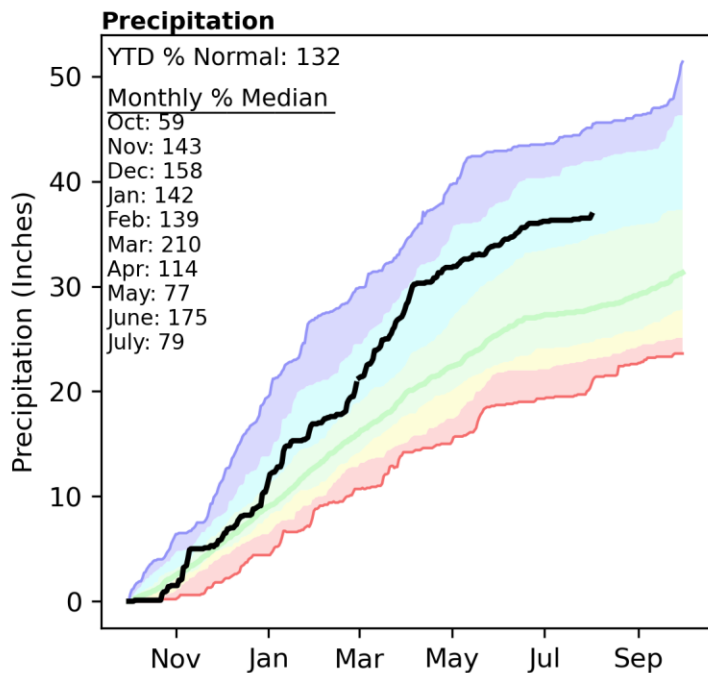
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Statistical shading breaks at 10th, 30th, 50th, 70th, and 90th percentiles.
For more information visit: [30 year normal calculation description](#)

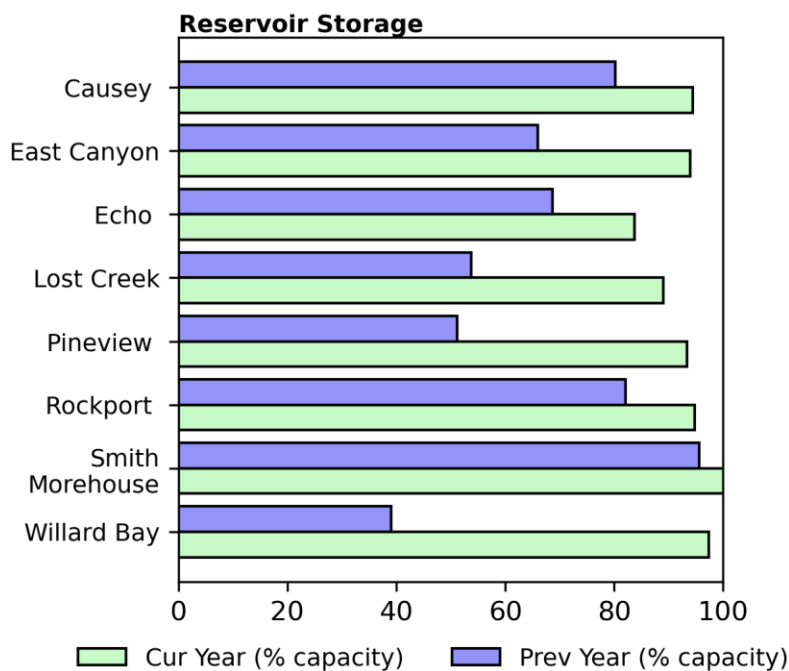
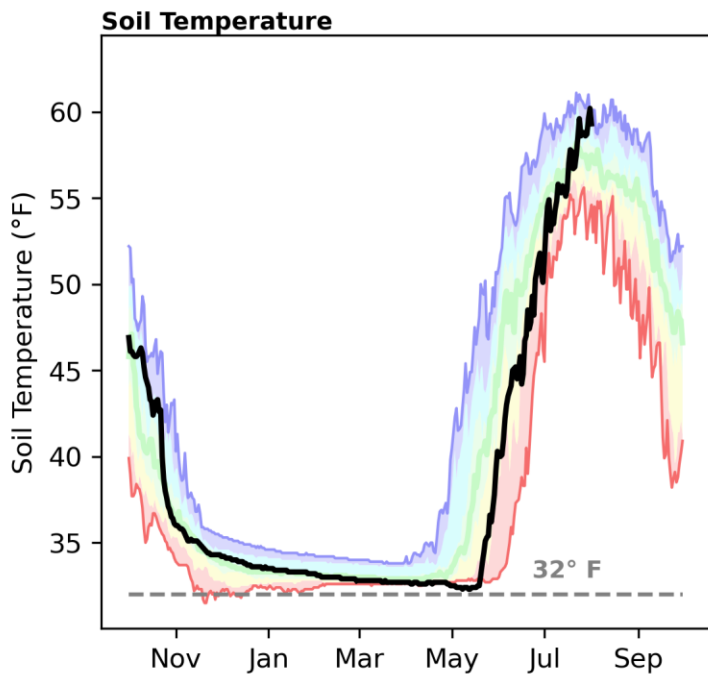
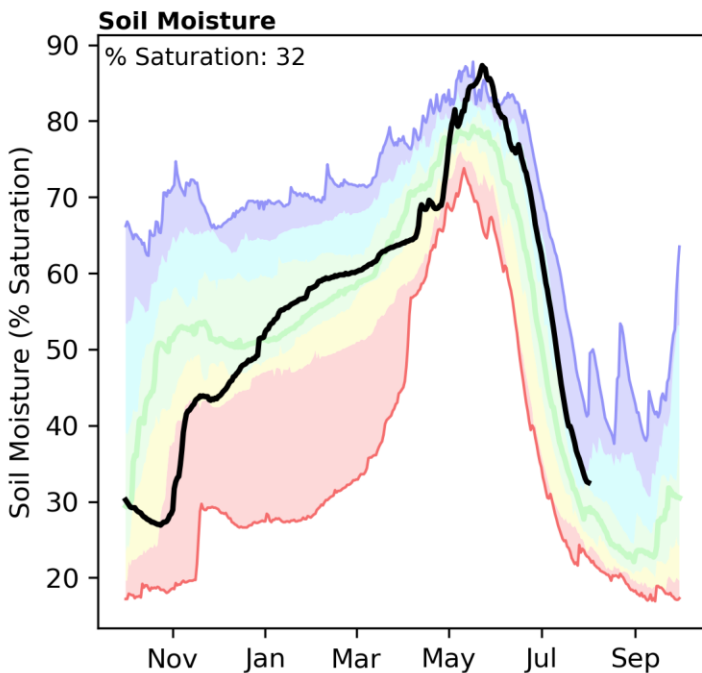
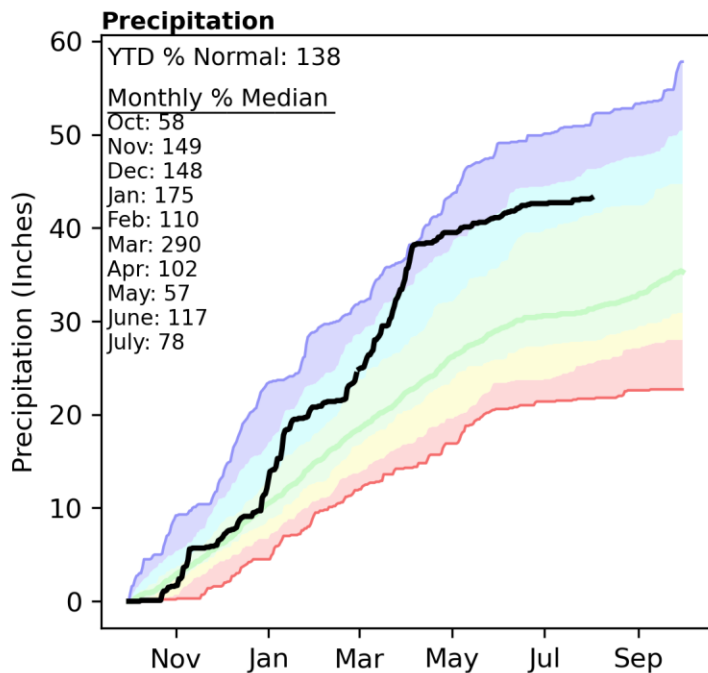
¹Statewide reservoir percentages exclude Lake Powell and Flaming Gorge Reservoirs.

Precipitation in July was below normal, with an average of 0.6" falling region-wide (79% of normal). This brings the water year accumulation (October-July) to 132% of median. Depth averaged soil moisture was calculated to be 41% of saturation compared to 35% at this time last year. Reservoir storage is 65% of capacity, compared to 37% last year. The Water Availability Index percentiles are 59% for the Bear, 81% for the Little Bear, and 82% for Woodruff Narrows.



Statistical shading breaks at 10th, 30th, 50th, 70th, and 90th percentiles.
For more information visit: [30 year normal calculation description](#)

