

Legislative update regarding Utah's water supply conditions

January 22nd, 2021

Contact info:

Jordan Clayton

Utah NRCS Snow Survey

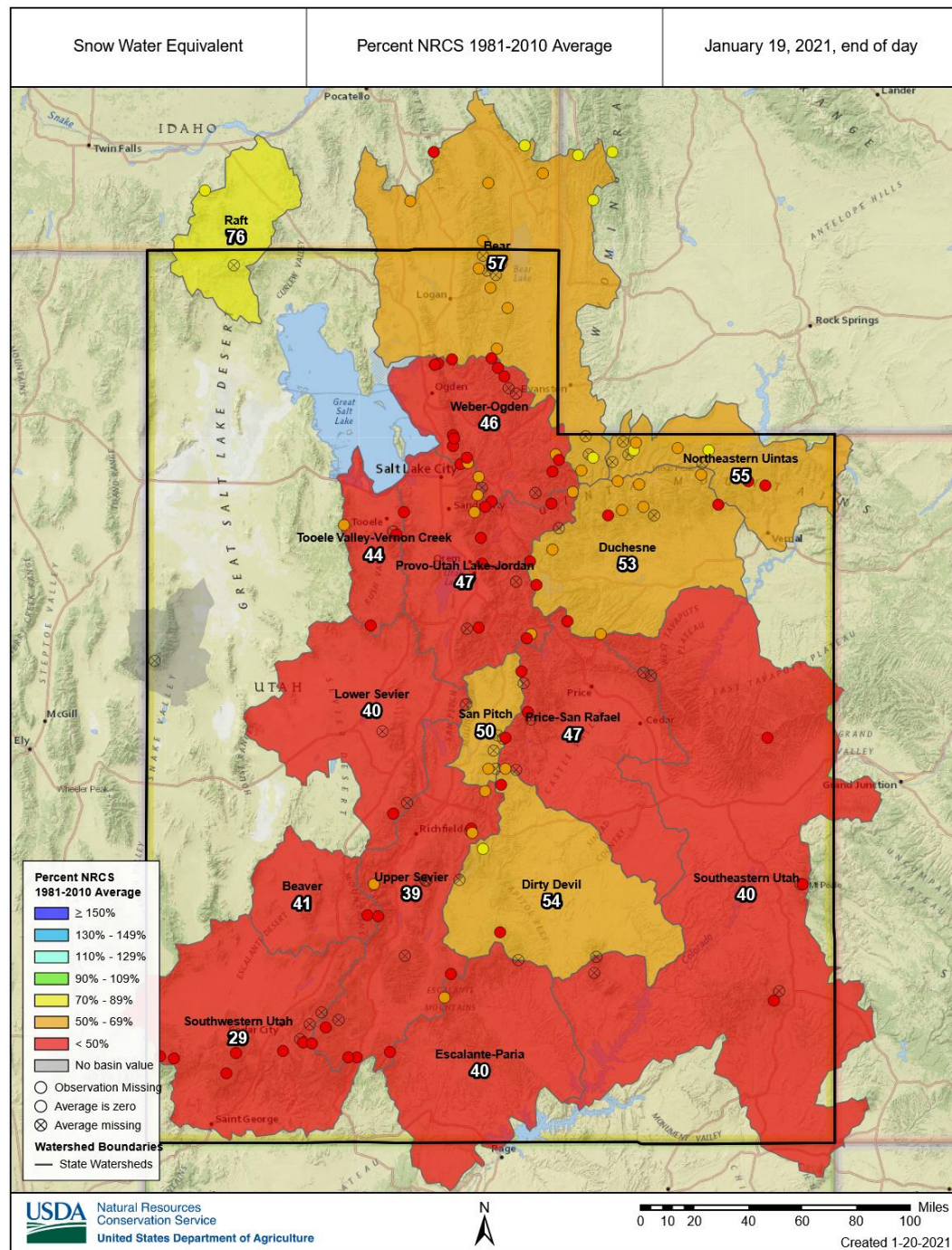
385-285-3118

jordan.clayton@usda.gov



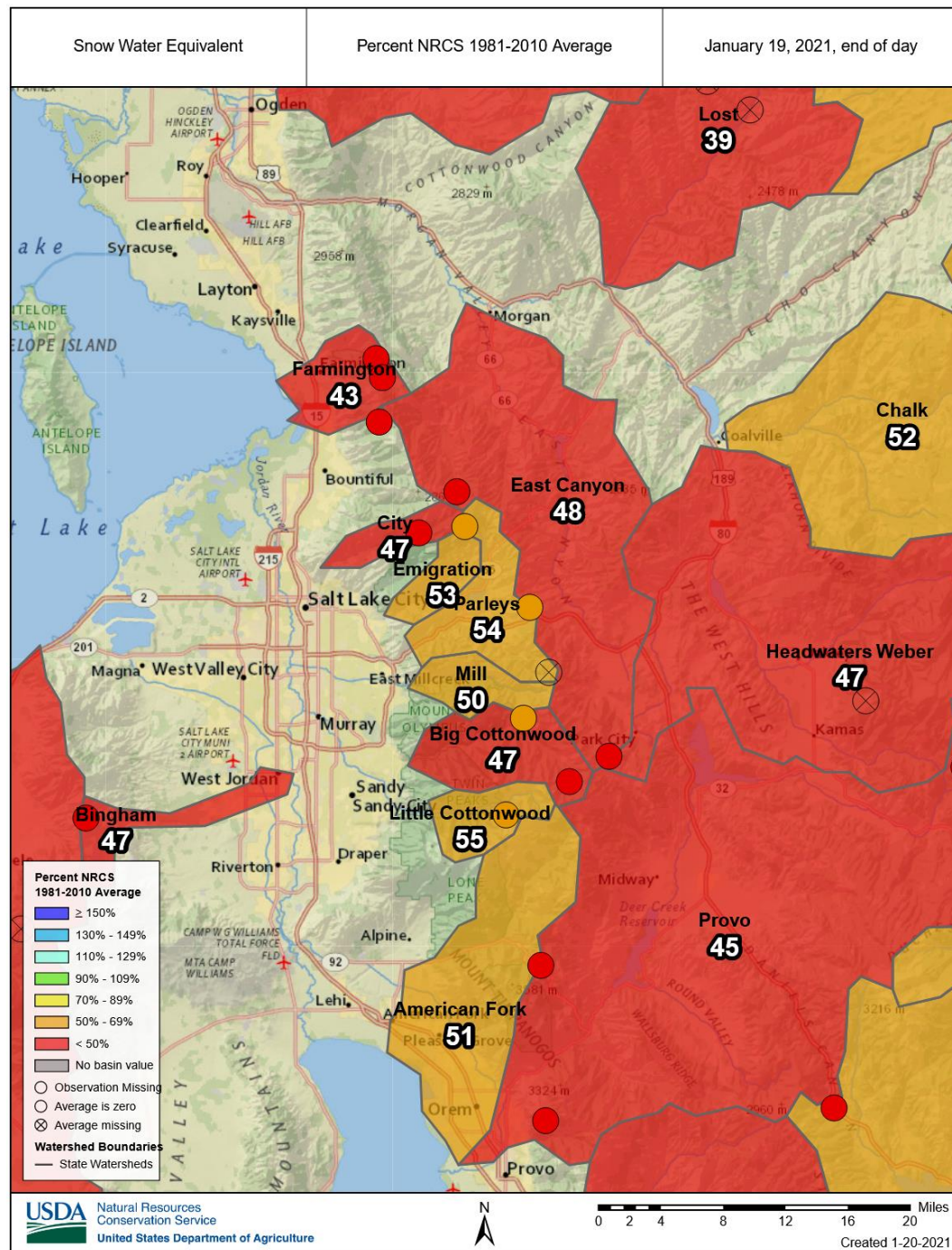
Current conditions at Utah SNOTEL sites

Basin
average
conditions



Current conditions at Utah SNOTEL sites

