



Utah Water Conditions Monitoring (Drought Webinar)

The meeting will begin shortly



Thank you to our contributors



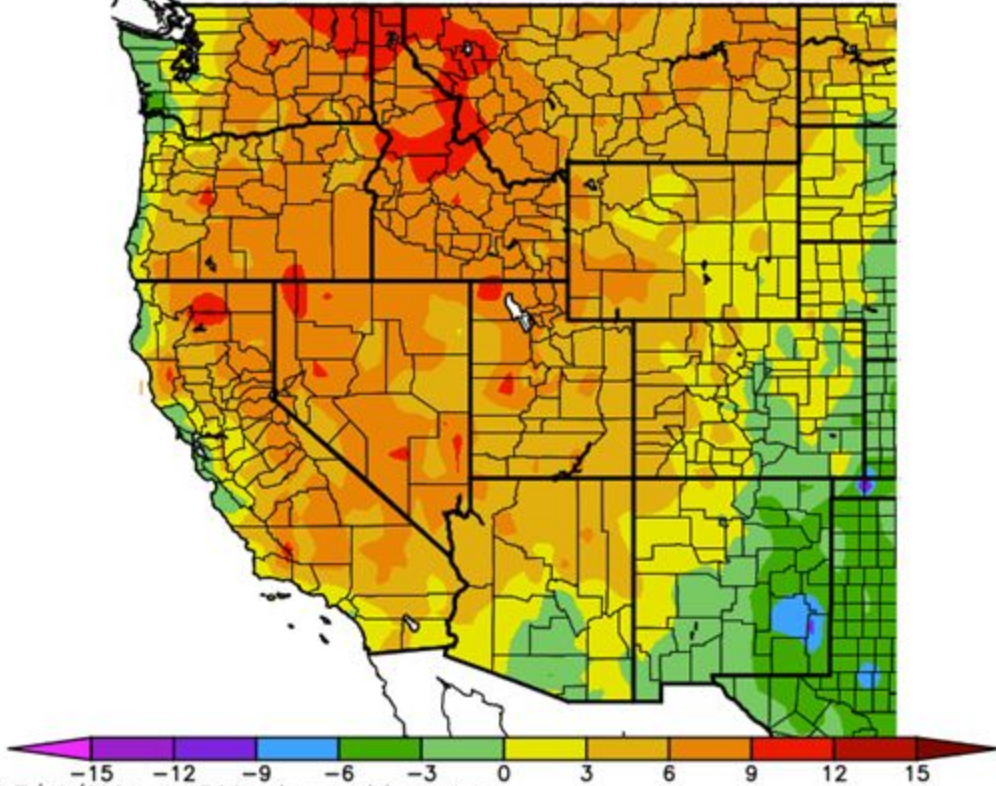


Utah Drought Monitor Webinar

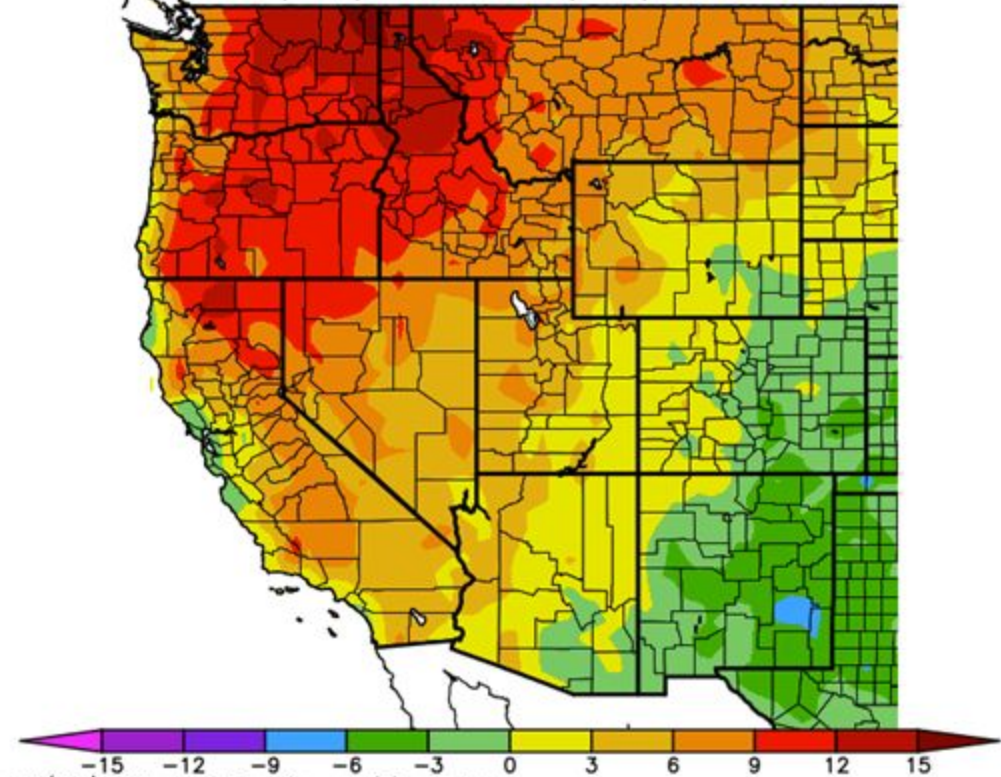
July 20, 2021

Temperature 14 day history

Av. Max. Temperature dep from Ave (deg F)
7/5/2021 – 7/18/2021



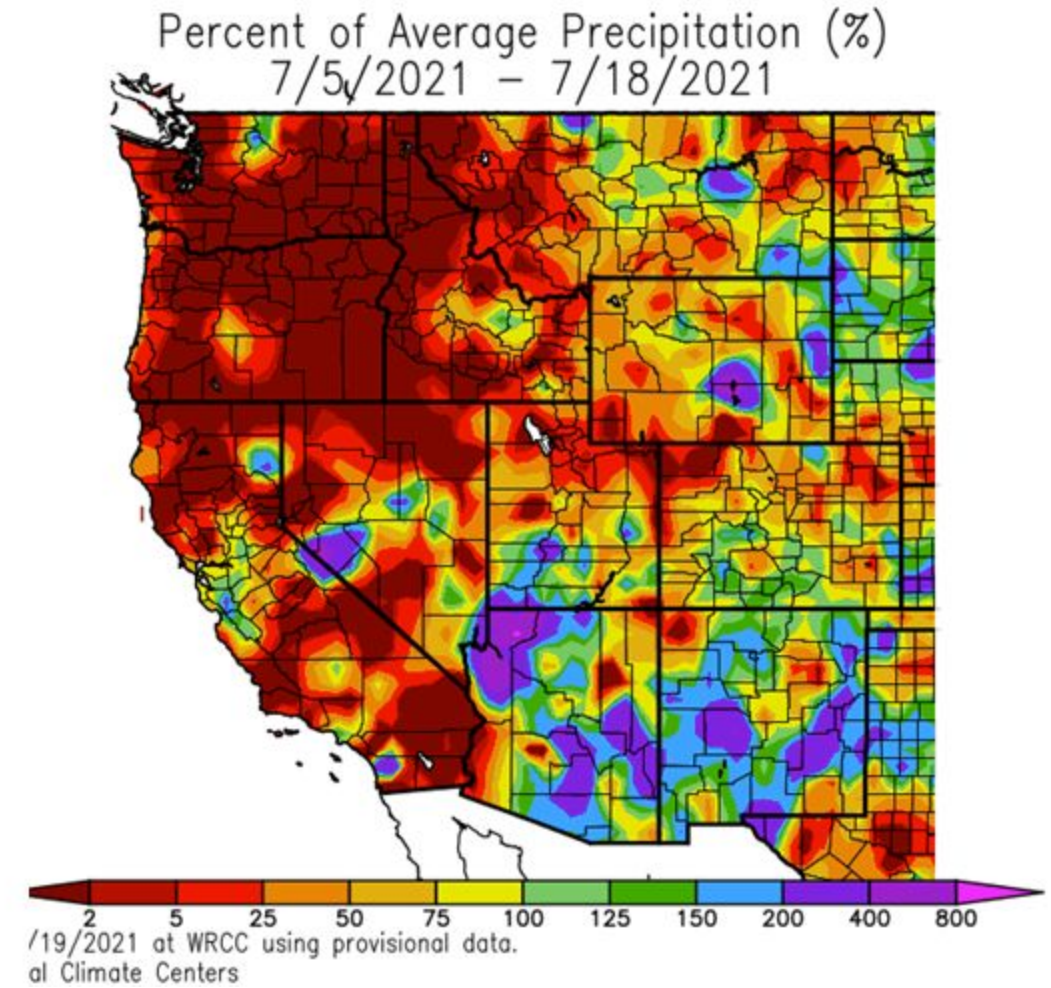
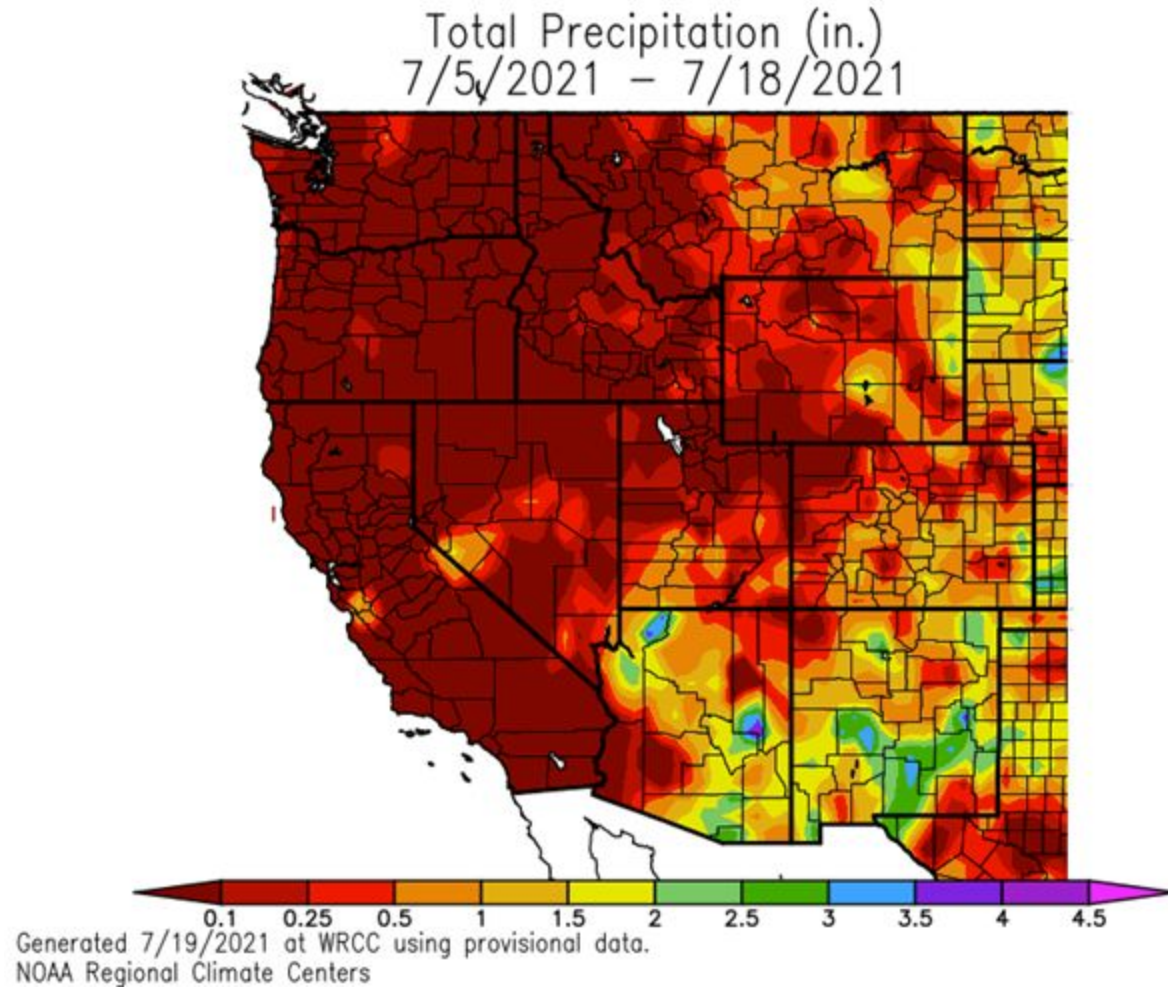
Av. Max. Temperature dep from Ave (deg F)
6/19/2021 – 7/18/2021