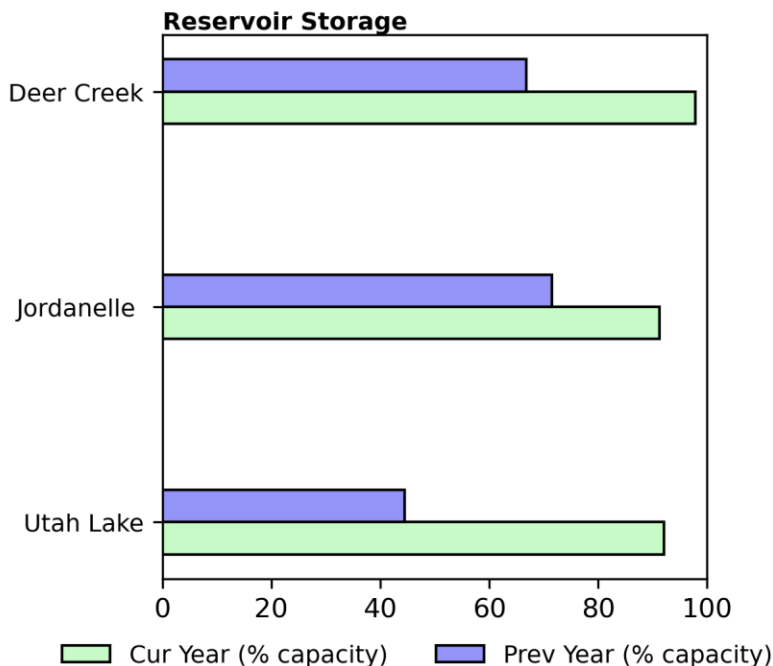
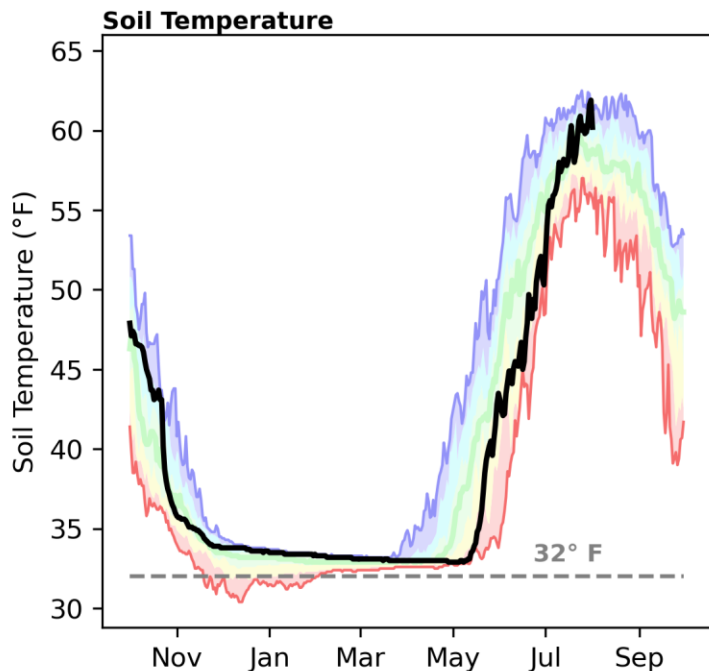
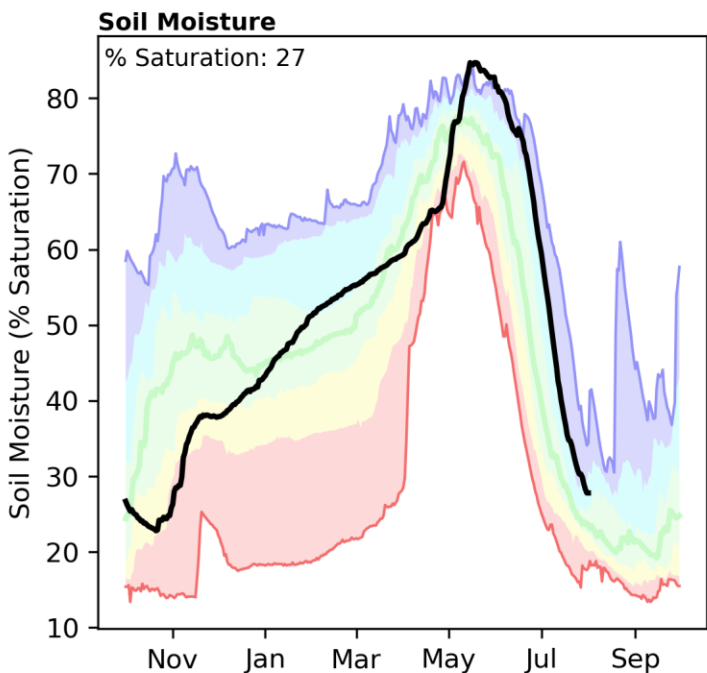
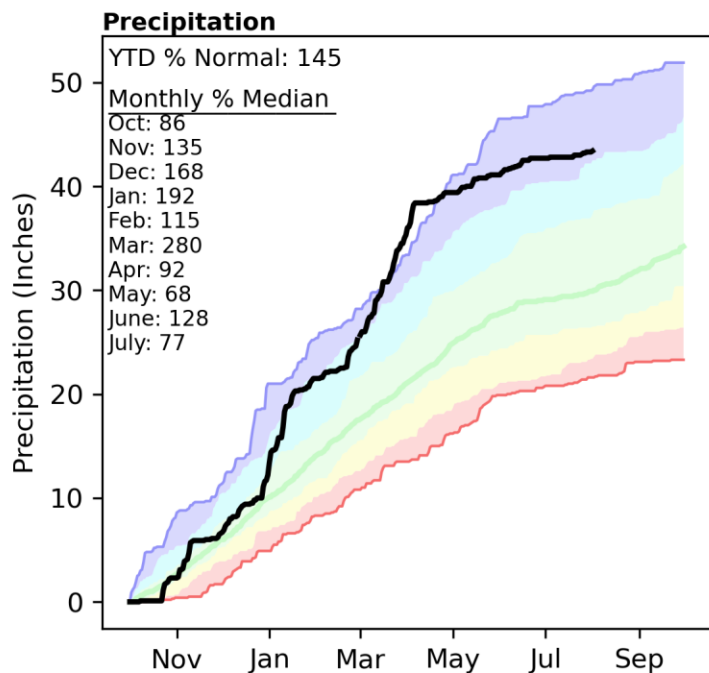
Precipitation in July was below normal, with an average of 0.6" falling region-wide (78% of normal). This brings the water year accumulation (October-July) to 138% of median. Depth averaged soil moisture was calculated to be 32% of saturation compared to 28% at this time last year. Reservoir storage is 93% of capacity, compared to 54% last year. The Water Availability Index percentiles are 86% for the Weber, and 91% for the Ogden.



Statistical shading breaks at 10th, 30th, 50th, 70th, and 90th percentiles.
For more information visit: [30 year normal calculation description](#)

Provo-Jordan-Utah Lake | August 1, 2023

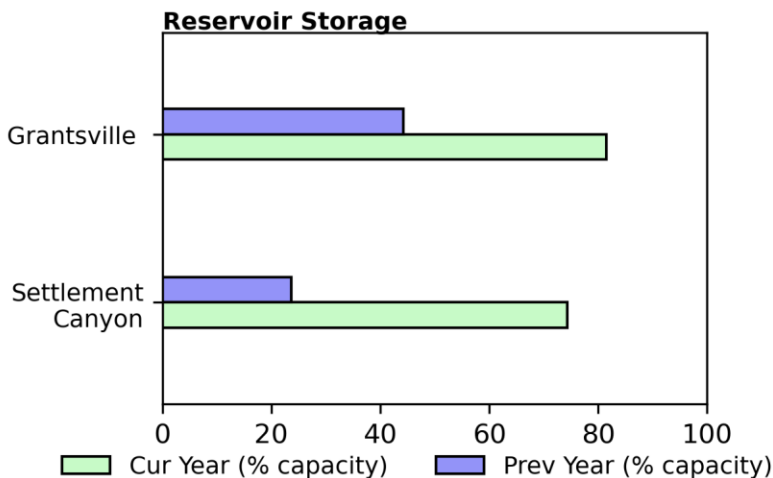
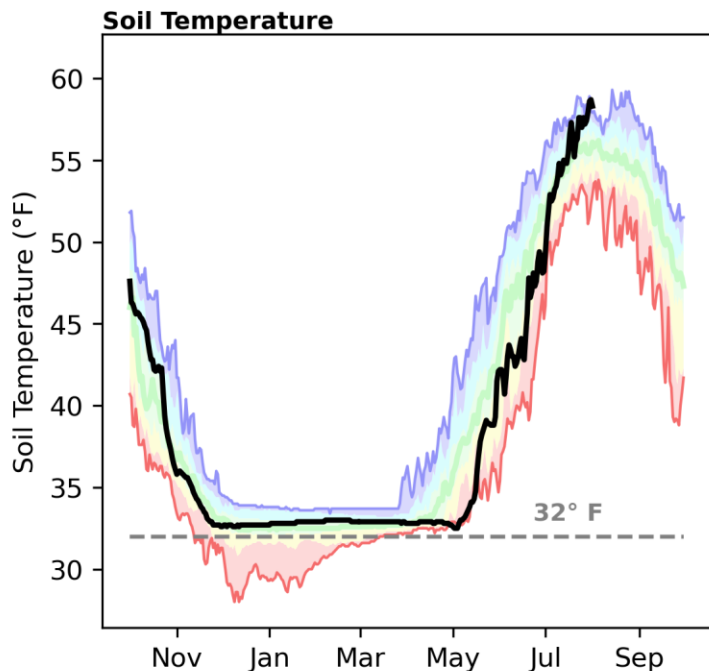
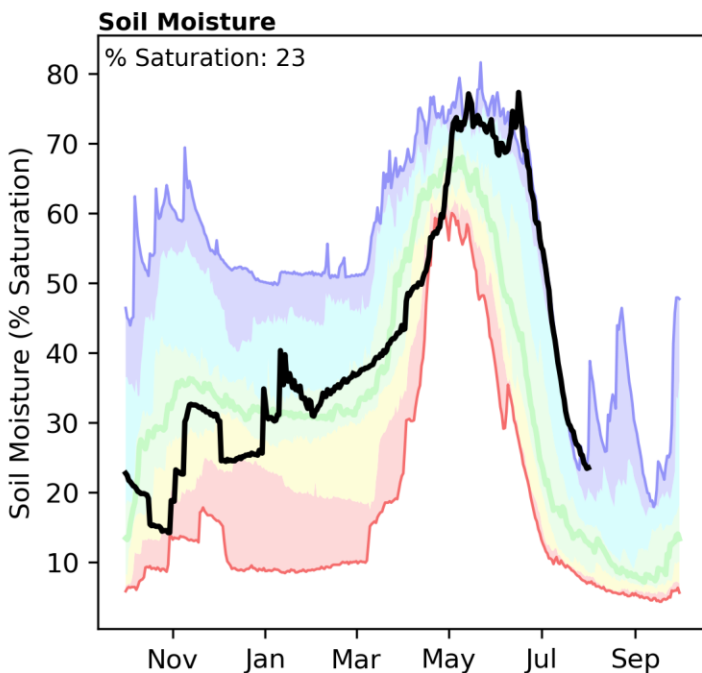
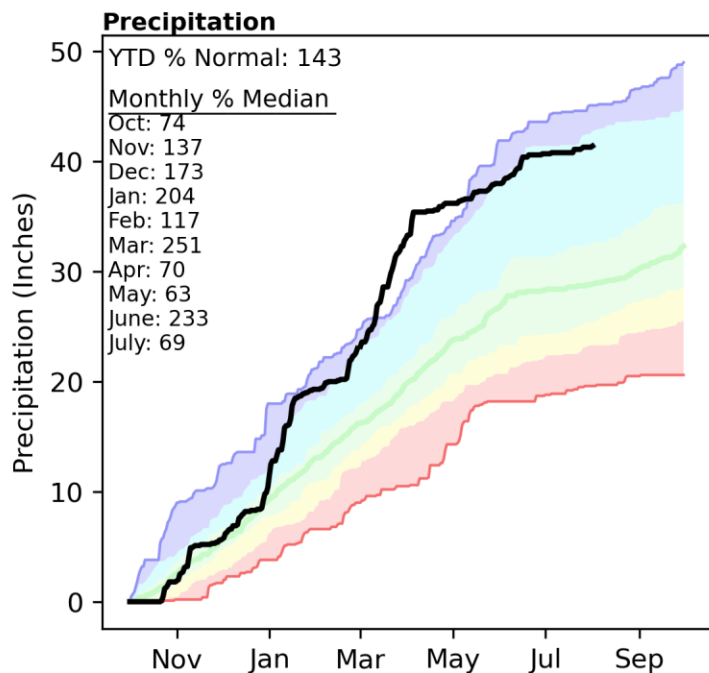
Precipitation in July was below normal, with an average of 0.7" falling region-wide (77% of normal). This brings the water year accumulation (October-July) to 145% of median. Depth averaged soil moisture was calculated to be 27% of saturation compared to 24% at this time last year. Reservoir storage is 92% of capacity, compared to 53% last year. The Water Availability Index percentile is 81% for the Provo.