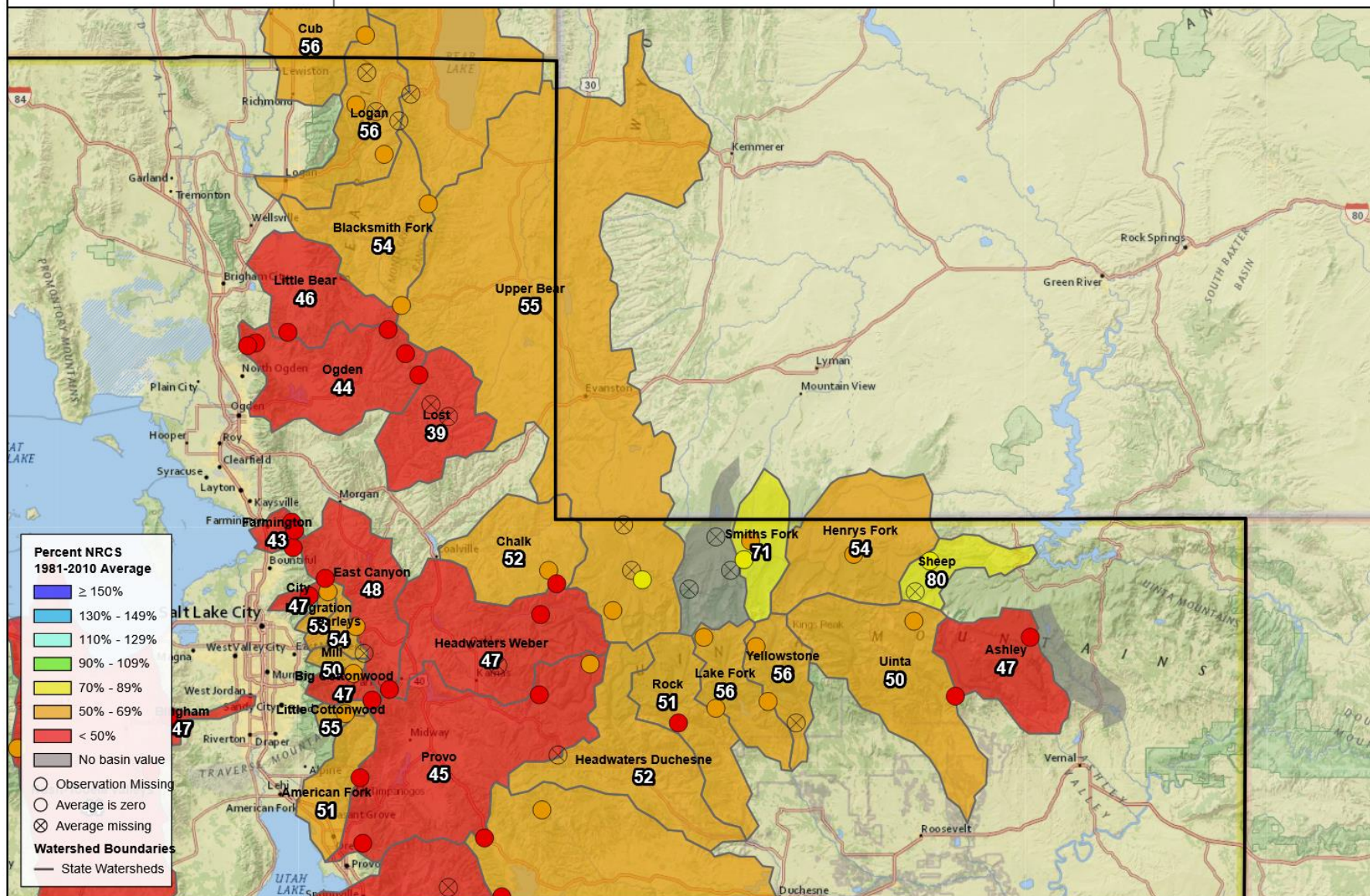
Subbasin conditions



Snow Water Equivalent

Percent NRCS 1981-2010 Average

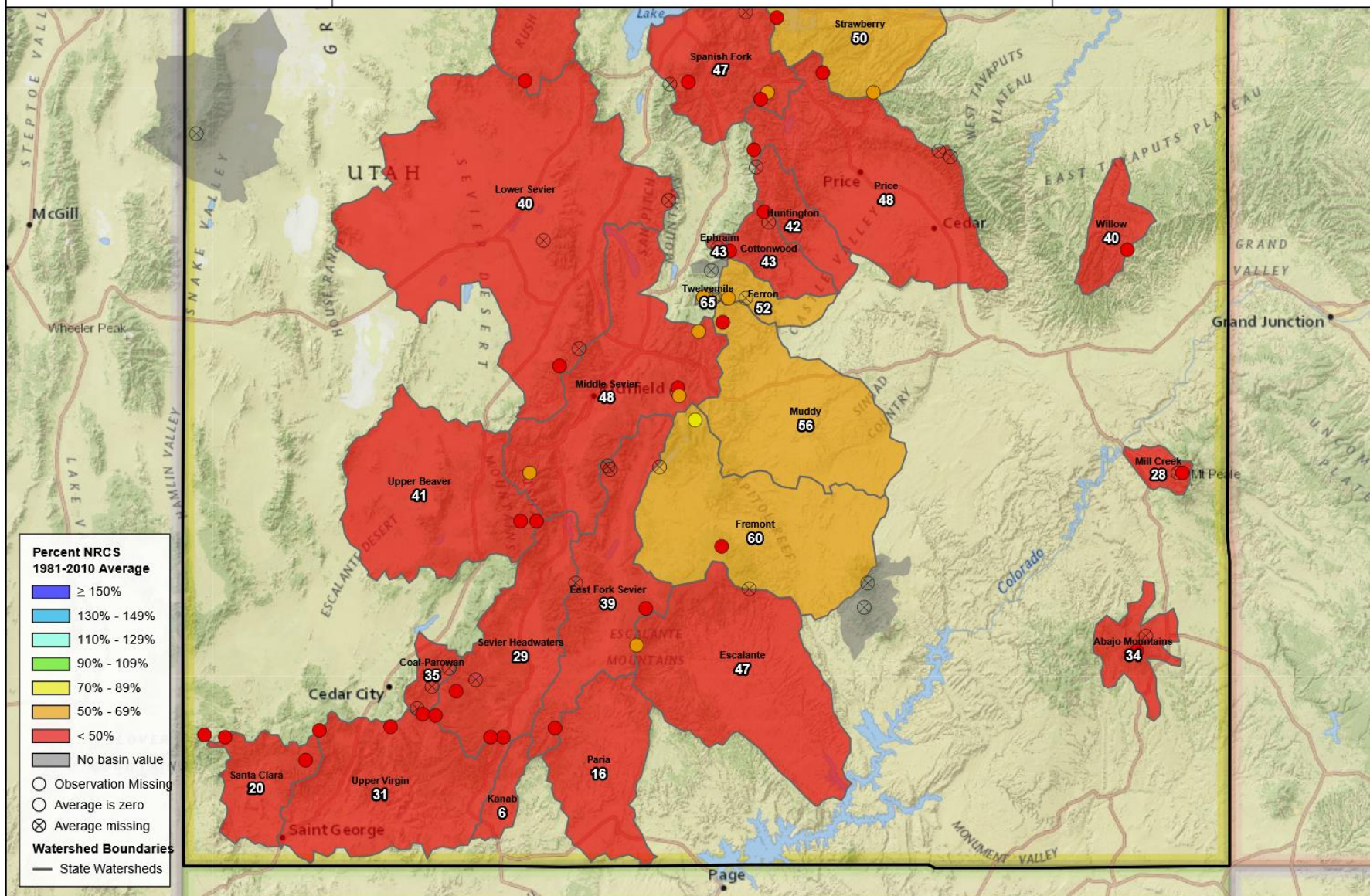
January 19, 2021, end of day



Snow Water Equivalent

Percent NRCS 1981-2010 Average

January 19, 2021, end of day



SNOW WATER EQUIVALENT IN STATE OF UTAH

Reset Range

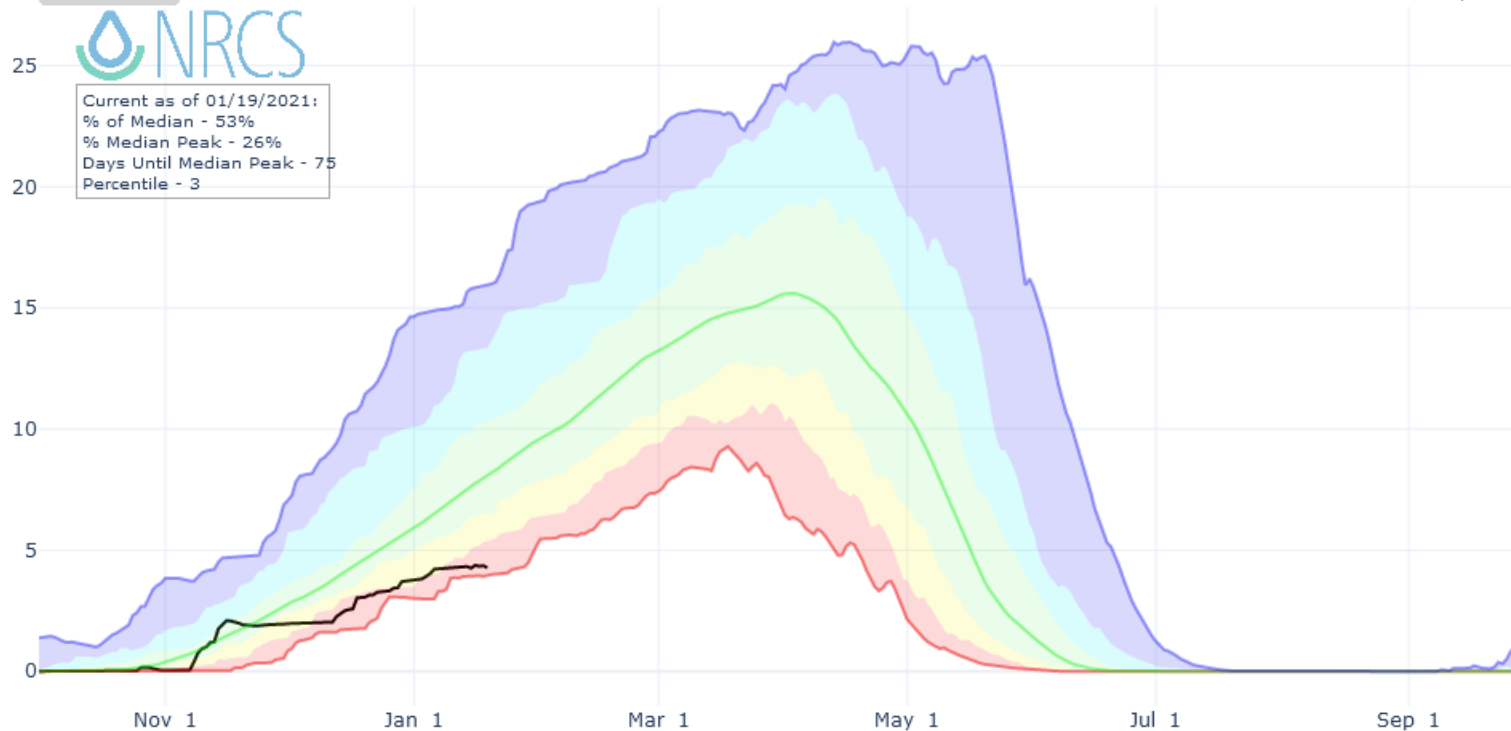


Current as of 01/19/2021:
 % of Median - 53%
 % Median Peak - 26%
 Days Until Median Peak - 75
 Percentile - 3

Link to data: CSV / JSON

Station List

Snow Water Equivalent (in.)



- ✱ Median Peak SWE
- Max
- Median (POR)
- Median ('81-'10)
- Min
- Stats. Shading
- 2021 (96 sites)
- 2020 (96 sites)
- 2019 (96 sites)
- 2018 (96 sites)
- 2017 (96 sites)
- 2016 (96 sites)
- 2015 (96 sites)
- 2014 (96 sites)
- 2013 (96 sites)
- 2012 (96 sites)
- 2011 (96 sites)
- 2010 (96 sites)
- 2009 (96 sites)
- 2008 (96 sites)
- 2007 (96 sites)
- 2006 (96 sites)
- 2005 (96 sites)



Statistical shading breaks at 10th, 30th, 50th, 70th, and 90th Percentiles.
 For more information visit: 30 year normals calculation description.