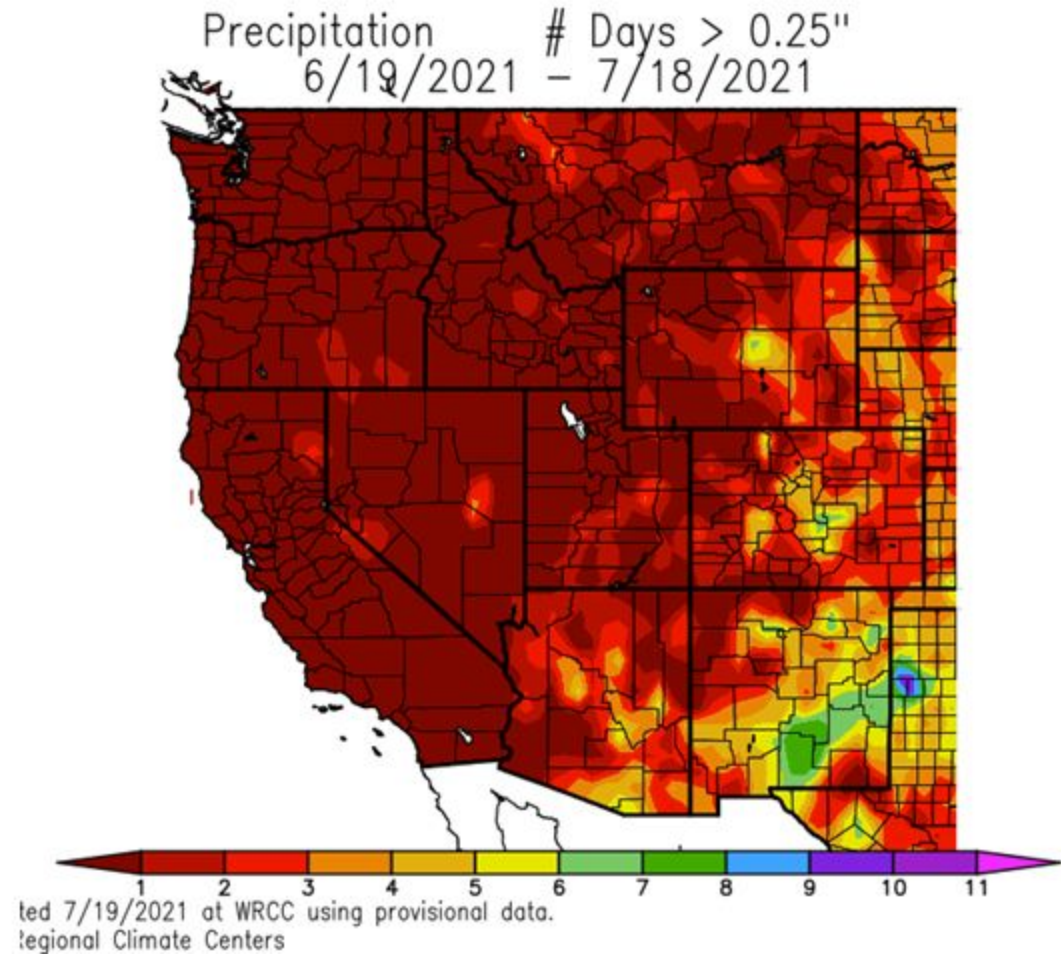
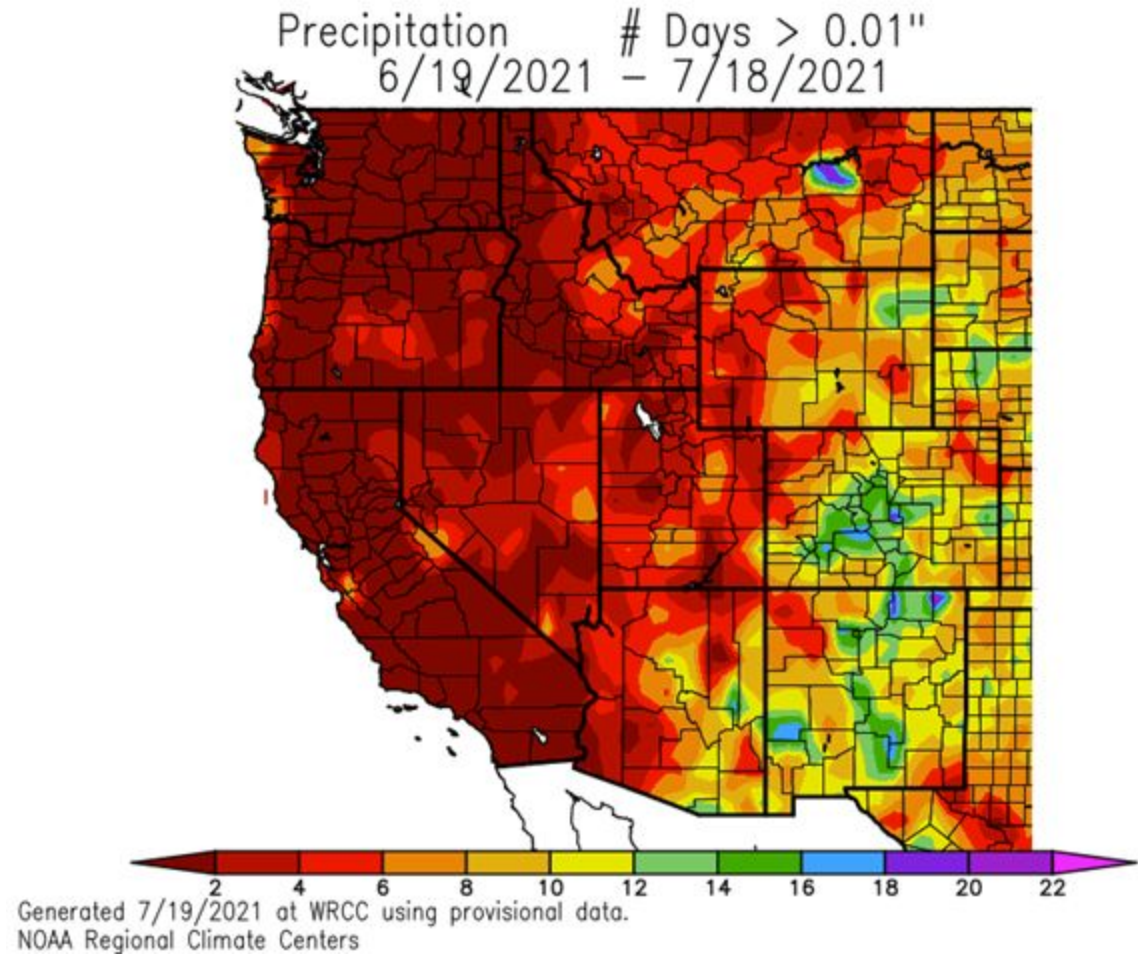
Agency - Utah Climate Center