Statistical shading breaks at 10th, 30th, 50th, 70th, and 90th percentiles.
For more information visit: [30 year normal calculation description](#)

Tooele Valley-Vernon Creek | August 1, 2023

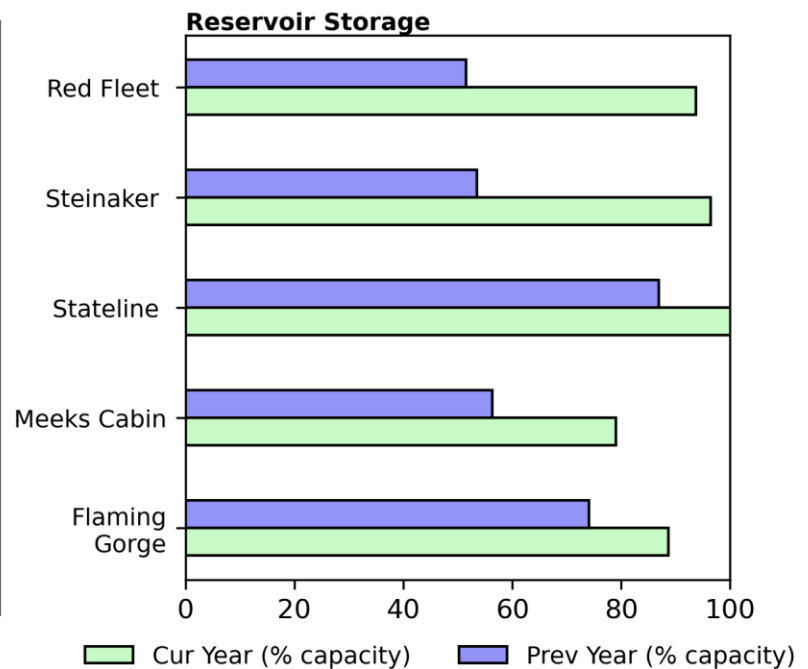
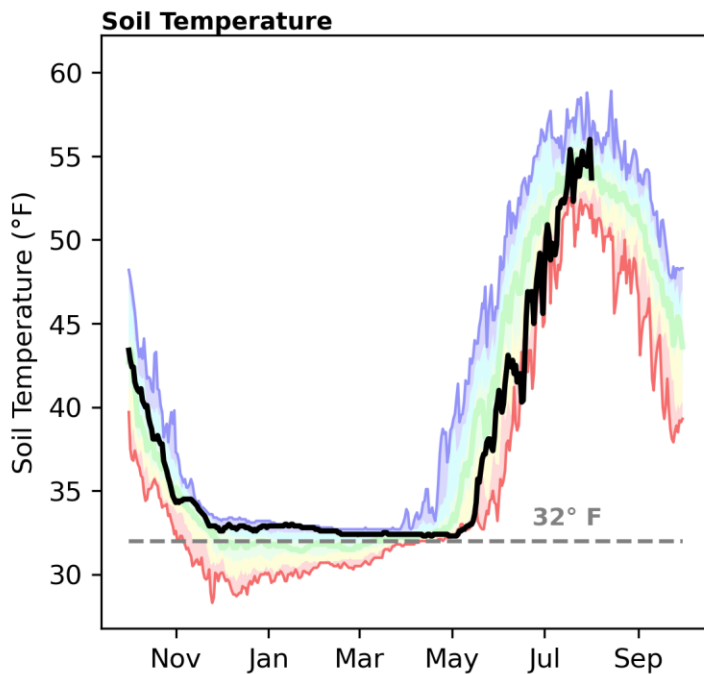
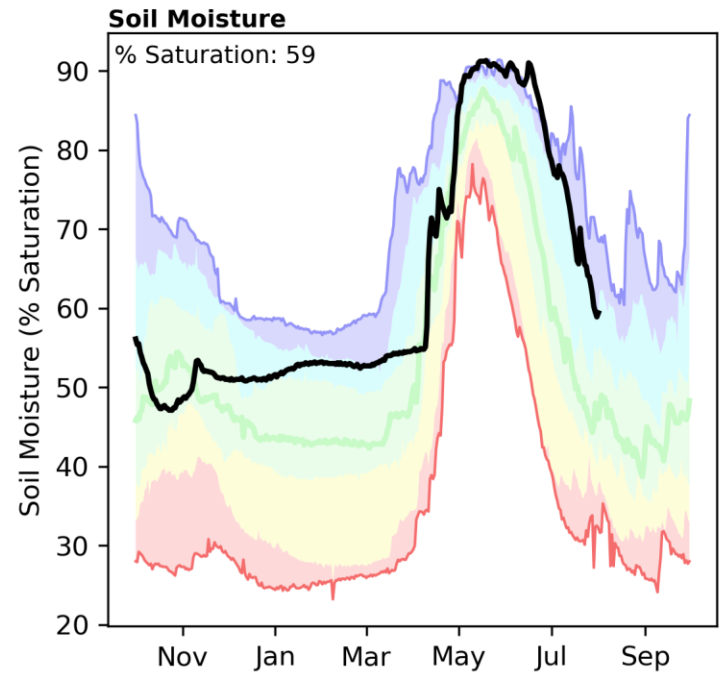
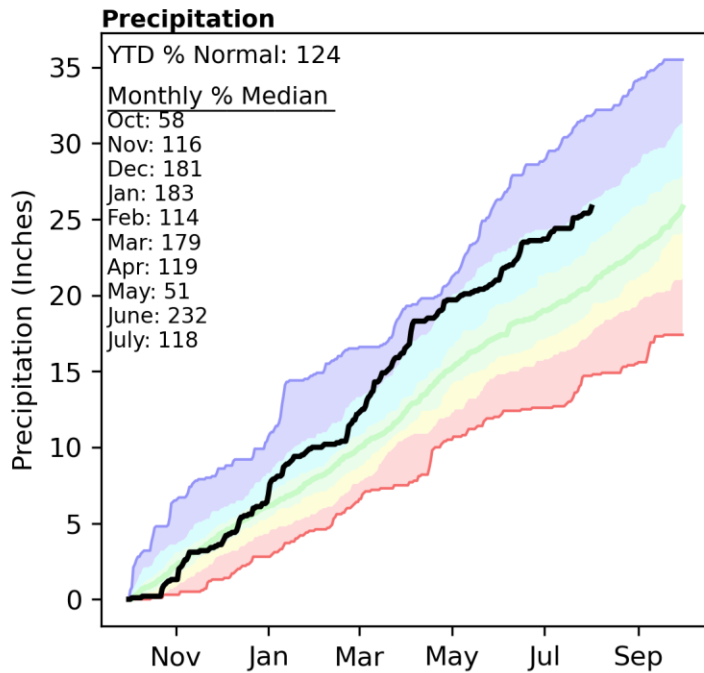
Precipitation in July was well below normal, with an average of 0.7" falling region-wide (69% of normal). This brings the water year accumulation (October-July) to 143% of median. Depth averaged soil moisture was calculated to be 23% of saturation compared to 15% at this time last year. Reservoir storage is 79% of capacity, compared to 39% last year.



Statistical shading breaks at 10th, 30th, 50th, 70th, and 90th percentiles.
For more information visit: [30 year normal calculation description](#)

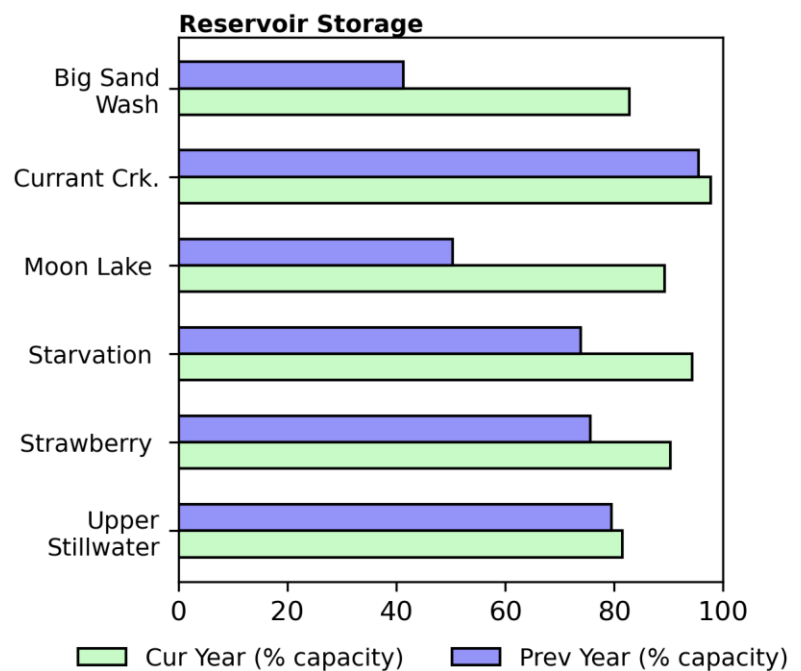
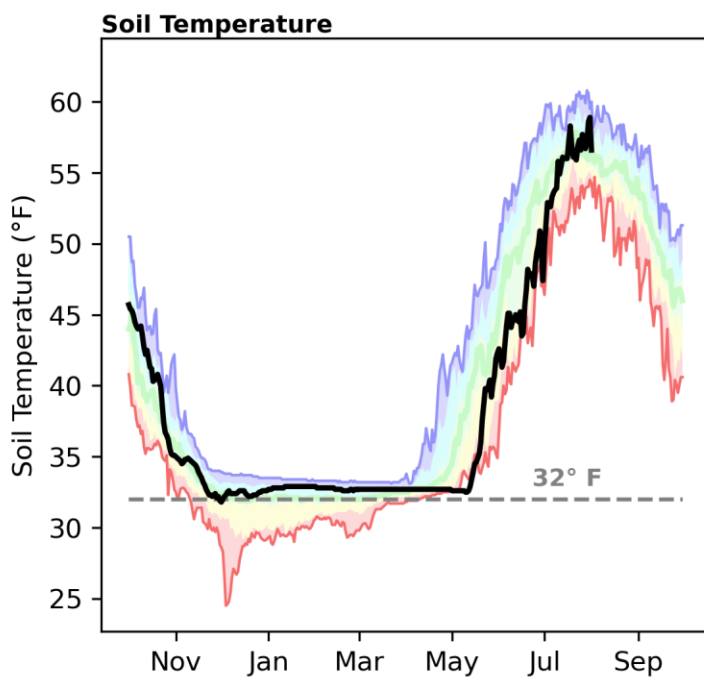
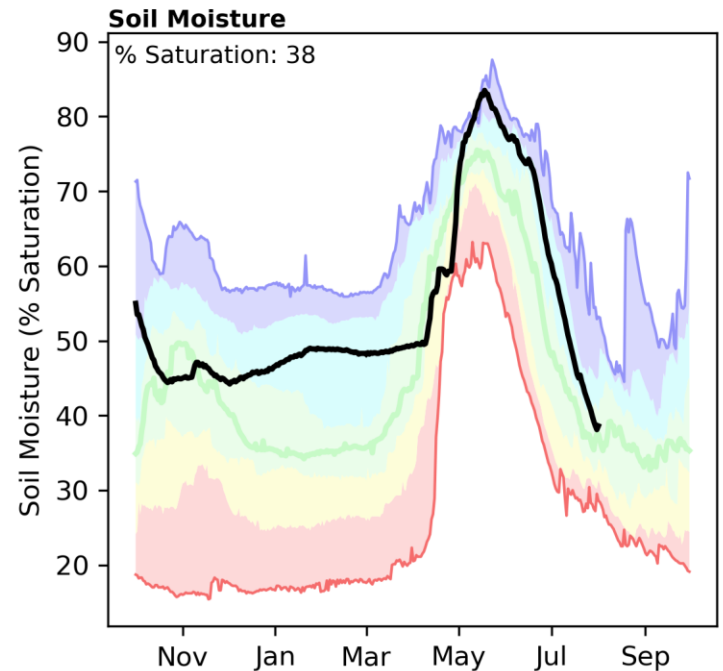
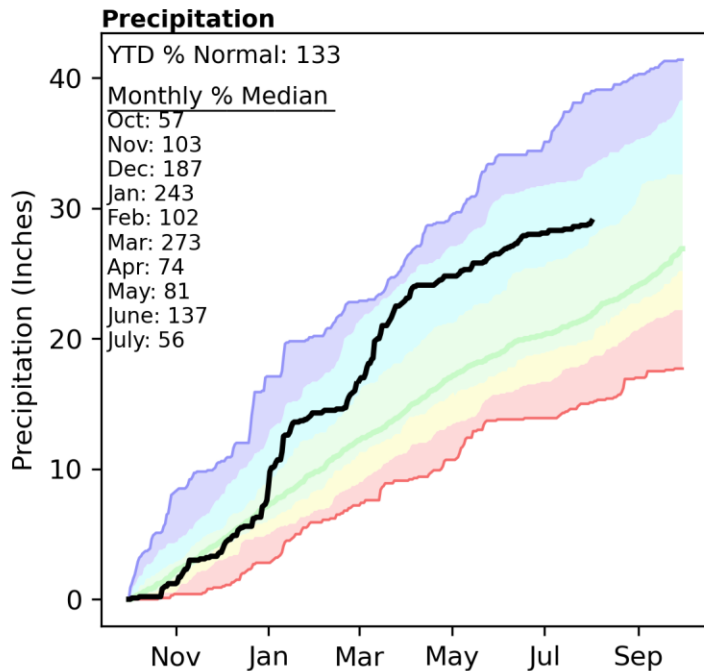
Northeastern Uintas | August 1, 2023

Precipitation in July was above normal, with an average of 2.1" falling region-wide (118% of normal). This brings the water year accumulation (October-July) to 124% of median. Depth averaged soil moisture was calculated to be 59% of saturation compared to 58% at this time last year. Reservoir storage is 88% of capacity, compared to 73% last year. The Water Availability Index percentiles are 83% for the Blacks Fork, and 83% for the Smiths Fork.