SNOW WATER EQUIVALENT PROJECTIONS IN STATE OF UTAH

Reset Range

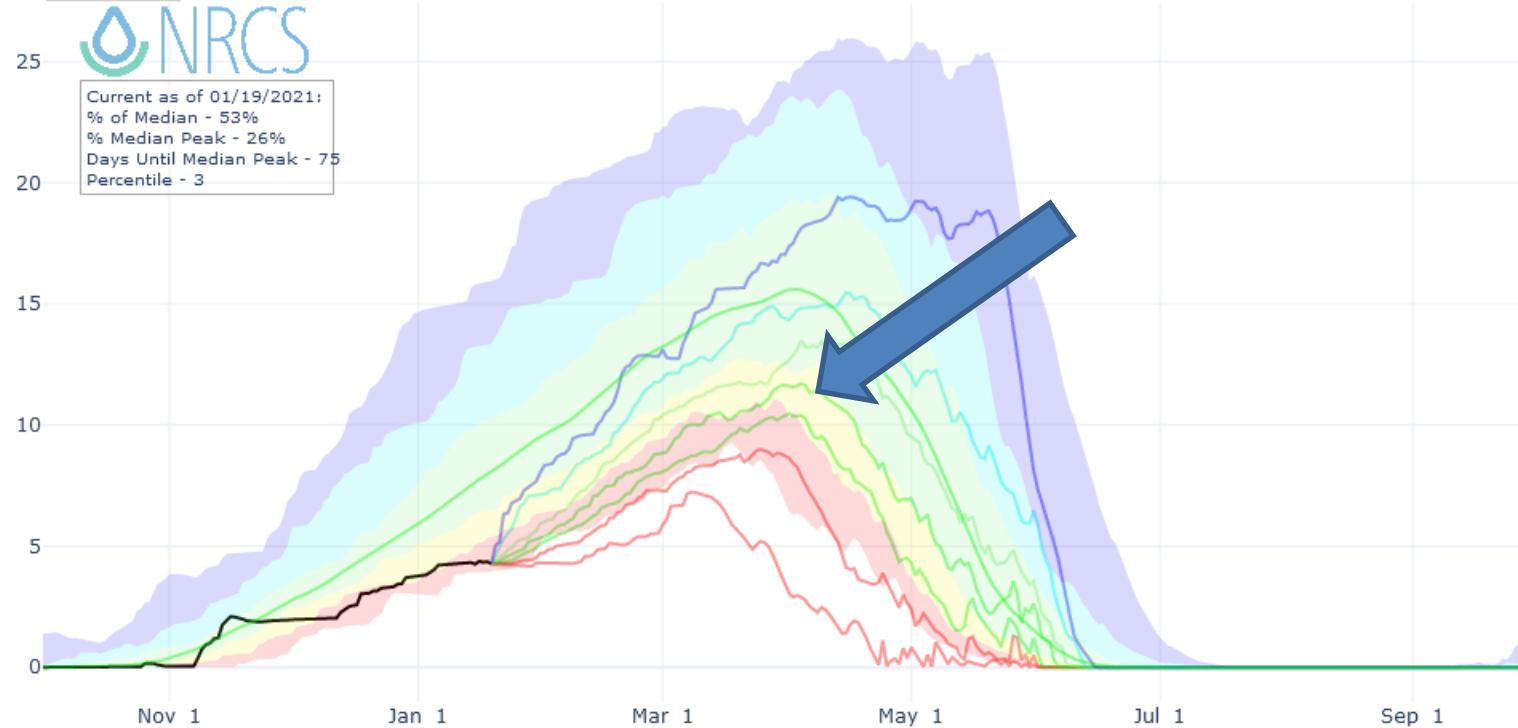


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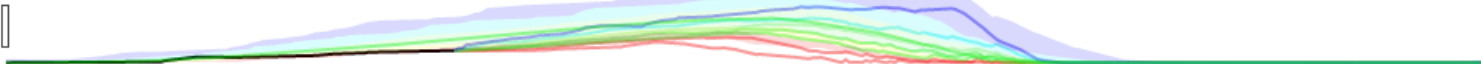
Link to data: CSV / JSON

Station List

Snow Water Equivalent (in.)



- * Median Peak SWE
- - - Median (POR)
- Median ('81-'10)
- Stats. Shading
- Max Proj
- 90% Proj
- 70% Proj
- 50% Proj
- 30% Proj
- 10% Proj
- Min Proj
- 2021 (96 sites)
- 2020 (96 sites)
- 2019 (96 sites)
- 2018 (96 sites)
- 2017 (96 sites)
- 2016 (96 sites)
- 2015 (96 sites)
- 2014 (96 sites)
- 2013 (96 sites)
- 2012 (96 sites)
- 2011 (96 sites)
- 2010 (96 sites)