Presenter - Jon Meyer

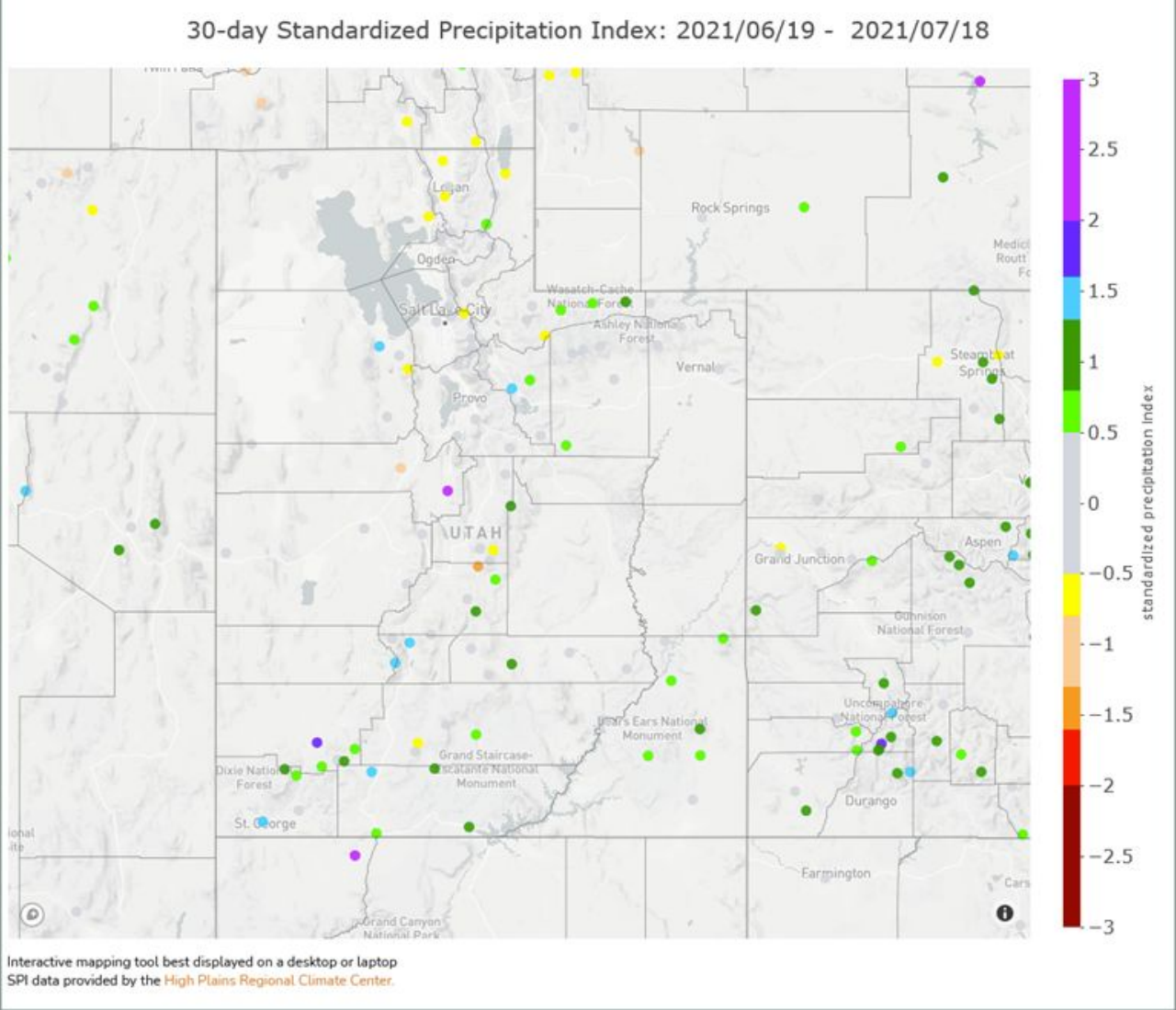
Precipitation 14 day



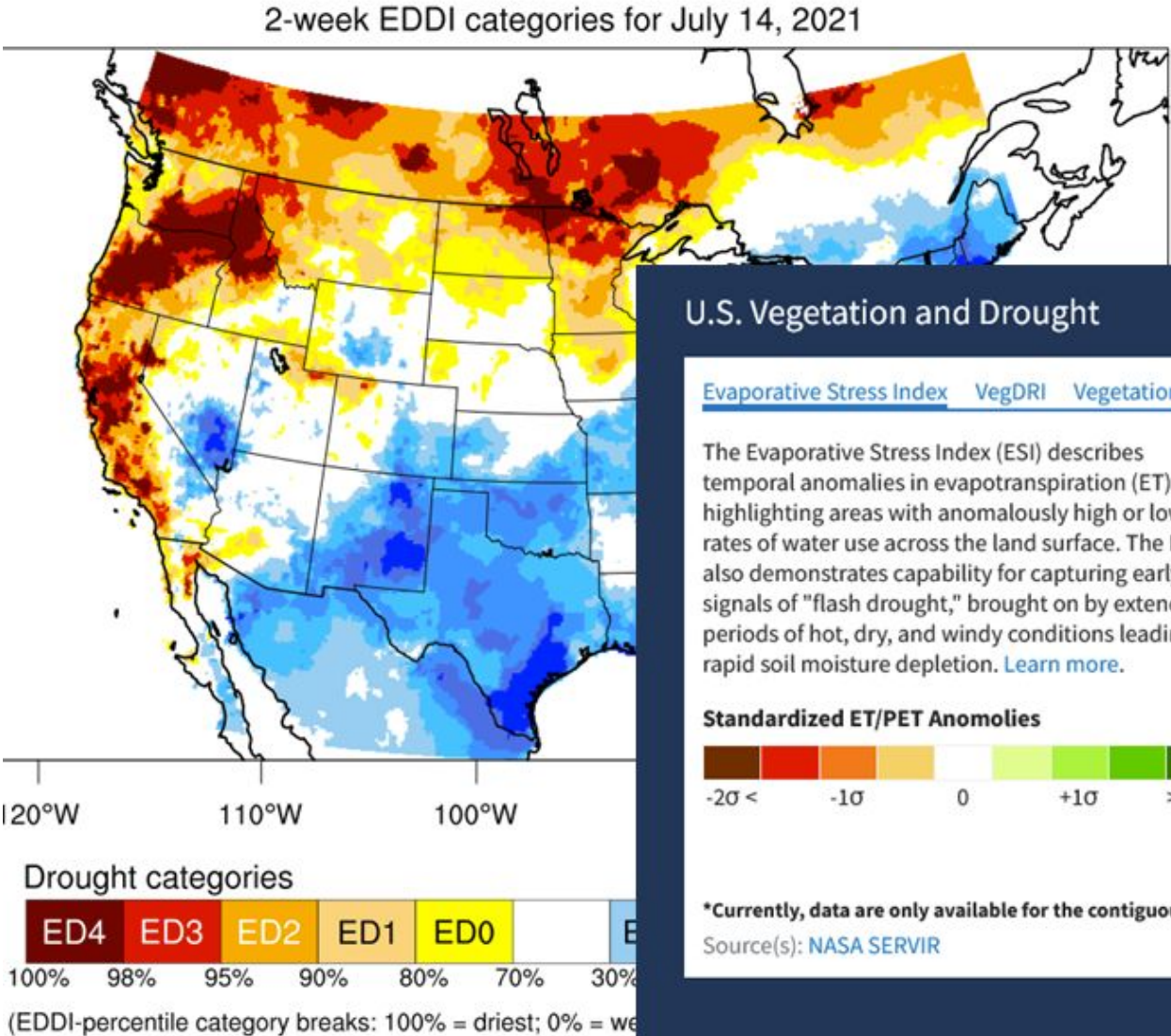
Precipitation 30 day history (Percent of Average)



30-day Standardized Precipitation Index (SPI)



Evaporative Stress



U.S. Vegetation and Drought

[Evaporative Stress Index](#) [VegDRI](#) [Vegetation Health Index](#)

The Evaporative Stress Index (ESI) describes temporal anomalies in evapotranspiration (ET), highlighting areas with anomalously high or low rates of water use across the land surface. The ESI also demonstrates capability for capturing early signals of "flash drought," brought on by extended periods of hot, dry, and windy conditions leading to rapid soil moisture depletion. [Learn more.](#)

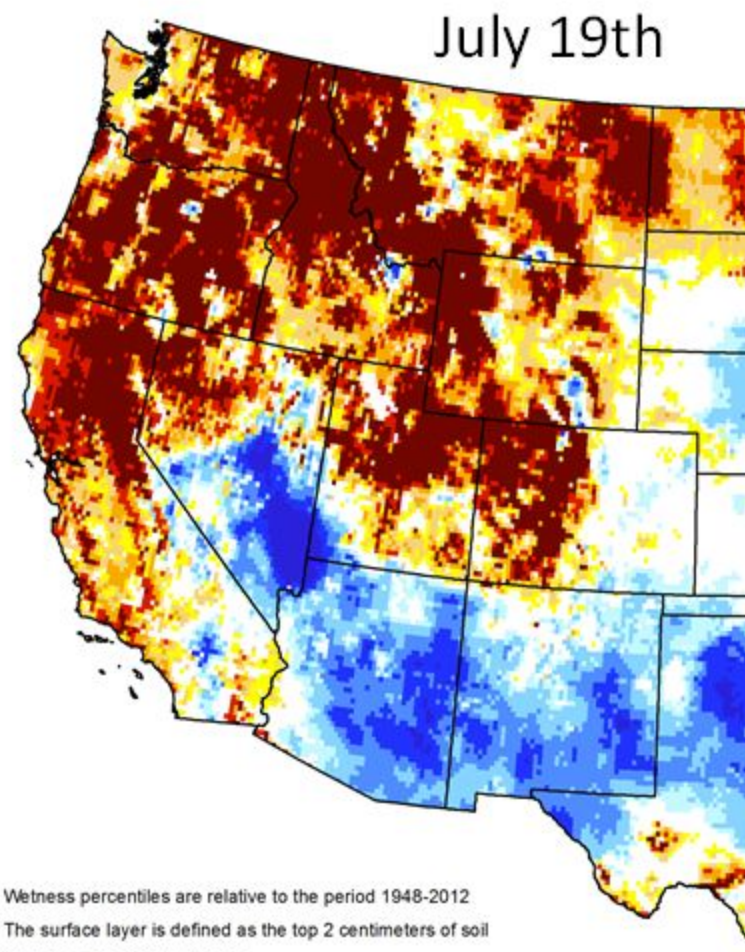
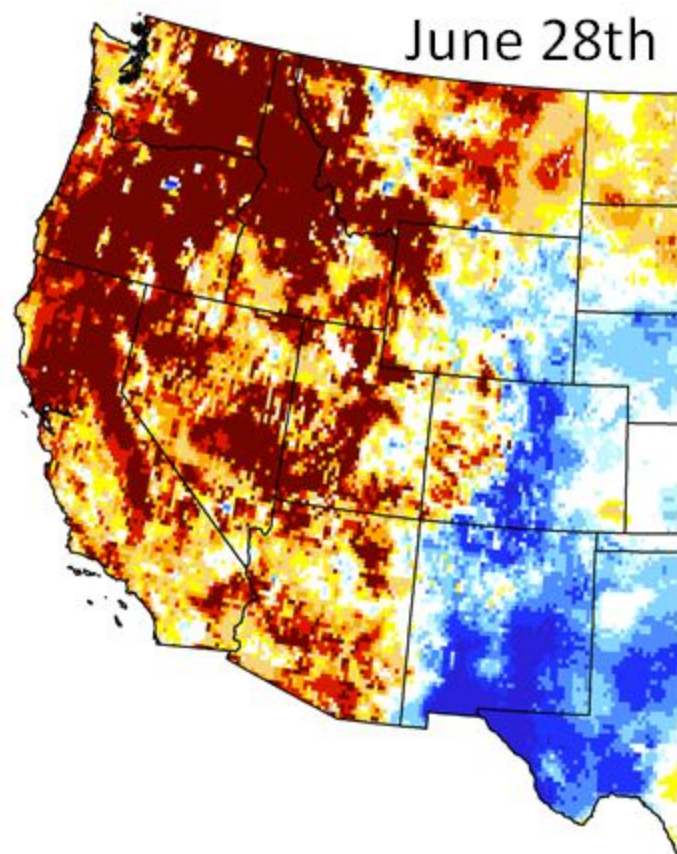
Standardized ET/PET Anomalies

-2σ <	-1σ	0	+1σ	>+2σ
Dark Brown	Red	Orange	Yellow	Green

*Currently, data are only available for the contiguous U.S.
Source(s): [NASA SERVIR](#)