Statistical shading breaks at 10th, 30th, 50th, 70th, and 90th percentiles.
For more information visit: [30 year normal calculation description](#)

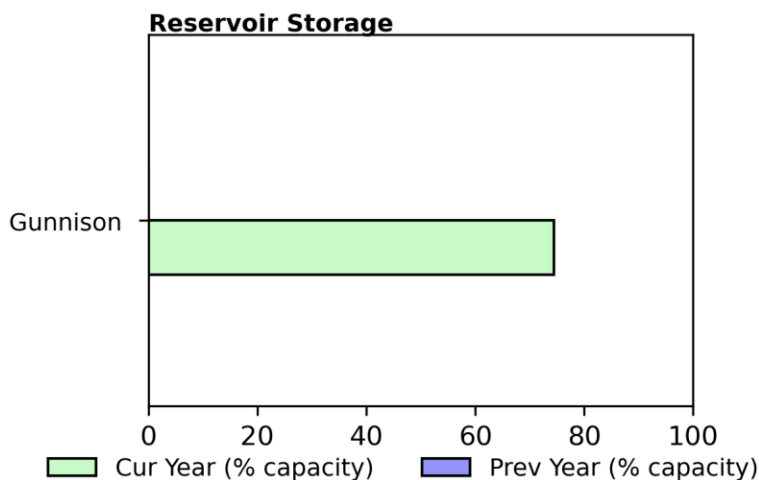
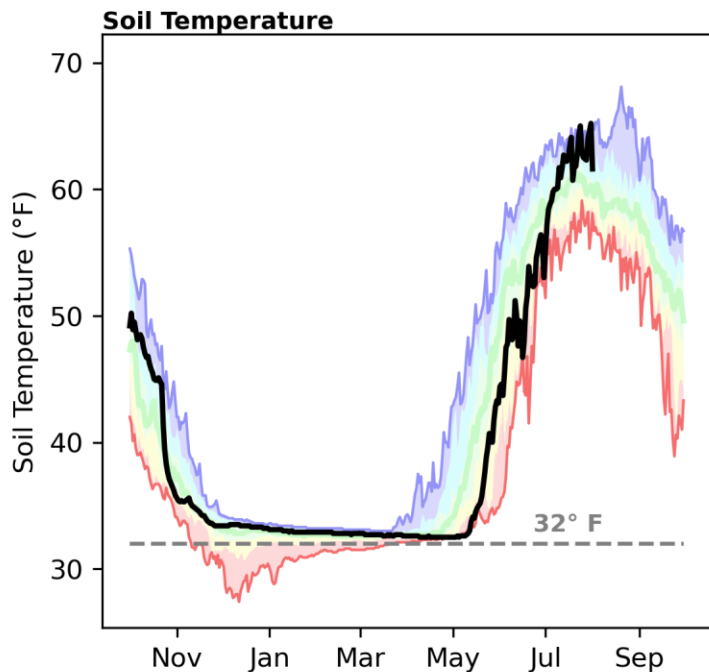
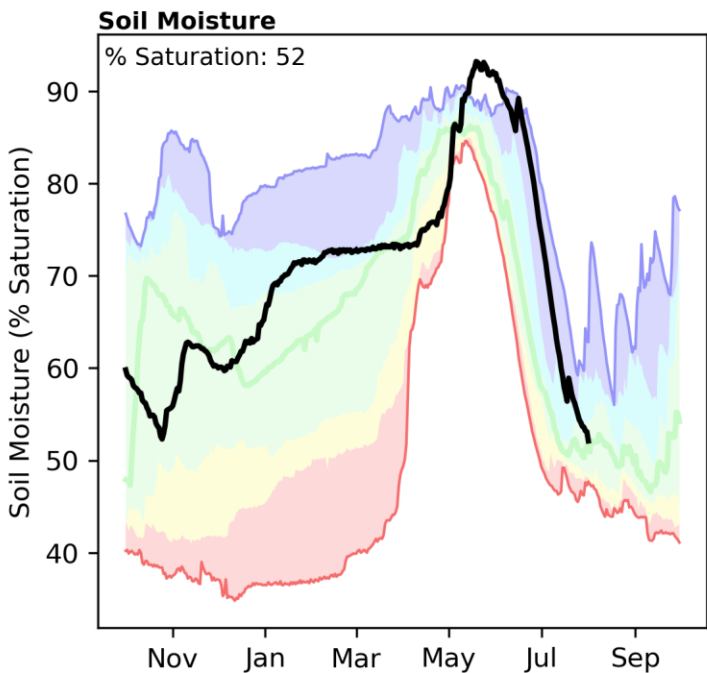
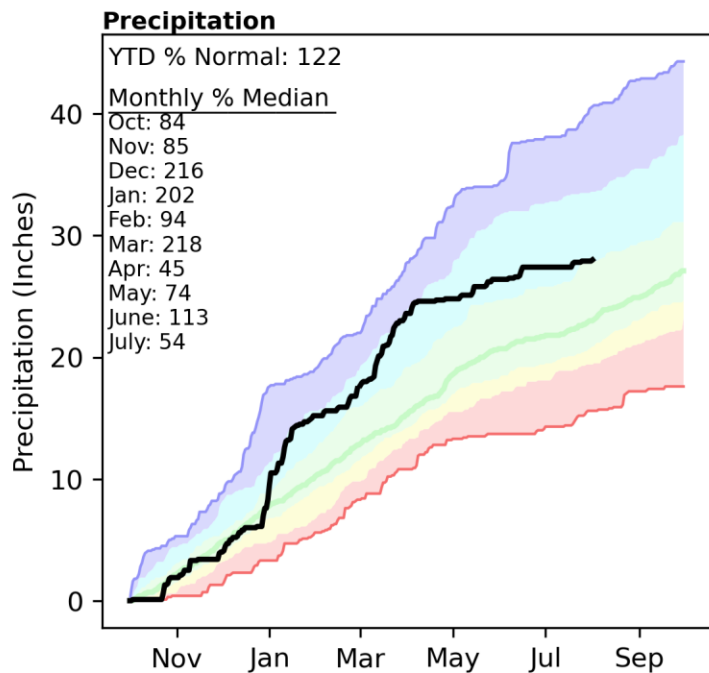
Precipitation in July was well below normal, with an average of 0.9" falling region-wide (56% of normal). This brings the water year accumulation (October-July) to 133% of median. Depth averaged soil moisture was calculated to be 38% of saturation compared to 43% at this time last year. Reservoir storage is 90% of capacity, compared to 74% last year. The Water Availability Index percentiles are 73% for the Western Uintas, and 84% for the Eastern Uintas.



Statistical shading breaks at 10th, 30th, 50th, 70th, and 90th percentiles.
For more information visit: [30 year normal calculation description](#)

San Pitch | August 1, 2023

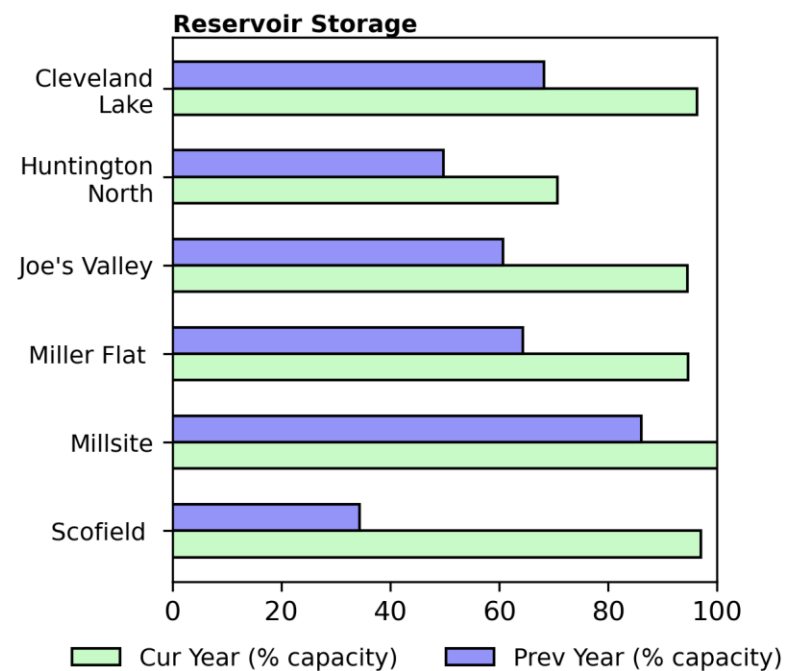
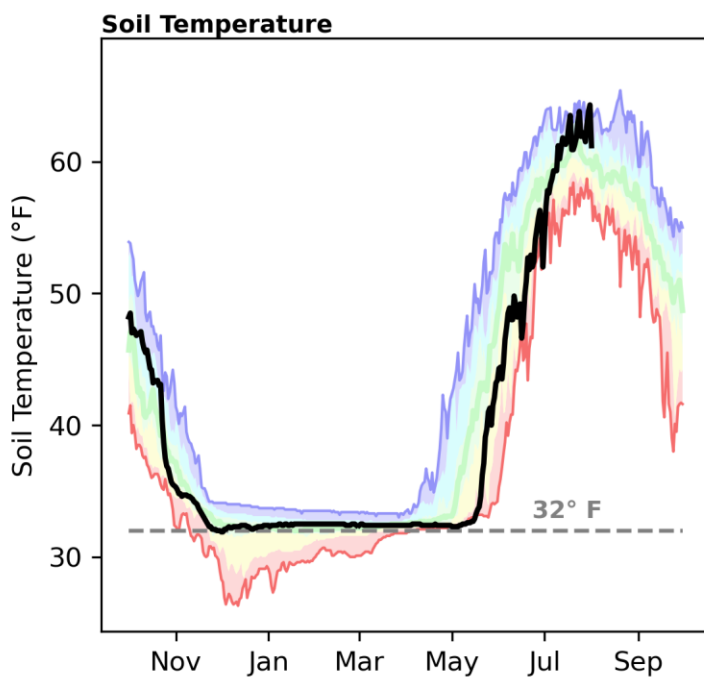
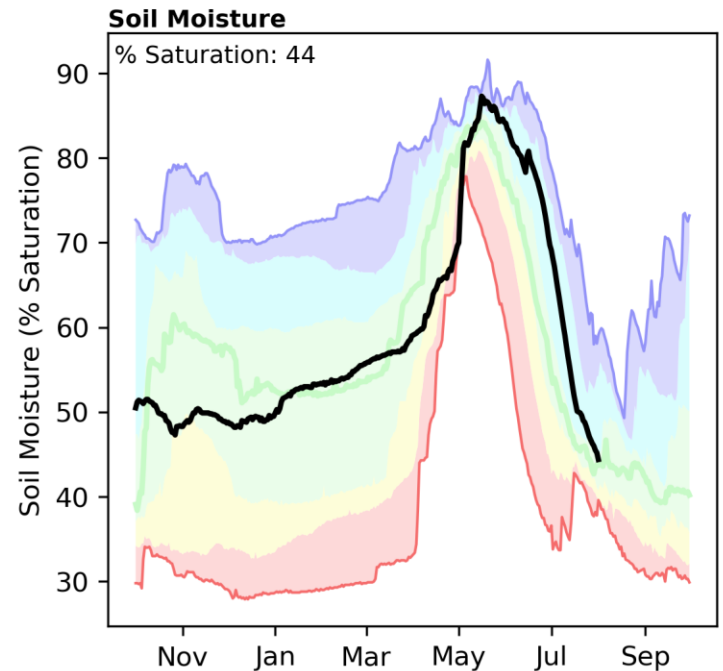
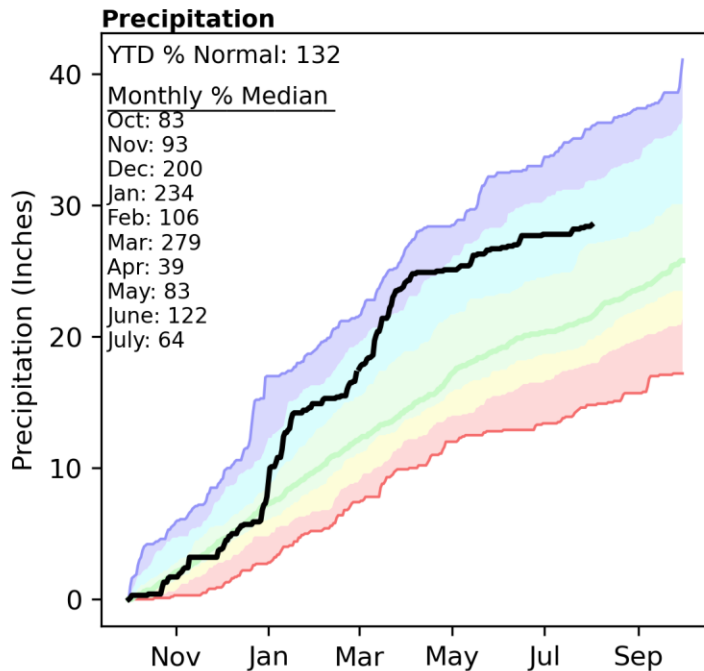
Precipitation in July was well below normal, with an average of 0.6" falling region-wide (54% of normal). This brings the water year accumulation (October-July) to 122% of median. Depth averaged soil moisture was calculated to be 52% of saturation compared to 52% at this time last year. Reservoir storage is 74% of capacity, compared to 0% last year. The Water Availability Index percentile is 77% for the San Pitch.