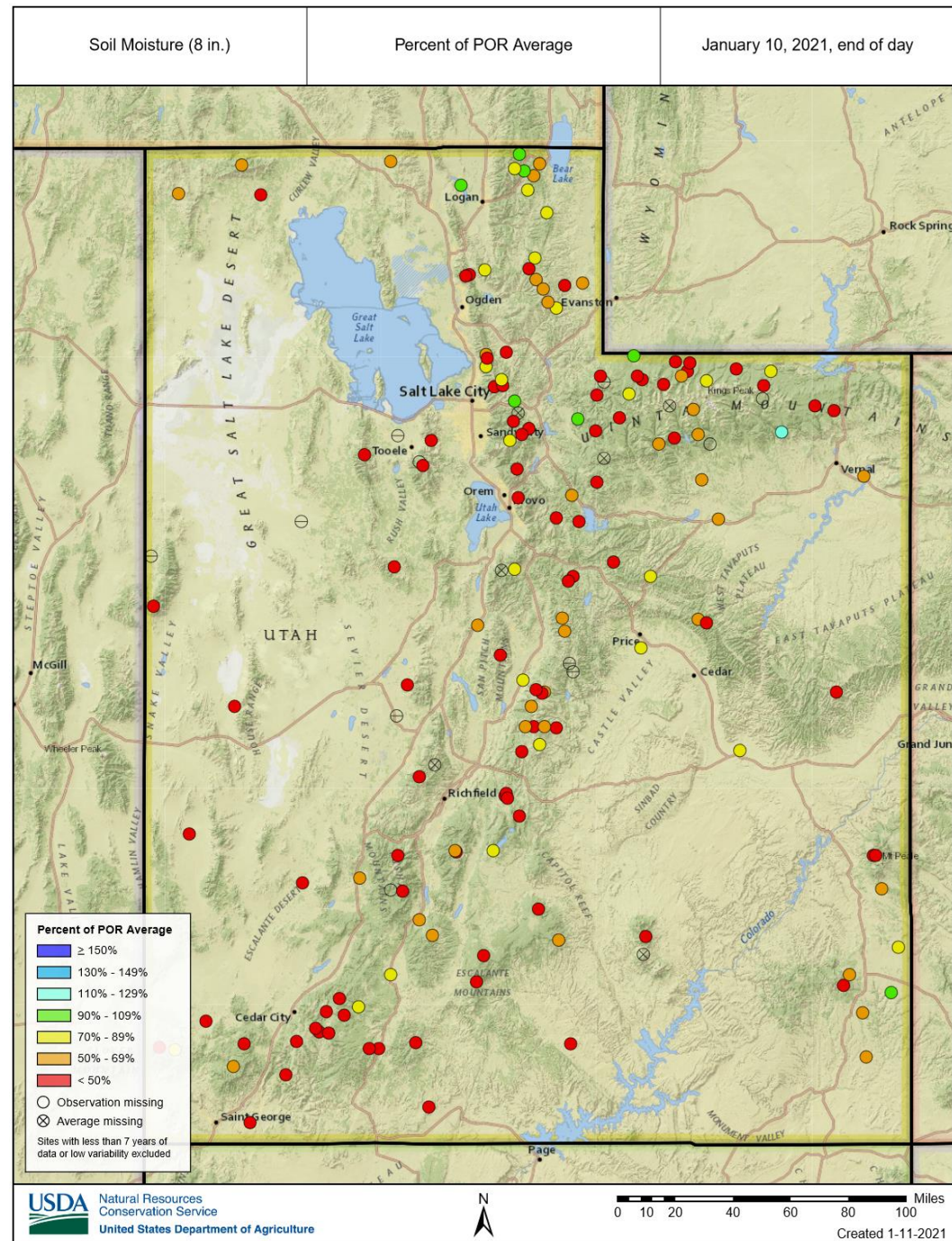
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- Projected SWE