Last Updated - 07/20/21

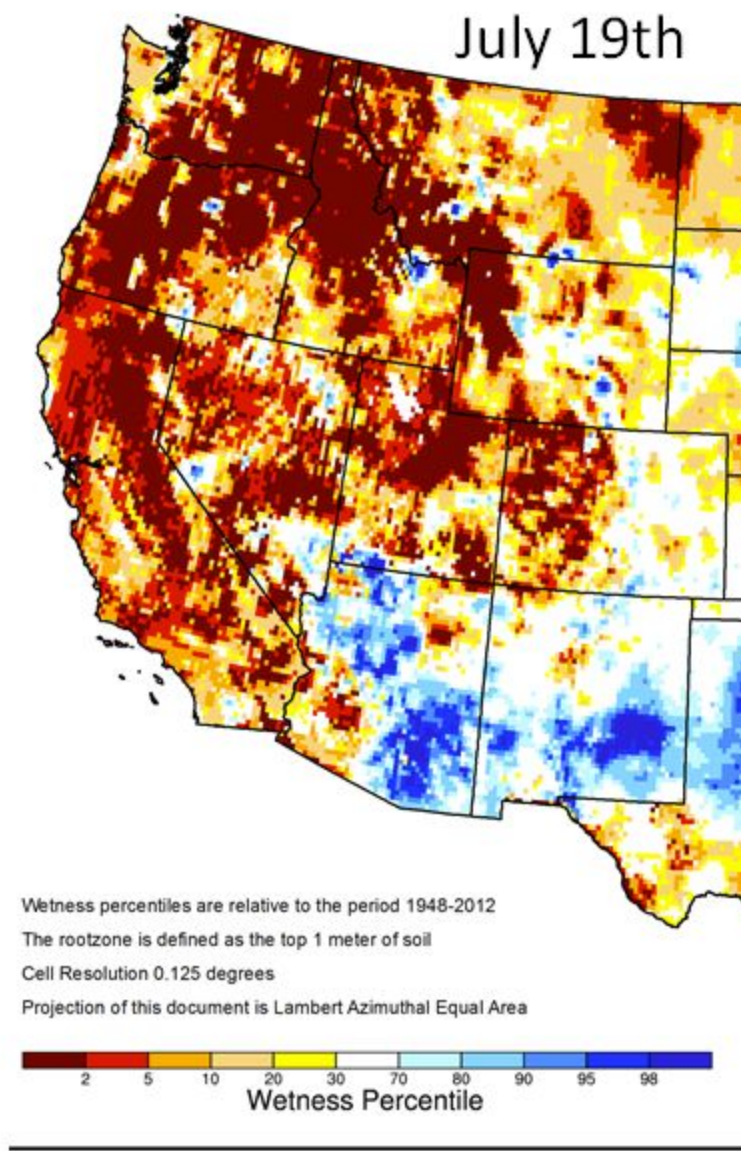
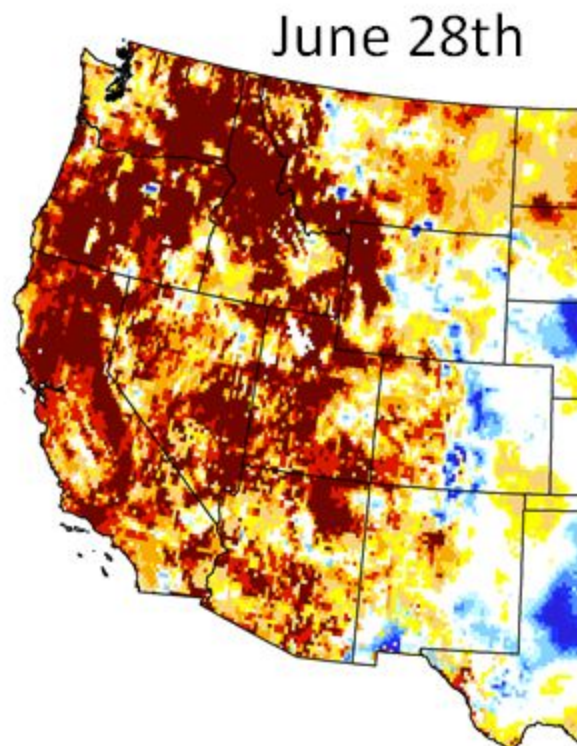
GRACE Satellite Surface Soil Moisture



Wetness percentiles are relative to the period 1948-2012
The surface layer is defined as the top 2 centimeters of soil
Cell Resolution 0.125 degrees
Projection of this document is Lambert Azimuthal Equal Area

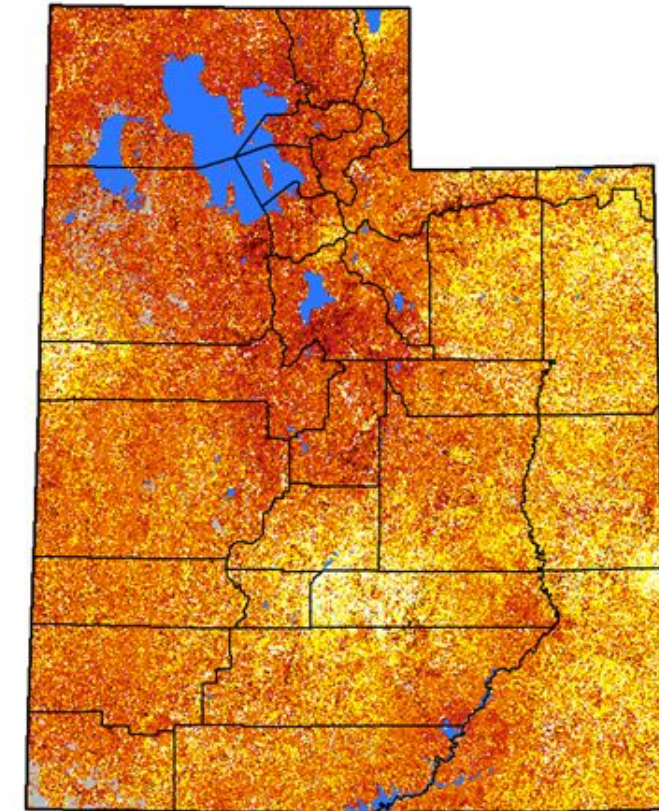
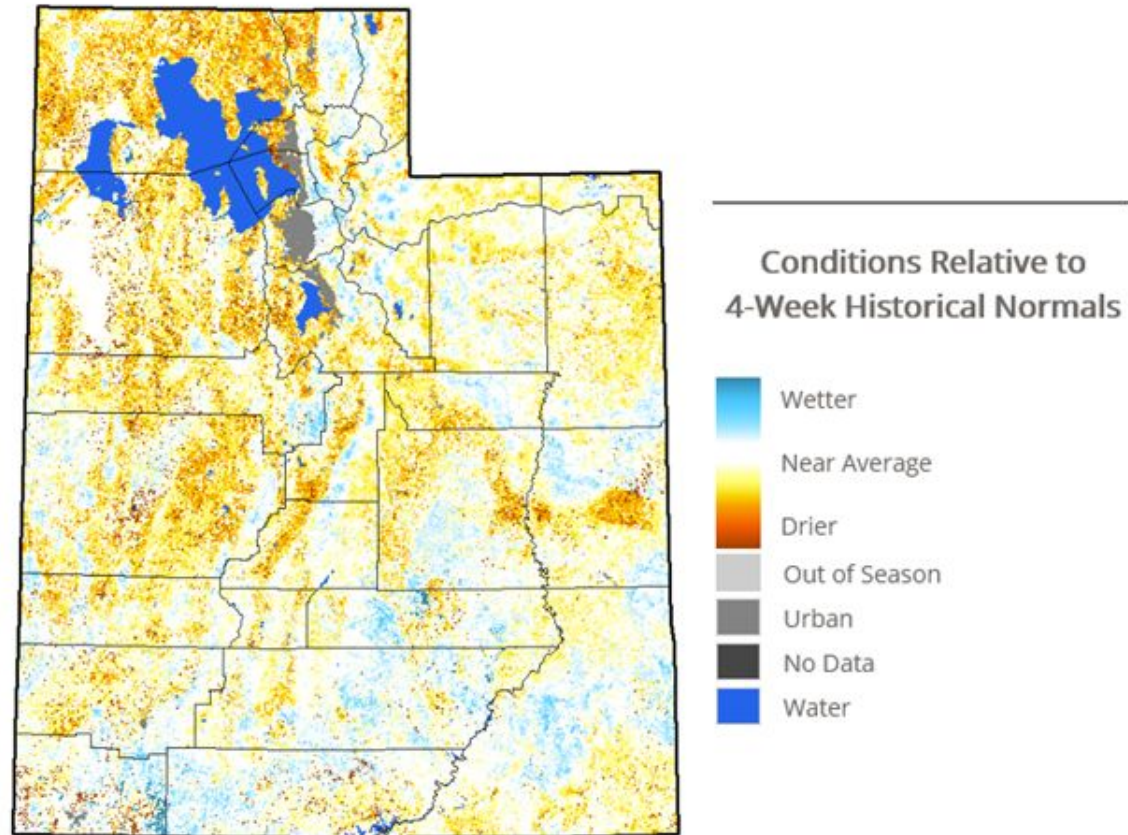
Wetness Percentile

GRACE Satellite Root Zone Soil Moisture

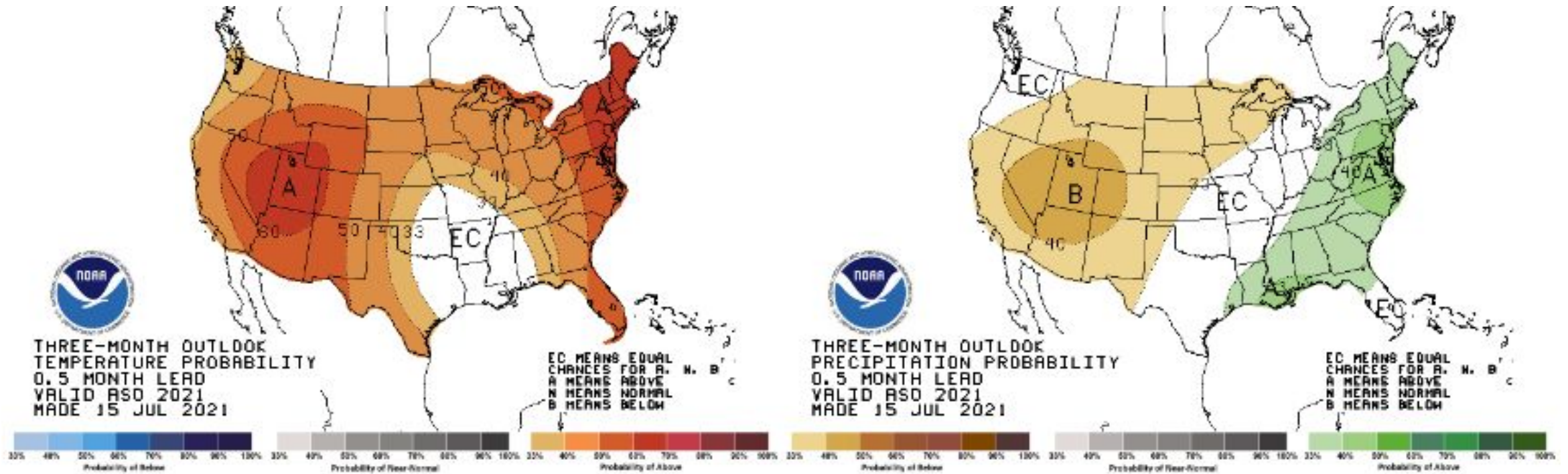


Vegetation Drought Response Index (VegDRI)

Quick Drought Response Index (QuickDRI)