Statistical shading breaks at 10th, 30th, 50th, 70th, and 90th percentiles.
For more information visit: [30 year normal calculation description](#)

Price-San Rafael | August 1, 2023

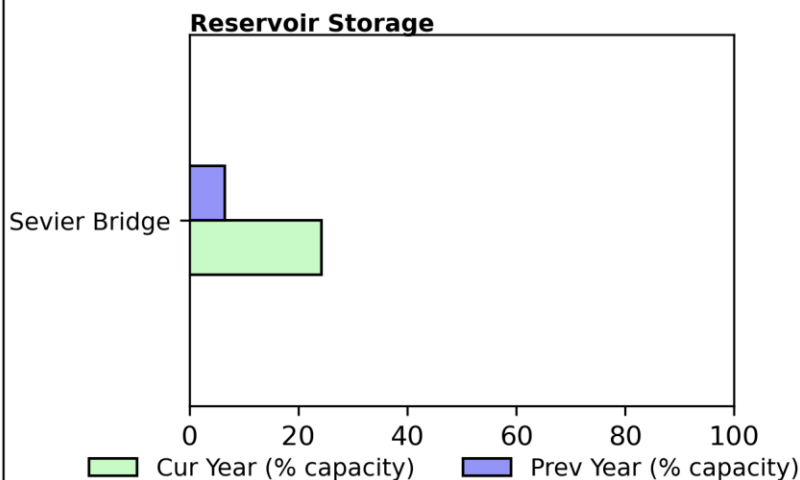
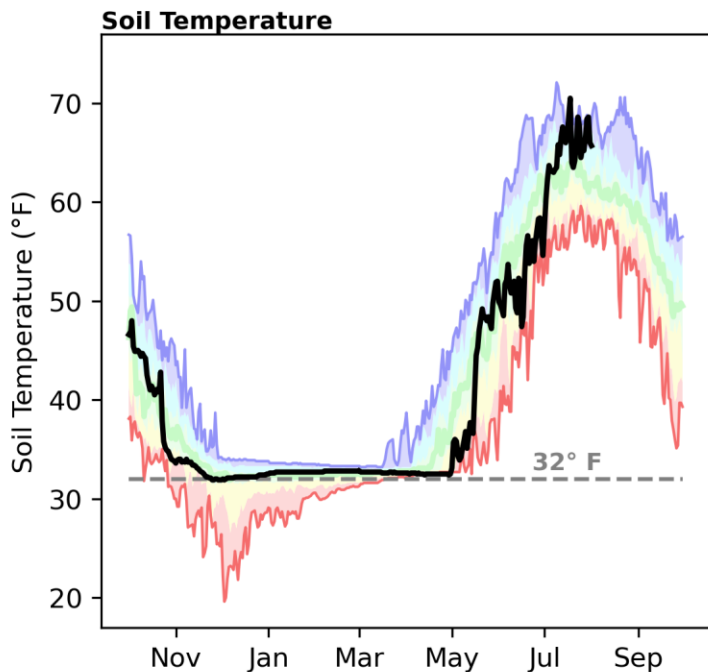
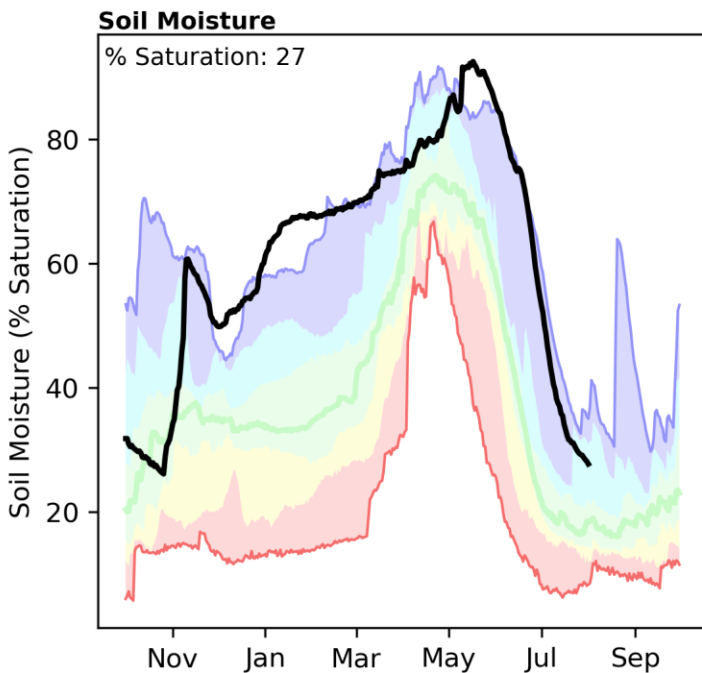
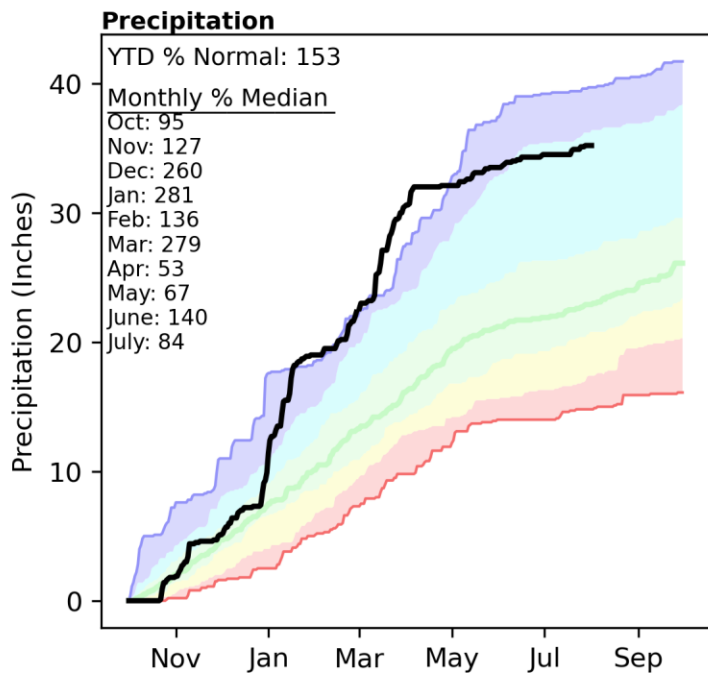
Precipitation in July was well below normal, with an average of 0.7" falling region-wide (64% of normal). This brings the water year accumulation (October-July) to 132% of median. Depth averaged soil moisture was calculated to be 44% of saturation compared to 45% at this time last year. Reservoir storage is 95% of capacity, compared to 52% last year. The Water Availability Index percentiles are 89% for the Price, 68% for Joes Valley, and 89% for Ferron Creek.



Statistical shading breaks at 10th, 30th, 50th, 70th, and 90th percentiles.
For more information visit: [30 year normal calculation description](#)