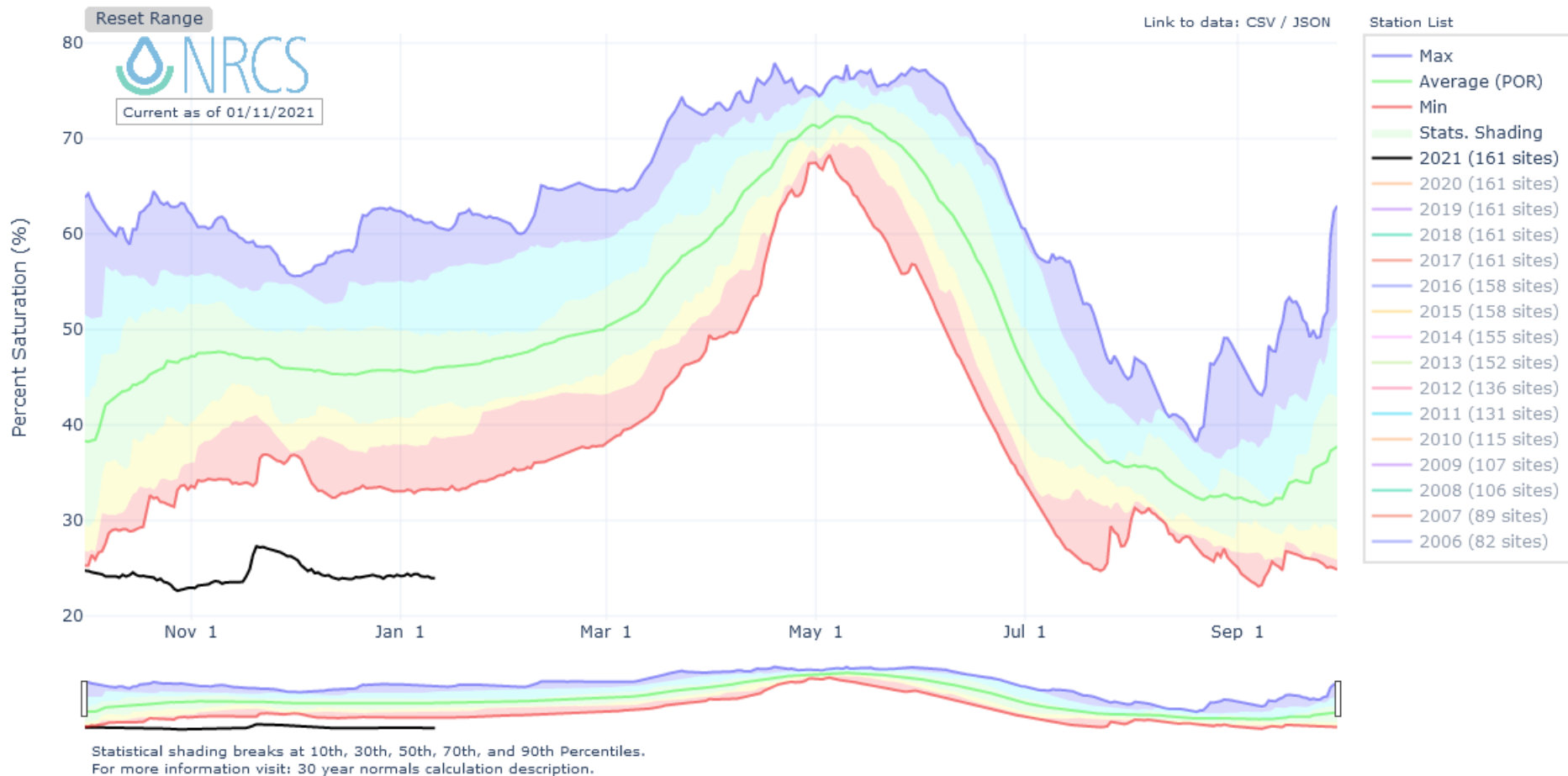
Soil moisture

SNOTEL & SCAN sites
8" sensor depth

*Extremely dry soils will
reduce efficiency of
snowmelt runoff next spring.*

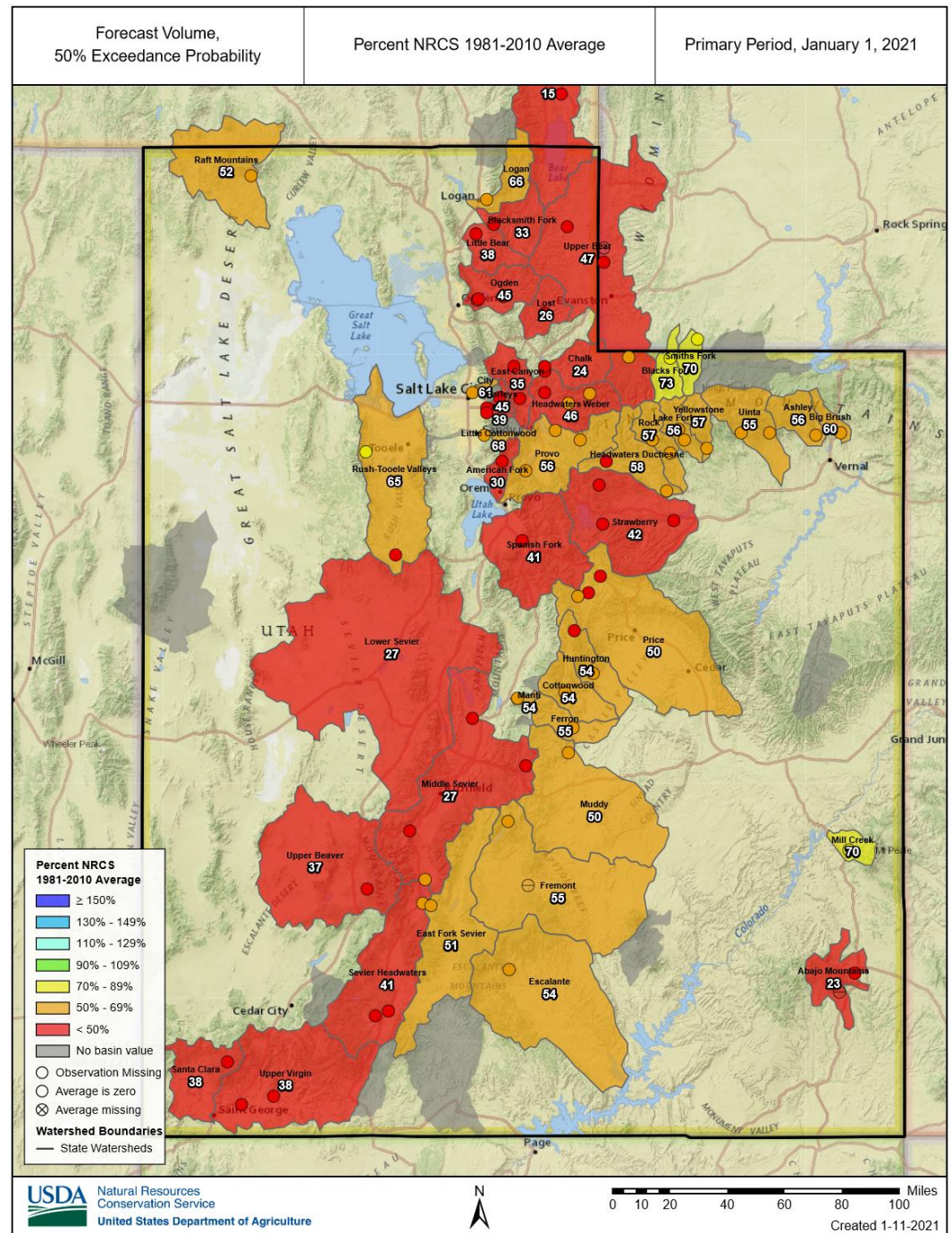


DEPTH AVERAGED SOIL SATURATION IN STATE OF UTAH



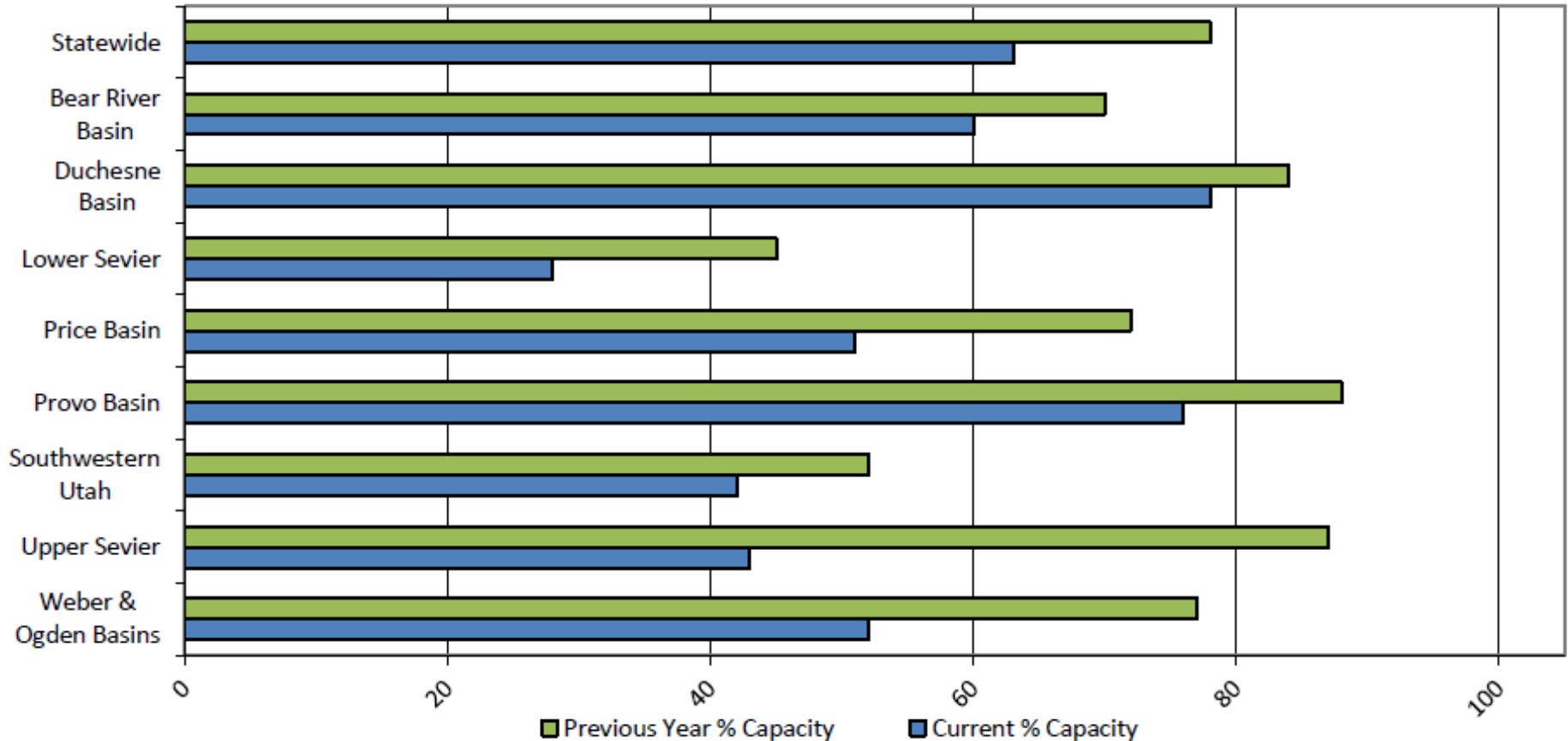
Streamflow forecasts

*Poor snowpack and dry soils
are resulting in well below-
normal runoff forecasts*



Statewide reservoir levels, as of January 1st

Reservoir Storage



- reservoir storage is at 63% of capacity
- down 15% from last year

“Surface Water Supply Index” numbers for Utah basins are extremely low

January 1, 2021

Surface Water Supply Index

Basin or Region	Dec EOM [*] Storage	APR-JUL Forecast	Storage + Forecast	Percentile	SWSI [#]	Years with similar SWSI
	KAF [^]	KAF [^]	KAF [^]	%		
Bear River	784.5	27.0	811.5	55	0.4	01, 13, 88, 17
Woodruff Narrows	25.1	70.0	95.1	19	-2.58	90, 92, 88, 89
Little Bear	9.7	17.0	26.7	33	-1.39	07, 12, 02, 20