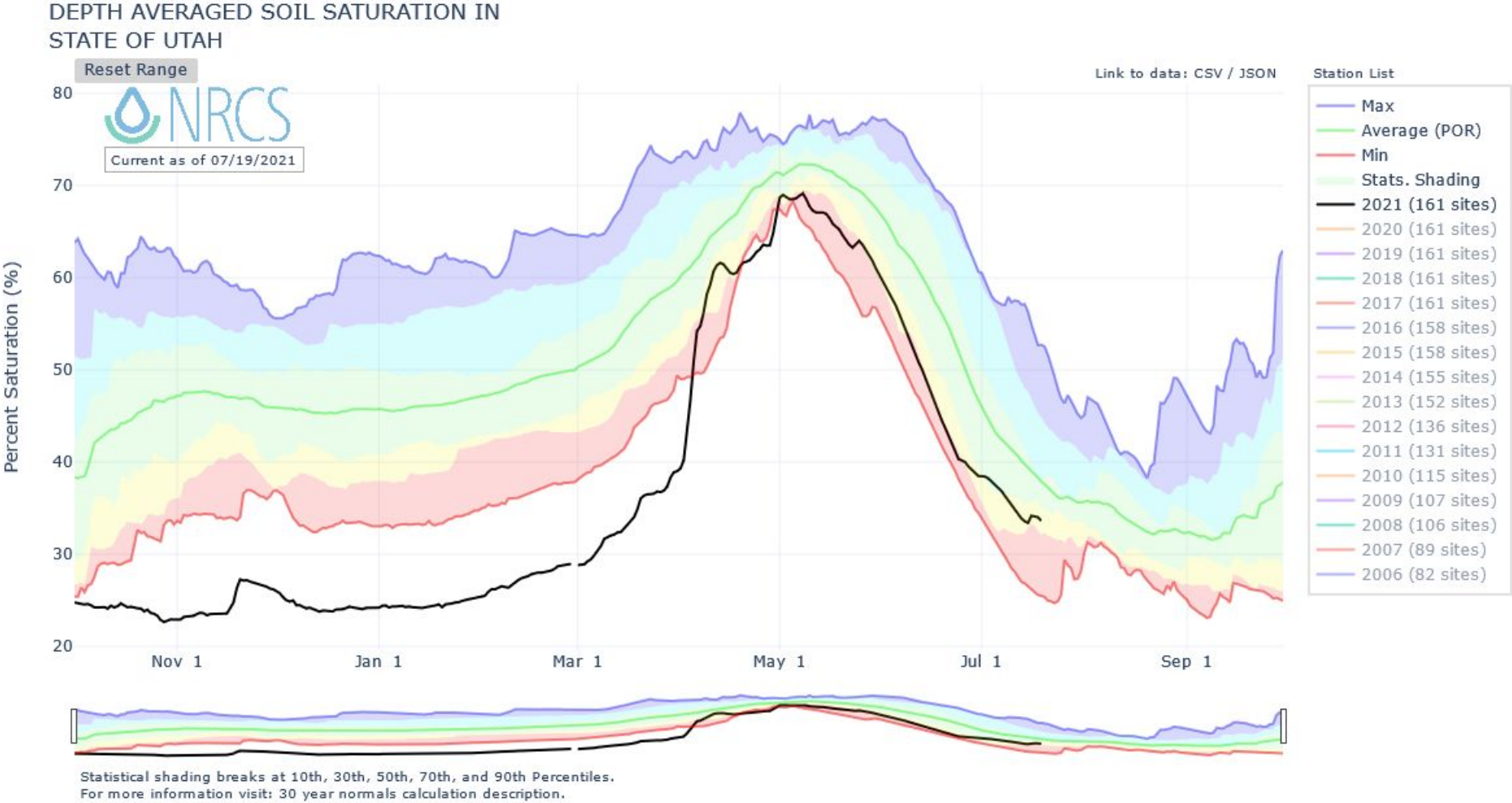
CPC 3-month outlook and ENSO watch



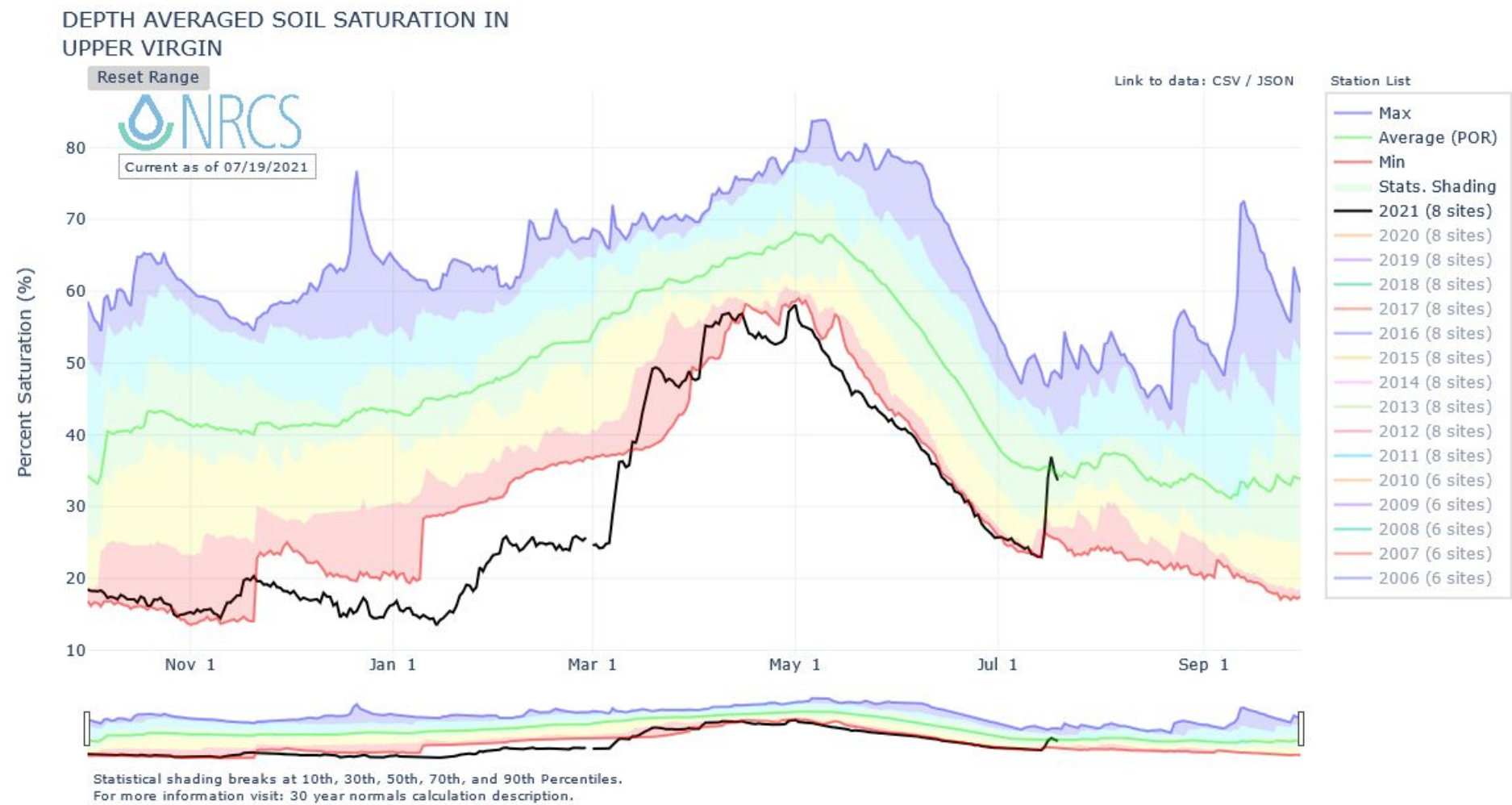
La Niña potentially emerging during the September-November season and lasting through the 2021-22 winter (66% chance during November-January).*

Station Name	Location	Last Updated	ETo inches		ETc inches		Precipitation inches		Irrigation Requirement inches	
			Last 24 hour	Last 7 Days	Last 24 hour	Last 7 Days	Last 24 hour	Last 7 Days	Last 24 hour	Last 7 Days
Logan, UT	Logan	07/20/2021 11:00 am	0.21"	1.72"	0.00"	0.00"	0.00"	0.00"	0.19"	1.55"
Brigham City, UT VWS	Brigham City	07/20/2021 12:00 pm	0.23"	1.87"	0.21"	1.69"	0.00"	0.00"	0.21"	1.69"
Randolph, UT VWS	Randolph	07/20/2021 12:00 pm	0.21"	1.80"	0.19"	1.62"	0.03"	0.03"	0.17"	1.59"
Weber Basin Water	Layton	07/20/2021 12:00 pm	0.20"	1.61"	0.18"	1.44"	0.00"	0.00"	0.18"	1.44"
Morgan, UT VWS	Morgan	07/20/2021 12:00 pm	0.23"	1.87"	0.21"	1.68"	0.01"	0.01"	0.20"	1.68"
North Salt Lake, UT VWS	North Salt Lake	07/20/2021 12:00 pm	0.25"	2.08"	0.23"	1.87"	0.00"	0.00"	0.23"	1.87"
Park City, UT VWS	Park City	07/20/2021 12:00 pm	0.18"	1.66"	0.17"	1.50"	0.04"	0.04"	0.14"	1.47"
Solamere	Park City	07/20/2021 10:15 am	0.16"	1.29"	0.14"	1.16"	0.04"	0.04"	0.11"	1.13"
Tooele, UT VWS	Tooele	07/20/2021 12:00 pm	0.20"	1.89"	0.18"	1.70"	0.03"	0.03"	0.16"	1.68"
Jordan Valley WCD	West Jordan	07/20/2021 09:00 am	0.23"	2.06"	0.21"	1.85"	0.02"	0.02"	0.19"	1.84"
Daybreak, UT VWS	South Jordan	07/20/2021 12:00 pm	0.22"	2.00"	0.20"	1.80"	0.00"	0.00"	0.20"	1.80"
Provo, UT VWS	Provo	07/20/2021 12:00 pm	0.22"	1.84"	0.20"	1.66"	0.01"	0.01"	0.19"	1.65"
Heber City, UT VWS	Heber City	07/20/2021 12:00 pm	0.22"	1.71"	0.20"	1.54"	0.02"	0.02"	0.18"	1.52"
Duchesne, UT VWS	Duchesne	07/20/2021 12:00 pm	0.24"	1.84"	0.22"	1.65"	0.01"	0.02"	0.21"	1.64"
Vernal, UT VWS	Vernal	07/20/2021 12:00 pm	0.26"	1.78"	0.24"	1.60"	0.00"	0.01"	0.24"	1.59"
Manilla, UT VWS	Manilla	07/20/2021 12:00 pm	0.21"	1.65"	0.19"	1.48"	0.00"	0.00"	0.19"	1.48"
Nephi, UT VWS	Nephi	07/20/2021 12:00 pm	0.18"	1.71"	0.16"	1.53"	0.06"	0.06"	0.12"	1.49"
Delta, UT VWS	Delta	07/20/2021 12:00 pm	0.19"	1.76"	0.17"	1.59"	0.00"	0.01"	0.17"	1.58"
Manti, UT VWS	Manti	07/20/2021 12:00 pm	0.20"	1.74"	0.18"	1.57"	0.03"	0.06"	0.15"	1.52"
Richfield, UT VWS	Richfield	07/20/2021 12:00 pm	0.16"	1.57"	0.14"	1.41"	0.11"	0.33"	0.06"	1.15"
Circleville, UT VWS	Circleville	07/20/2021 12:00 pm	0.16"	1.45"	0.14"	1.31"	0.05"	0.85"	0.10"	0.62"
Price, UT VWS	Price	07/20/2021 12:00 pm	0.25"	1.83"	0.23"	1.65"	0.00"	0.11"	0.23"	1.56"
Castle Dale, UT VWS	Castle Dale	07/20/2021 12:00 pm	0.24"	1.70"	0.22"	1.53"	0.00"	0.06"	0.22"	1.48"
Loa, UT VWS	Loa	07/20/2021 12:00 pm	0.16"	1.40"	0.14"	1.26"	0.01"	0.34"	0.14"	0.99"
Escalante, UT VWS	Escalante	07/20/2021 12:00 pm	0.23"	1.64"	0.21"	1.48"	0.00"	0.55"	0.21"	1.04"
Moab, UT VWS	Moab	07/20/2021 12:00 pm	0.26"	1.91"	0.23"	1.72"	0.00"	0.00"	0.23"	1.71"
Blanding, UT VWS	Blanding	07/20/2021 12:00 pm	0.25"	1.79"	0.22"	1.61"	0.00"	0.18"	0.22"	1.47"
Beaver, UT VWS	Beaver	07/20/2021 12:00 pm	0.18"	1.58"	0.16"	1.42"	0.22"	0.91"	-0.01"	0.69"
Cedar City, UT VWS	Cedar City	07/20/2021 12:00 pm	0.17"	1.60"	0.15"	1.44"	0.17"	0.98"	0.01"	0.66"
St. George, UT VWS	St. George	07/20/2021 12:00 pm	0.22"	1.96"	0.20"	1.76"	0.00"	0.23"	0.20"	1.57"
Kanab, UT VWS	Kanab	07/20/2021 12:00 pm	0.19"	1.61"	0.17"	1.45"	0.01"	0.28"	0.16"	1.22"