Lower Sevier | August 1, 2023

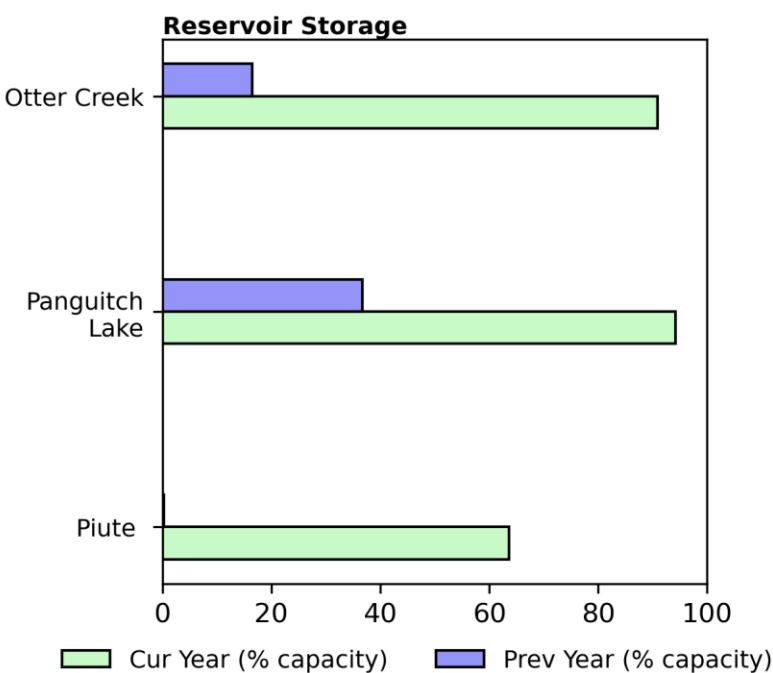
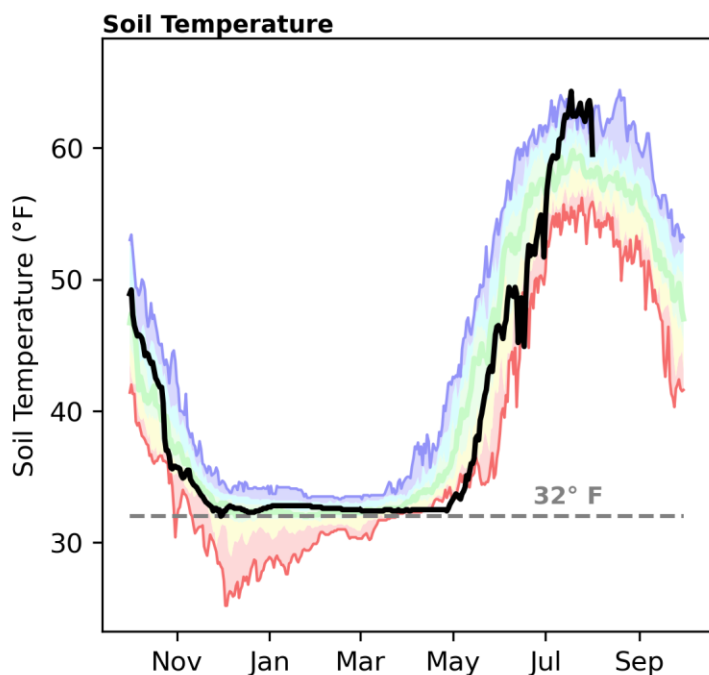
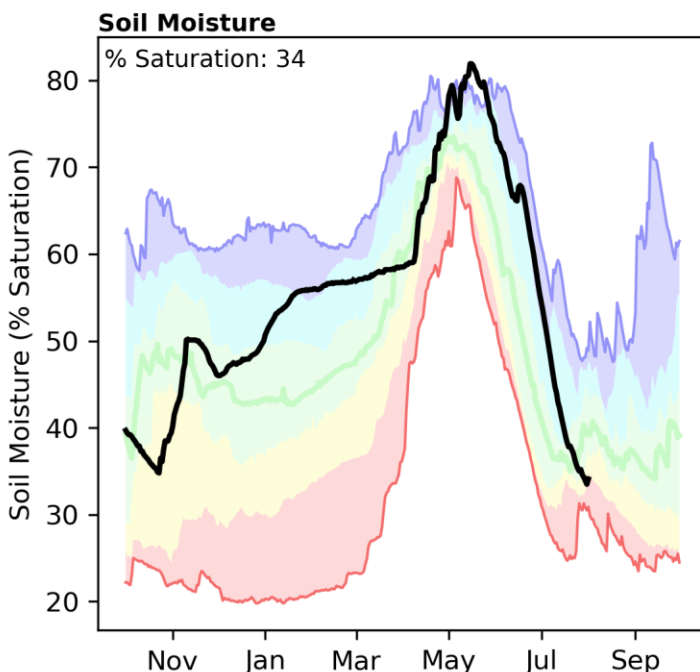
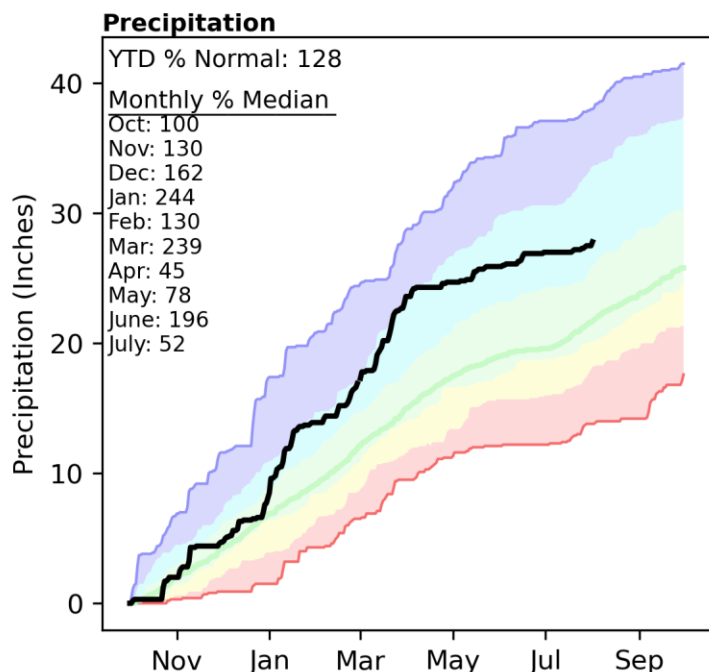
Precipitation in July was below normal, with an average of 0.7" falling region-wide (84% of normal). This brings the water year accumulation (October-July) to 153% of median. Depth averaged soil moisture was calculated to be 27% of saturation compared to 24% at this time last year. Reservoir storage is 24% of capacity, compared to 6% last year. The Water Availability Index percentile is 27% for the Lower Sevier.



Statistical shading breaks at 10th, 30th, 50th, 70th, and 90th percentiles.
For more information visit: [30 year normal calculation description](#)

Upper Sevier | August 1, 2023

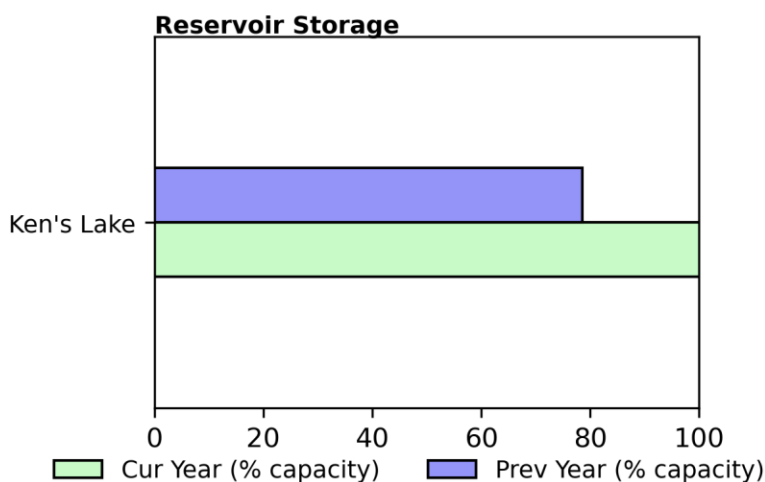
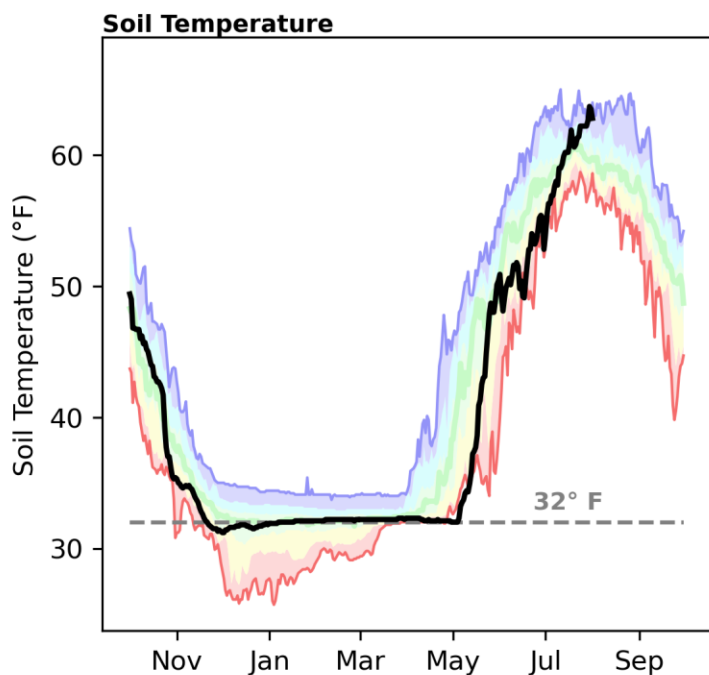
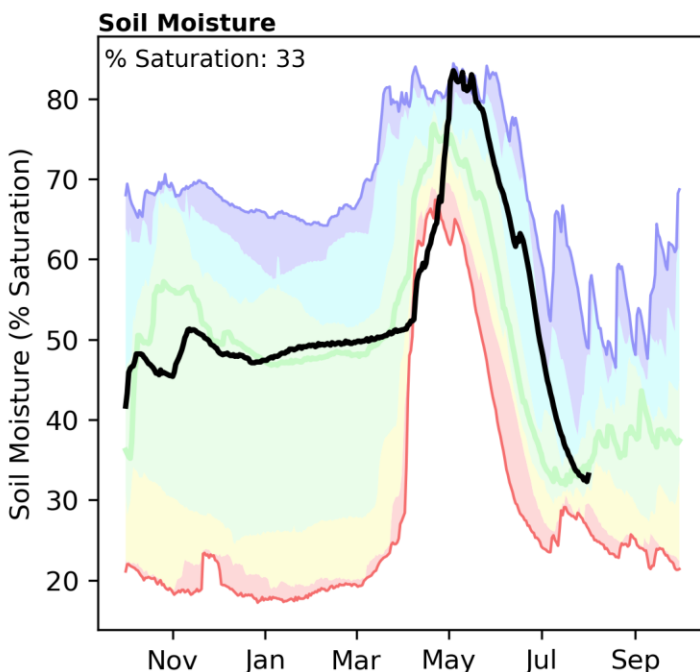
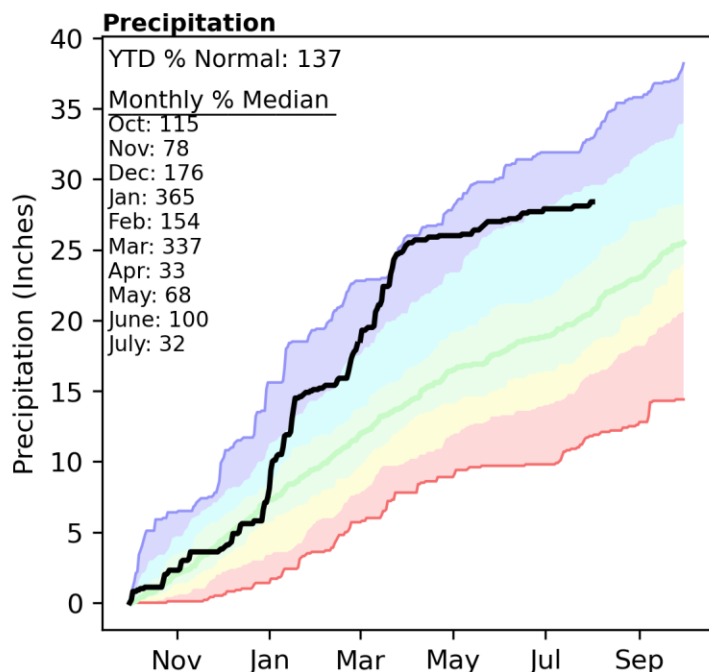
Precipitation in July was well below normal, with an average of 0.8" falling region-wide (52% of normal). This brings the water year accumulation (October-July) to 128% of median. Depth averaged soil moisture was calculated to be 34% of saturation compared to 39% at this time last year. Reservoir storage is 78% of capacity, compared to 11% last year. The Water Availability Index percentile is 82% for the Upper Sevier.