Ogden River	53.6	54.0	107.6	29	-1.79	02, 15, 14, 08
Weber River	233.1	66.0	299.1	5	-3.77	04, 13, 15, 14
Provo River	933.4	57.0	990.4	39	-0.89	14, 02, 18, 13
Western Uinta	144.2	70.0	214.2	29	-1.79	94, 07, 89, 93
Eastern Uinta	20.9	40.5	61.4	10	-3.37	14, 18, 13, 89
Blacks Fork	3.3	63.0	66.3	21	-2.46	12, 00, 89, 88
Smiths Fork	3.6	19.0	22.6	18	-2.67	07, 12, 89, 18
Price River	31.4	20.0	51.4	38	-0.99	07, 10, 93, 18
Joe's Valley	38.0	30.0	68.0	21	-2.38	92, 18, 94, 12
Ferron Creek	3.9	21.0	24.9	5	-3.77	18, 13, 90, 89
Moab	0.5	3.0	3.5	23	-2.26	12, 04, 09, 14
Upper Sevier	48.4	33.0	81.4	17	-2.78	90, 92, 09, 18
San Pitch	0.0	9.0	9.0	10	-3.37	02, 13, 16, 15
Lower Sevier	66.0	27.0	93.0	12	-3.17	18, 16, 03, 02
Beaver River	5.4	9.7	15.1	7	-3.57	02, 18, 90, 04
Virgin River	28.6	28.9	57.5	30	-1.67	96, 13, 07, 12

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

- SWSI values combine forecasted streamflow and current reservoir conditions.
- Percentiles are compared to 30 year average SWSI values.

Questions?