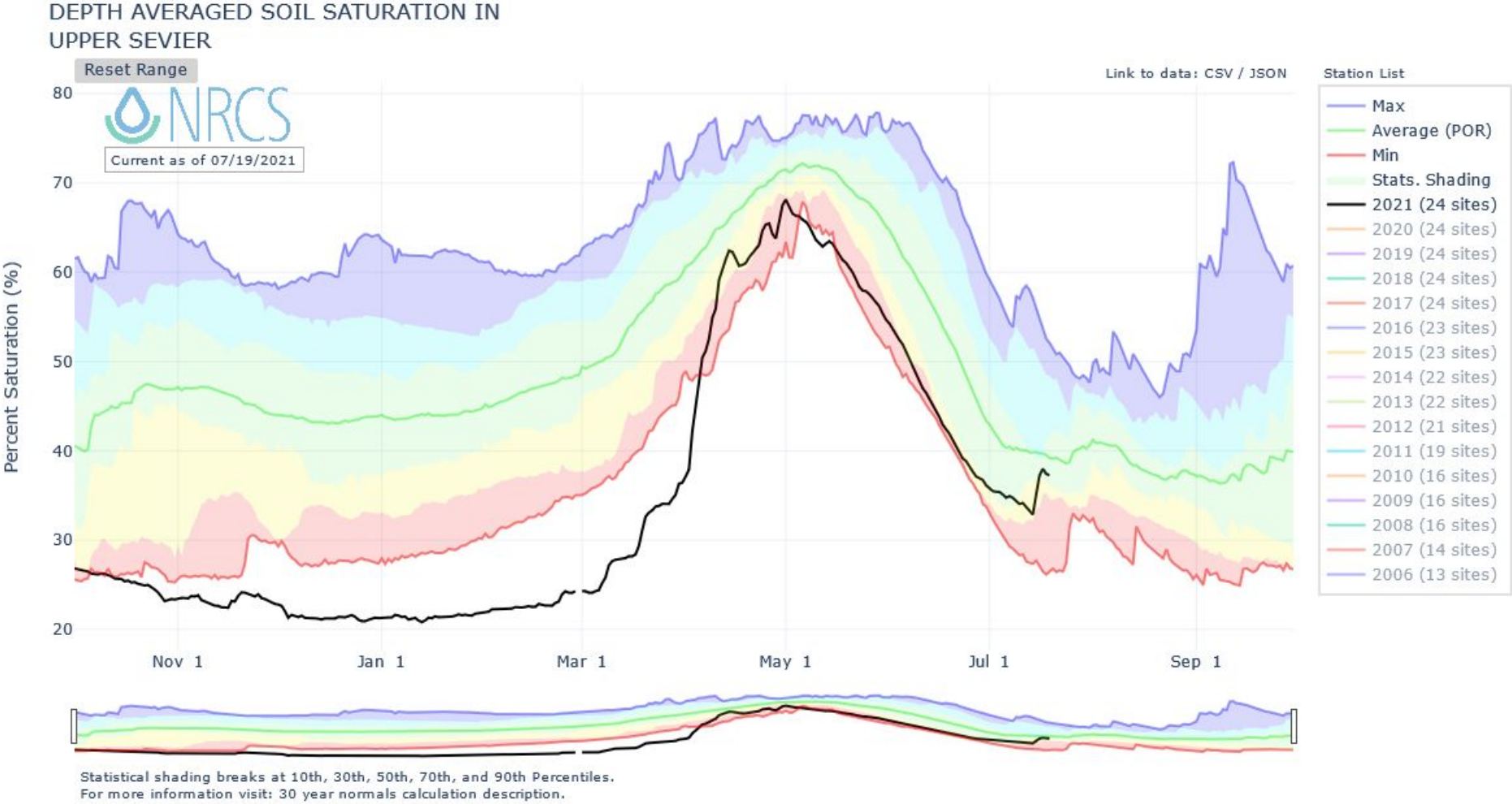
Soil Moisture



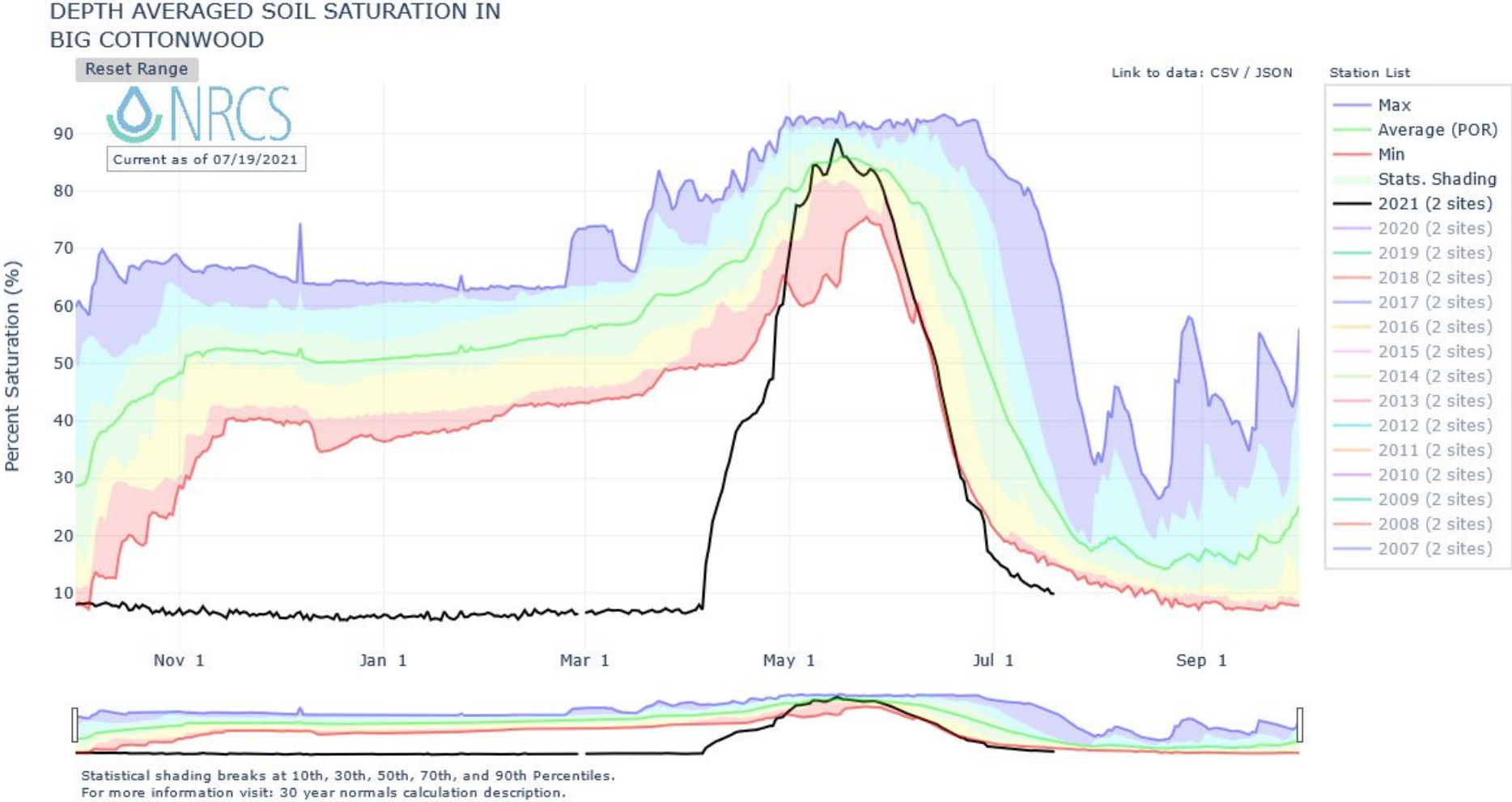
Soil Moisture



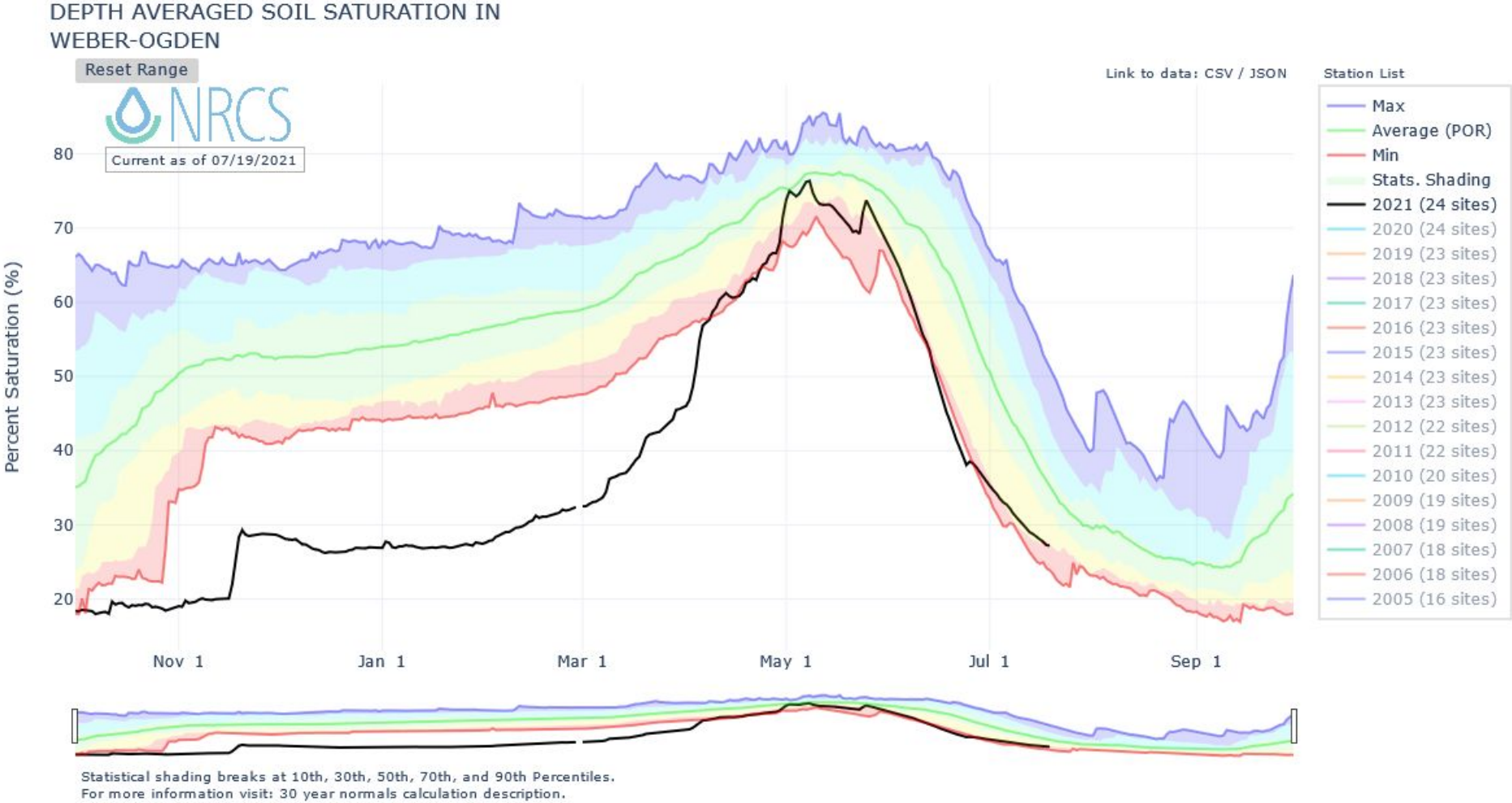
Soil Moisture



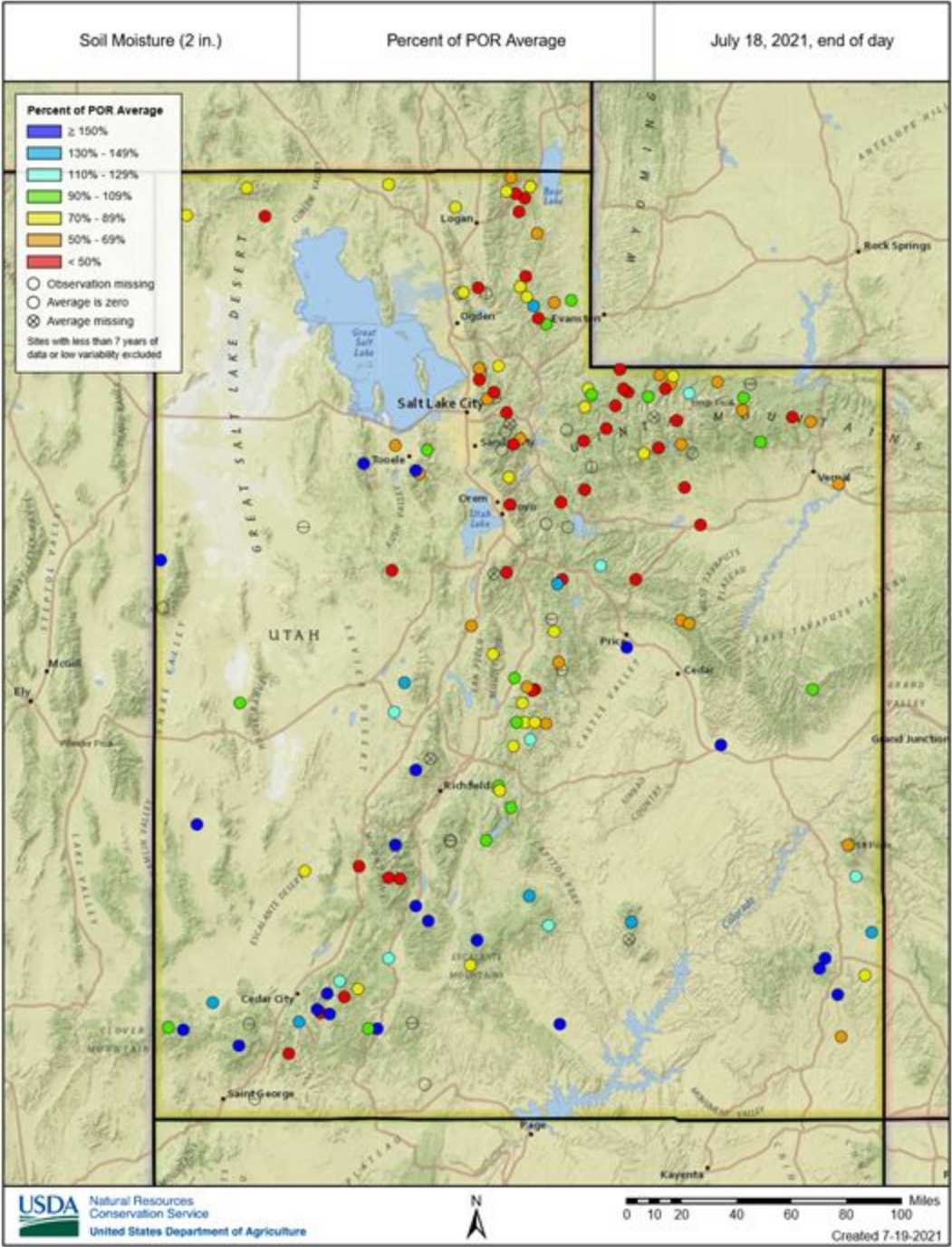
Soil Moisture



Soil Moisture