Statistical shading breaks at 10th, 30th, 50th, 70th, and 90th percentiles.
For more information visit: [30 year normal calculation description](#)

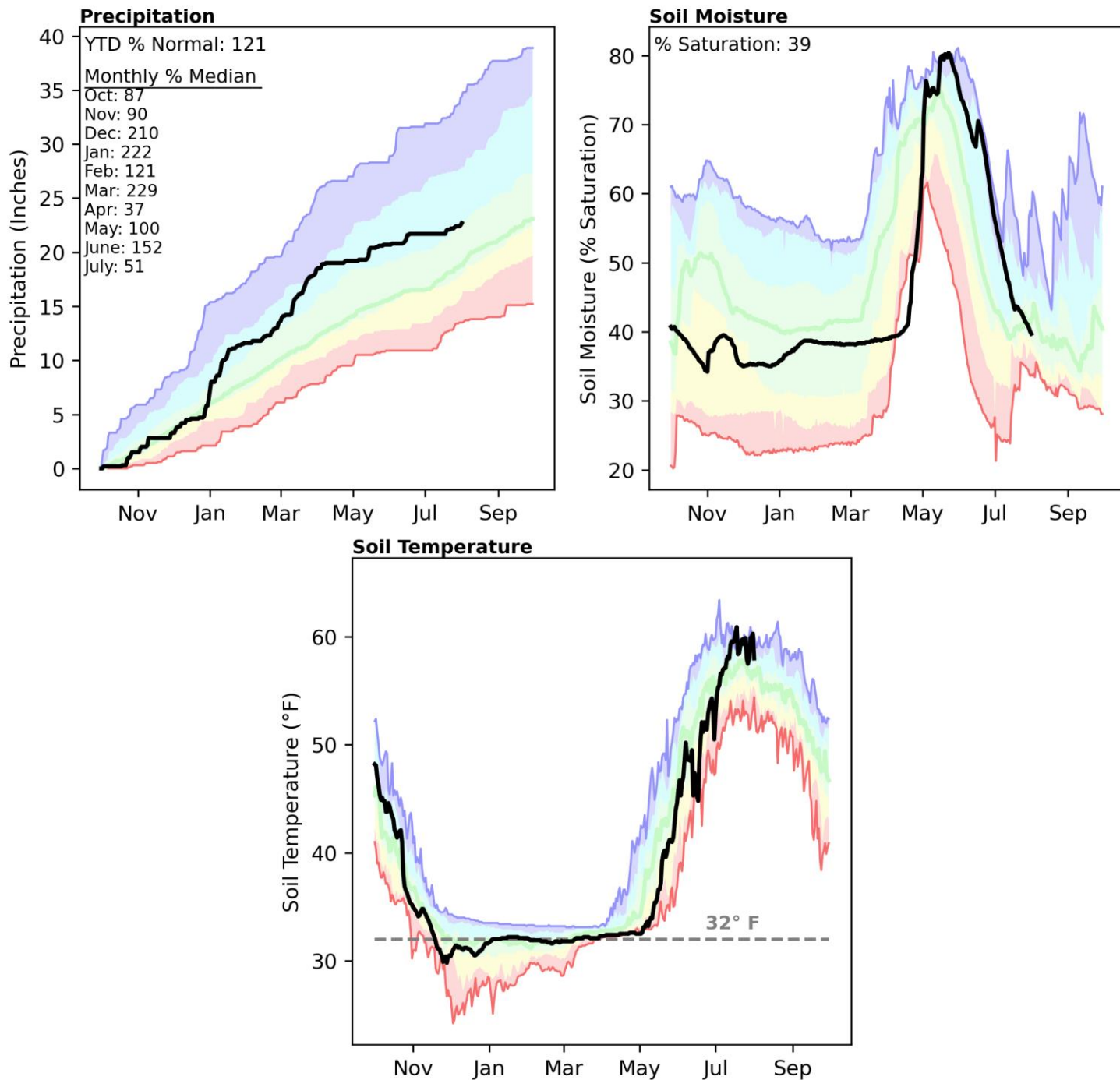
Southeastern Utah | August 1, 2023

Precipitation in July was well below normal, with an average of 0.5" falling region-wide (32% of normal). This brings the water year accumulation (October-July) to 137% of median. Depth averaged soil moisture was calculated to be 33% of saturation compared to 44% at this time last year. Reservoir storage is 109% of capacity, compared to 78% last year. The Water Availability Index percentile is 84% for Moab.



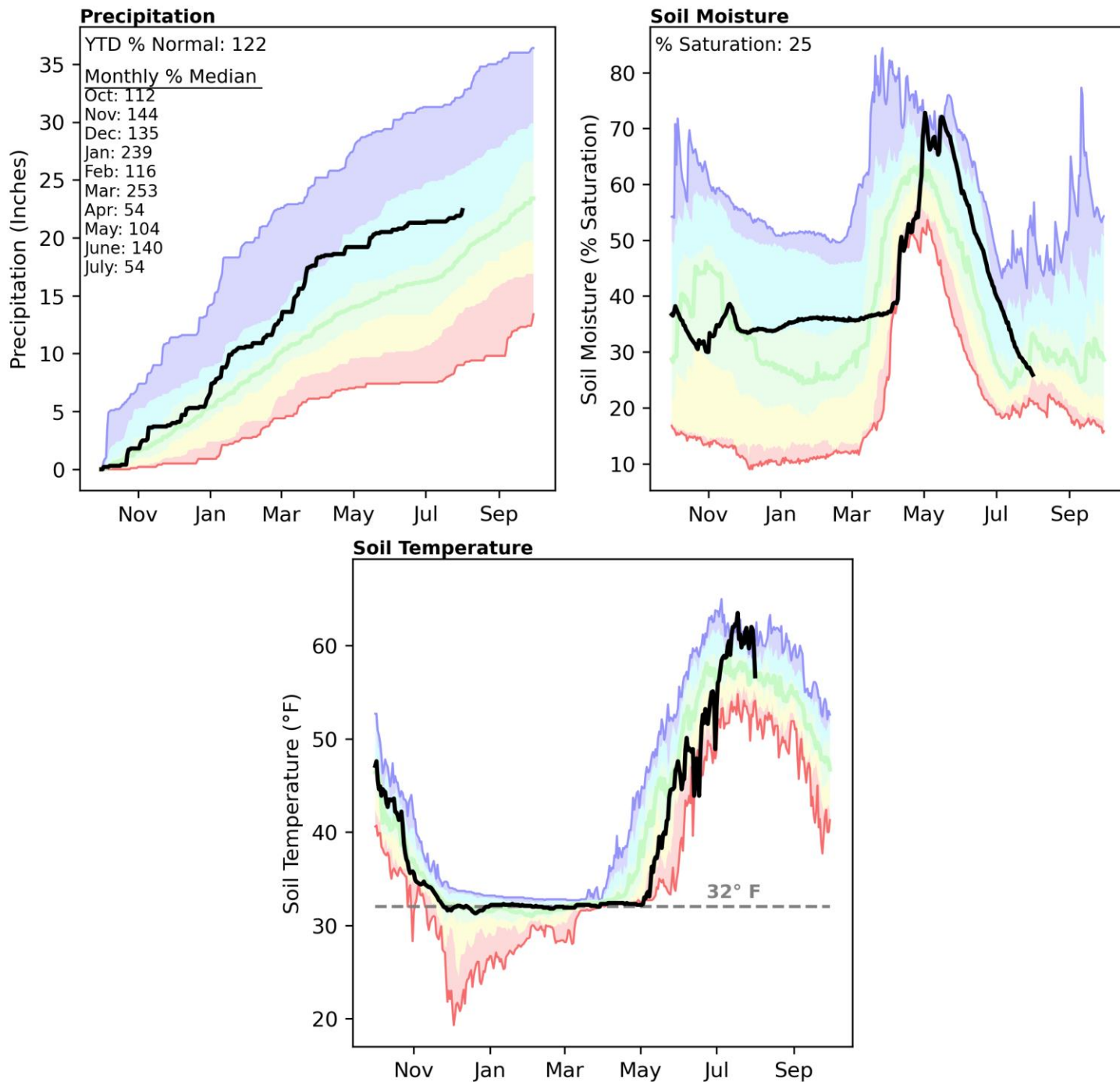
Statistical shading breaks at 10th, 30th, 50th, 70th, and 90th percentiles.
For more information visit: [30 year normal calculation description](#)

Precipitation in July was well below normal, with an average of 1.0" falling region-wide (51% of normal). This brings the water year accumulation (October-July) to 121% of median. Depth averaged soil moisture was calculated to be 39% of saturation compared to 43% at this time last year.



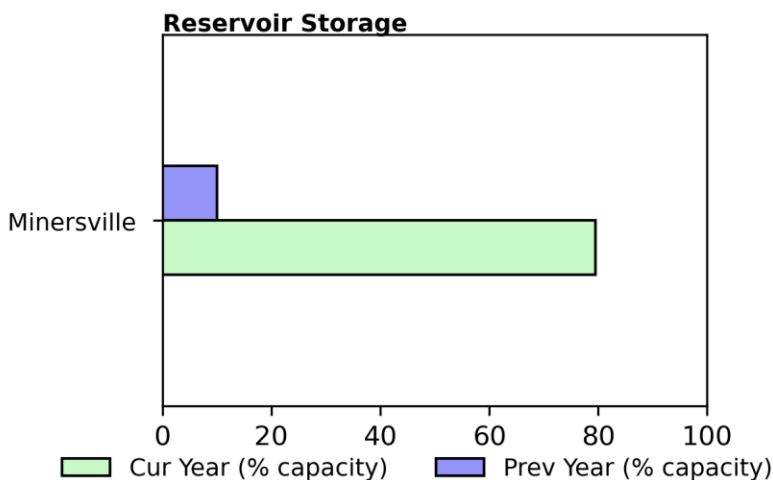
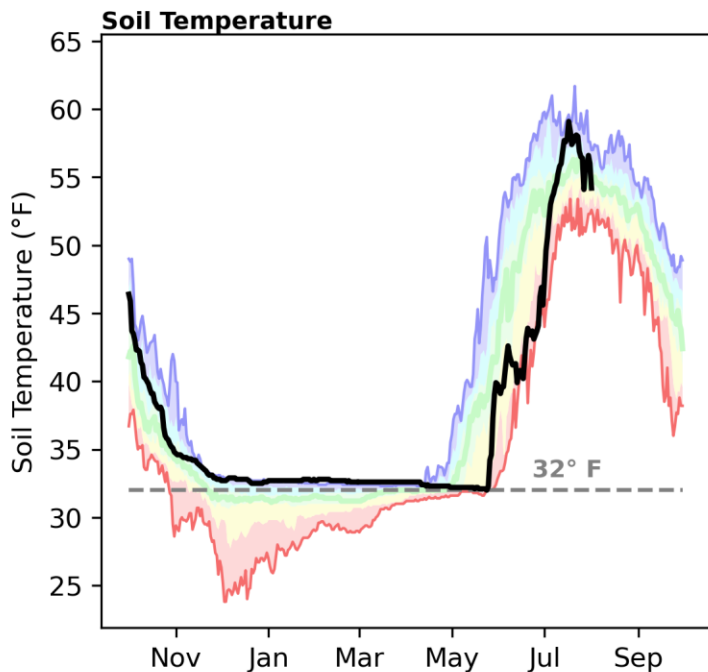
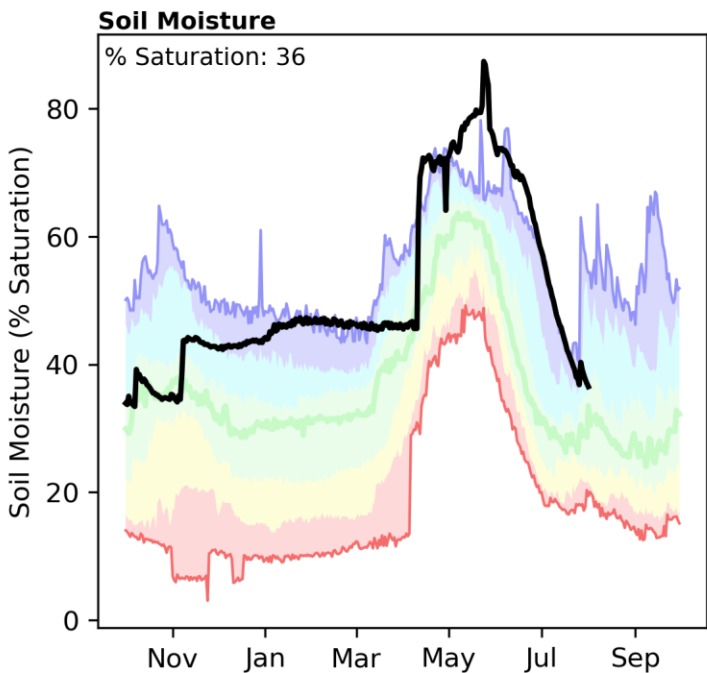
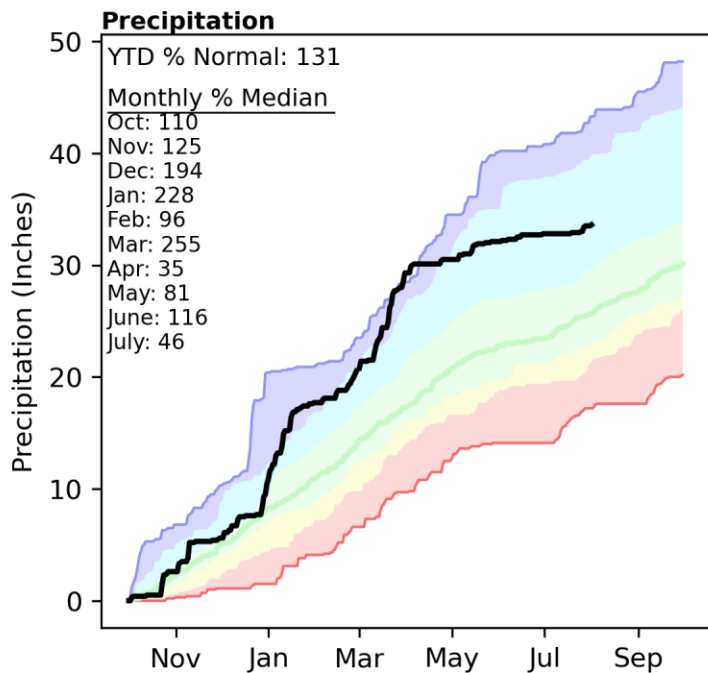
Statistical shading breaks at 10th, 30th, 50th, 70th, and 90th percentiles.
For more information visit: [30 year normal calculation description](#)