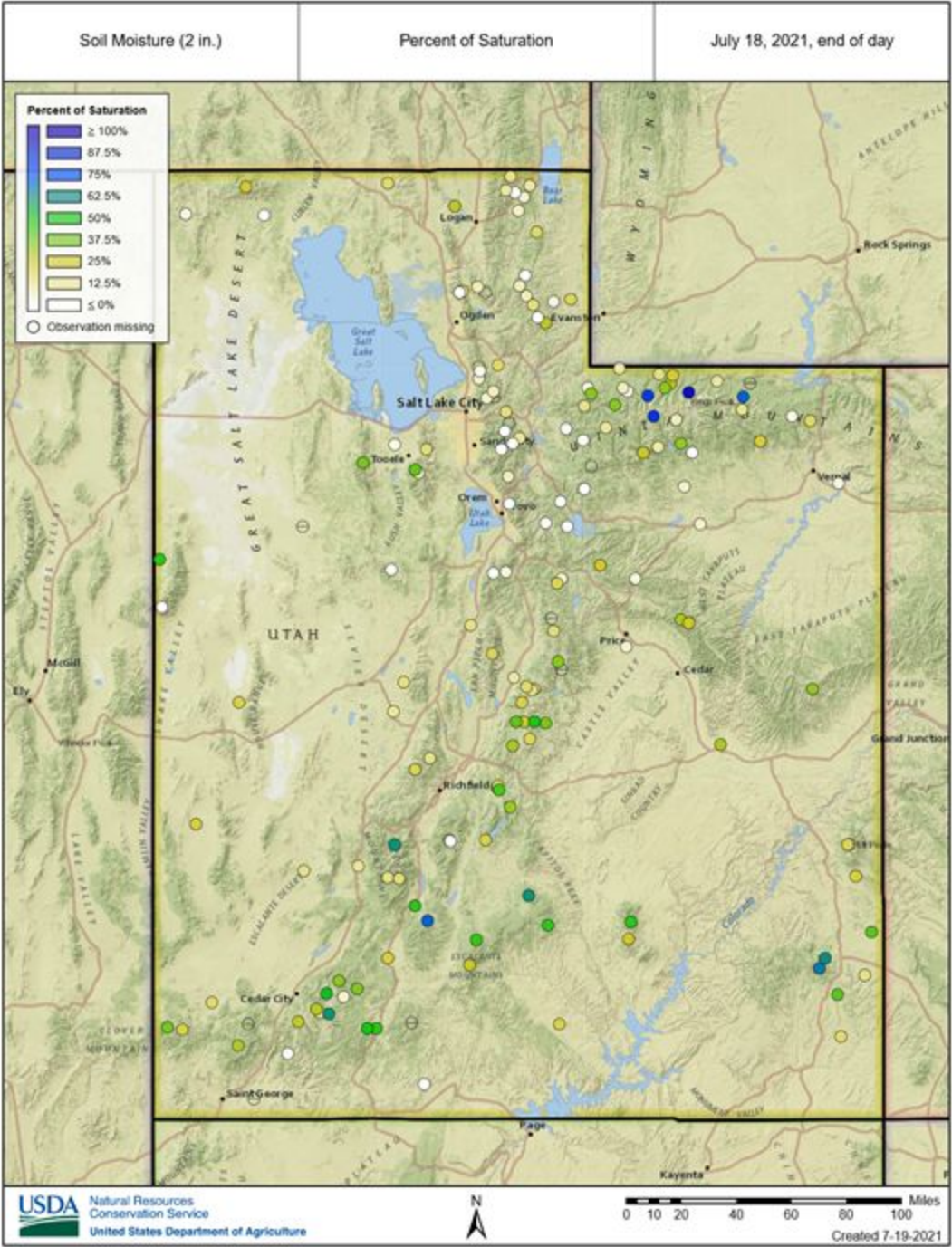


Soil Moisture



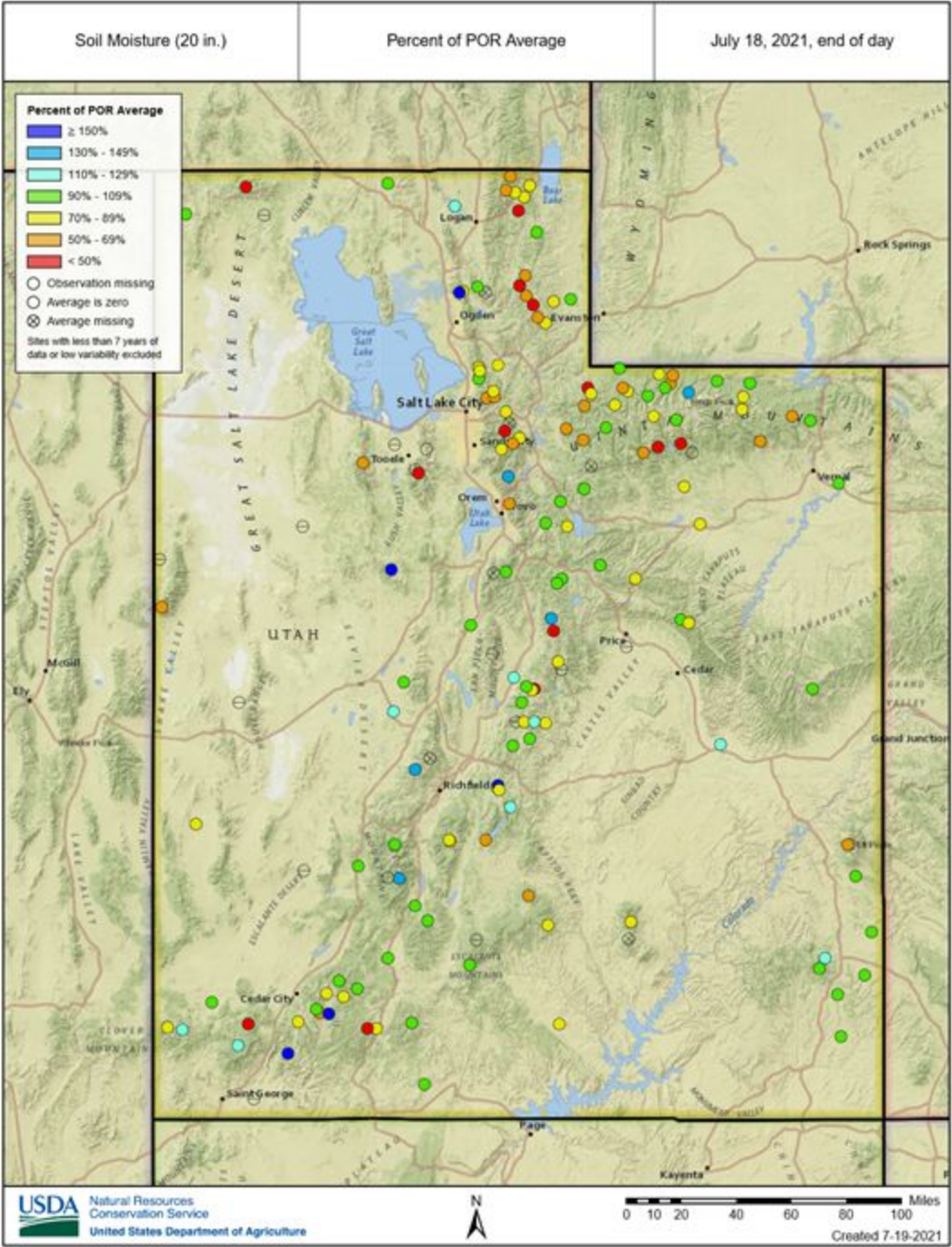
Agency - NRCS Snow Survey
Presenter - Jordan Clayton

Soil Moisture



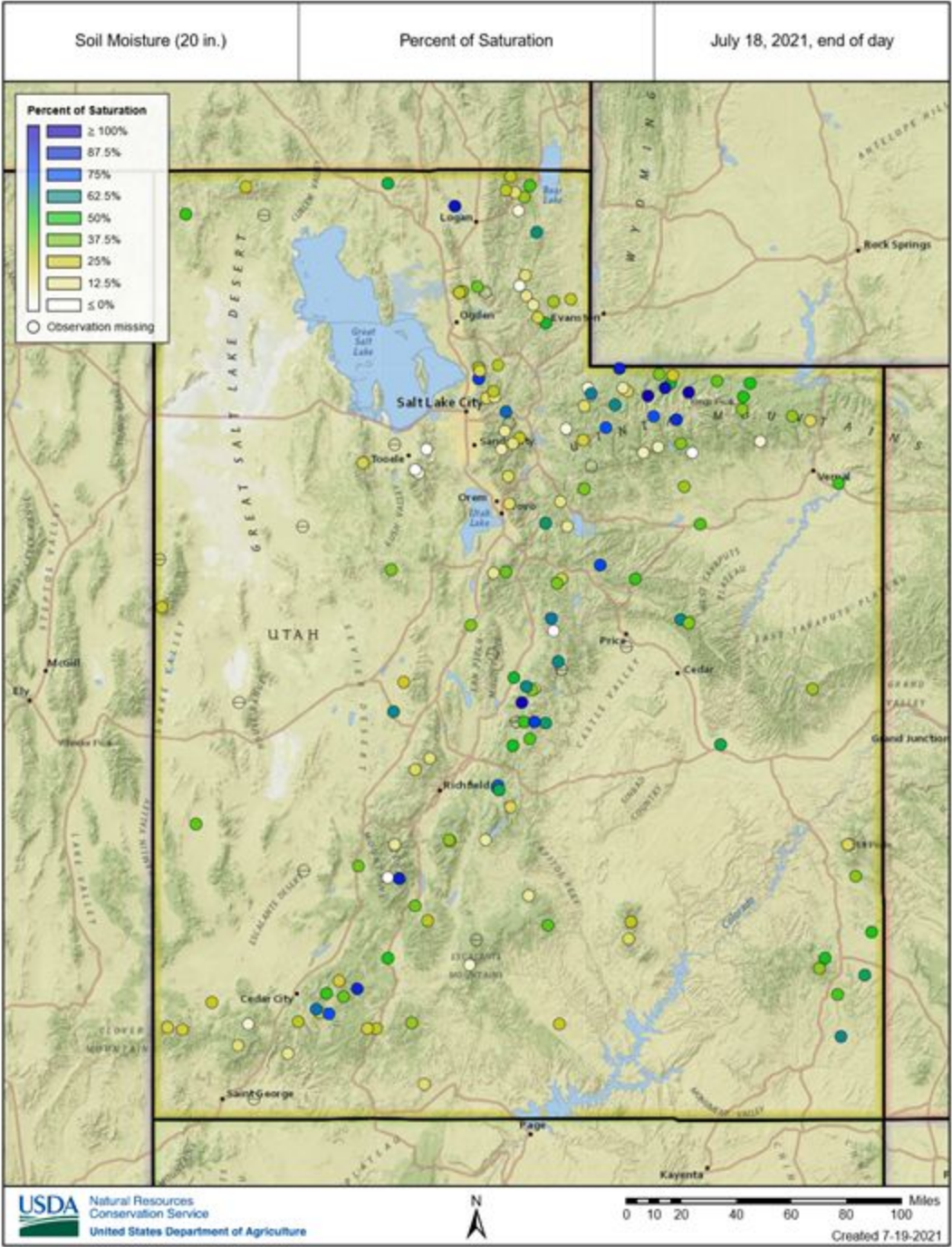