Precipitation in July was well below normal, with an average of 1.1" falling region-wide (54% of normal). This brings the water year accumulation (October-July) to 122% of median. Depth averaged soil moisture was calculated to be 25% of saturation compared to 33% at this time last year.



Statistical shading breaks at 10th, 30th, 50th, 70th, and 90th percentiles.
For more information visit: [30 year normal calculation description](#)

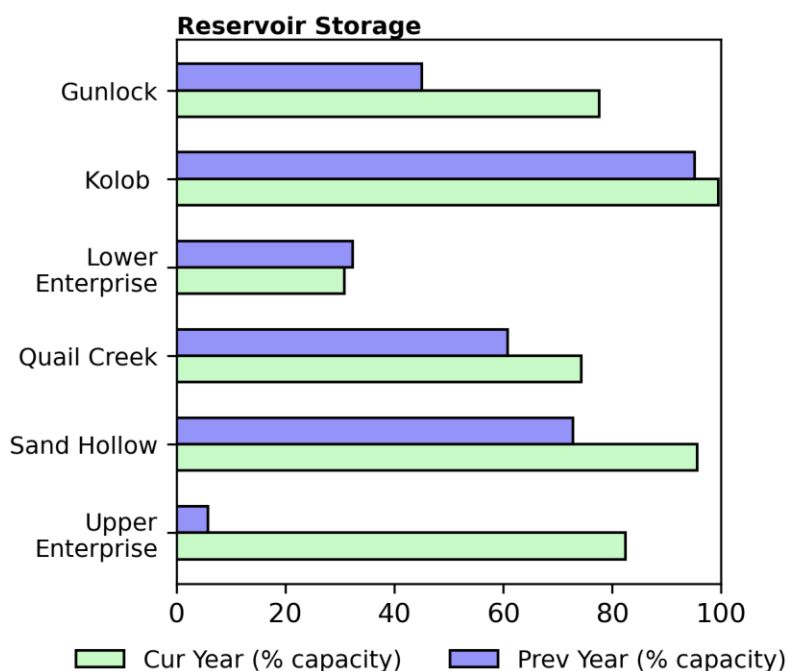
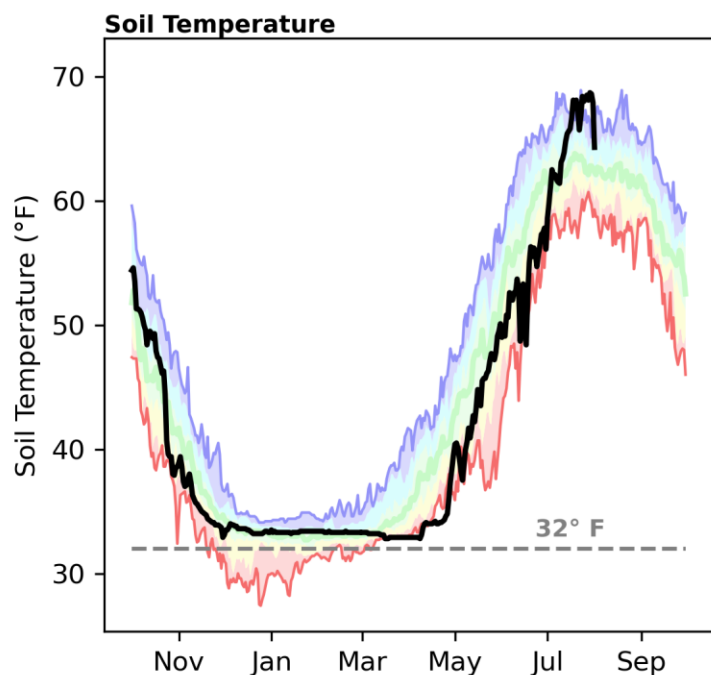
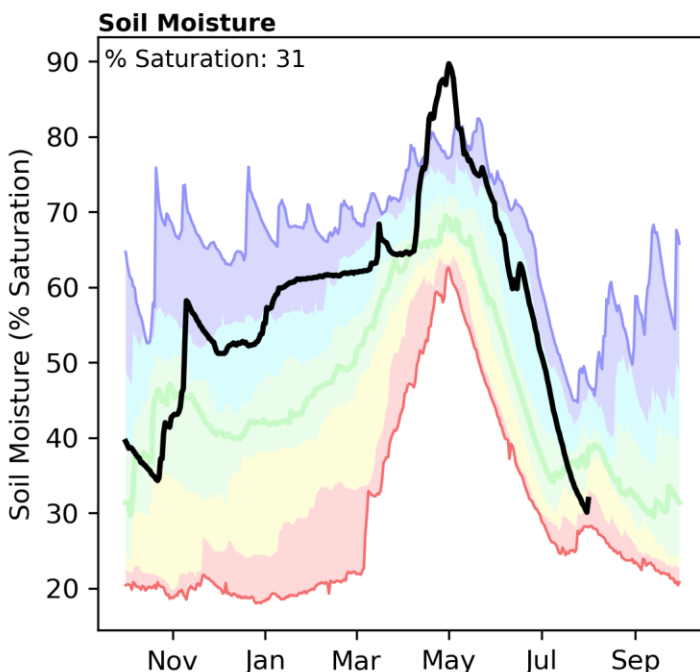
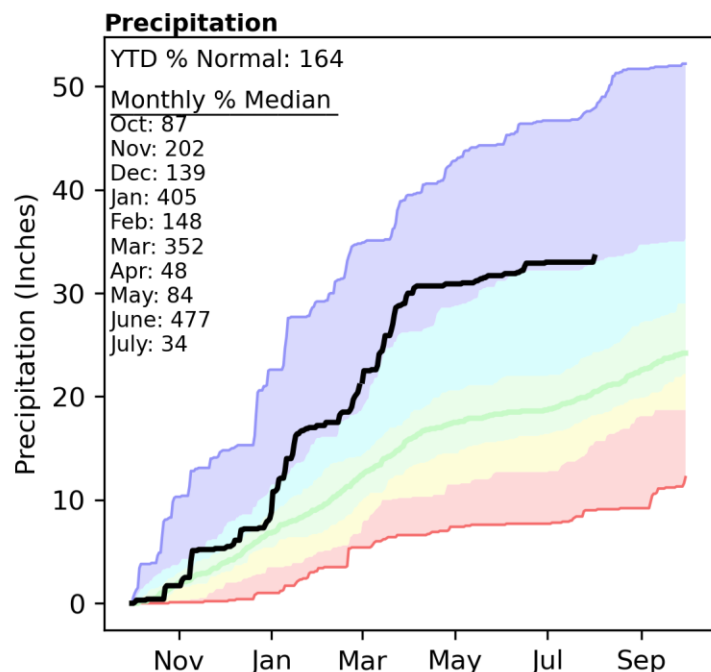
Precipitation in July was well below normal, with an average of 0.8" falling region-wide (46% of normal). This brings the water year accumulation (October-July) to 131% of median. Depth averaged soil moisture was calculated to be 36% of saturation compared to 33% at this time last year. Reservoir storage is 79% of capacity, compared to 10% last year. The Water Availability Index percentile is 82% for the Beaver River.



Statistical shading breaks at 10th, 30th, 50th, 70th, and 90th percentiles.
For more information visit: [30 year normal calculation description](#)

Southwestern Utah | August 1, 2023

Precipitation in July was well below normal, with an average of 0.5" falling region-wide (34% of normal). This brings the water year accumulation (October-July) to 164% of median. Depth averaged soil moisture was calculated to be 31% of saturation compared to 35% at this time last year. Reservoir storage is 84% of capacity, compared to 60% last year. The Water Availability Index percentile is 66% for the Virgin River.



Statistical shading breaks at 10th, 30th, 50th, 70th, and 90th percentiles.
For more information visit: [30 year normal calculation description](#)

Appendix A: Data used in WAI Calculations

Watershed/ Region	USGS Gauging Station(s)	Reservoir(s)	Start Date
Bear	Bear R nr Ut-Wy State Line	Bear Lake	1981
Woodruff Narrows	Bear R ab Resv nr Woodruff	Woodruff Narrows Reservoir	1981
Little Bear	Little Bear R at Paradise	Hyrum Reservoir	1993
Ogden	SF Ogden R nr Huntsville	Pineview Reservoir, Causey Reservoir	1981
Weber	Weber R nr Oakley, Chalk Ck at Coalville, East Canyon Ck nr Morgan	East Canyon Reservoir, Echo Reservoir, Lost Creek Reservoir, Rockport Reservoir, Smith And Morehouse Reservoir	1989
Provo	Provo R at Woodland	Deer Creek Reservoir, Jordanelle Reservoir	1993
Western Uintas	Lake Fk R ab Moon Lk nr Mountain Home, Rock Ck nr Mountain Home, Yellowstone R nr Altonah	Starvation Reservoir, Moon Lake Reservoir, Upper Stillwater Reservoir	1988
Eastern Uintas	Big Brush Ck ab Red Fleet Reservoir, Ashley Ck nr Vernal, Whiterocks R nr Whiterocks	Red Fleet Reservoir, Steinaker Reservoir	1981
Blacks Fork	Blacks Fk nr Robertson	Meeks Cabin Reservoir	1984
Smiths Fork	EF of Smiths Fork nr Robertson	Stateline Reservoir	1984
Price	Fish Ck ab Reservoir nr Scofield	Scofield Reservoir	1981
Joes Valley	Seely Ck bl Joes Valley Resv	Joes Valley Reservoir	1981
Ferron Creek	Ferron Ck Upper Station nr Ferron	Millsite	1981
Moab	Mill Ck at Sheley Tunnel nr Moab	Ken's Lake	1988
Upper Sevier	Sevier R nr Kingston	Piute Reservoir, Otter Creek Reservoir	1981
San Pitch	Manti Ck bl Dugway Ck nr Manti	Gunnison Reservoir	1981
Lower Sevier	Sevier R nr Gunnison	Sevier Bridge Reservoir	1981
Beaver River	Beaver R nr Beaver	Minersville Reservoir	1981
Virgin River	Virgin R at Virgin, Santa Clara R nr Pine Valley	Quail Creek, Gunlock	1993

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Utah Water Supply Outlook Report

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