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Soil Moisture



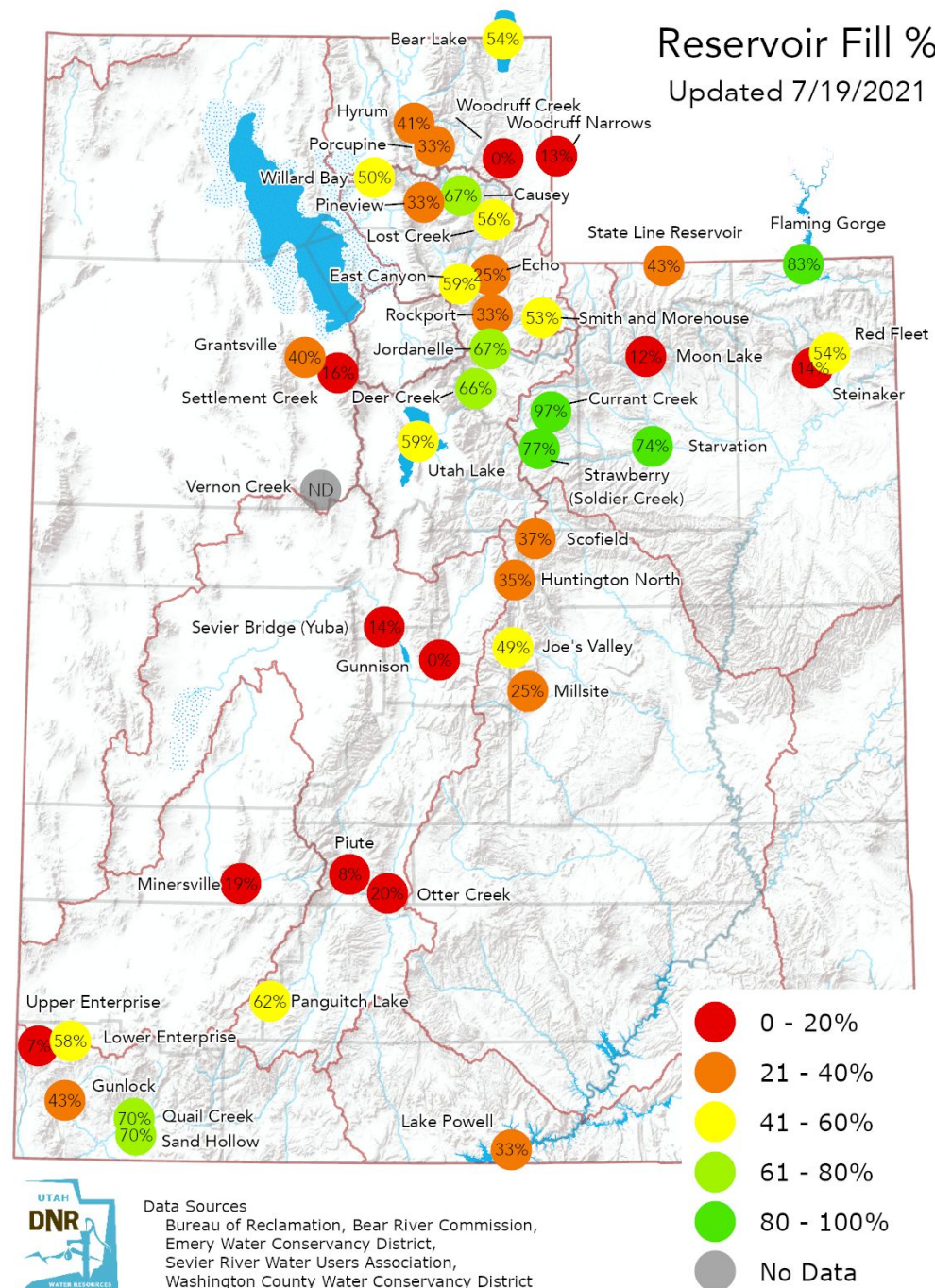
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Soil Moisture

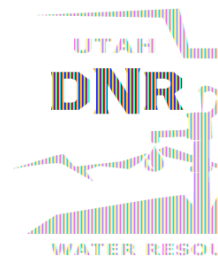


Agency - NRCS Snow Survey
Presenter - Jordan Clayton

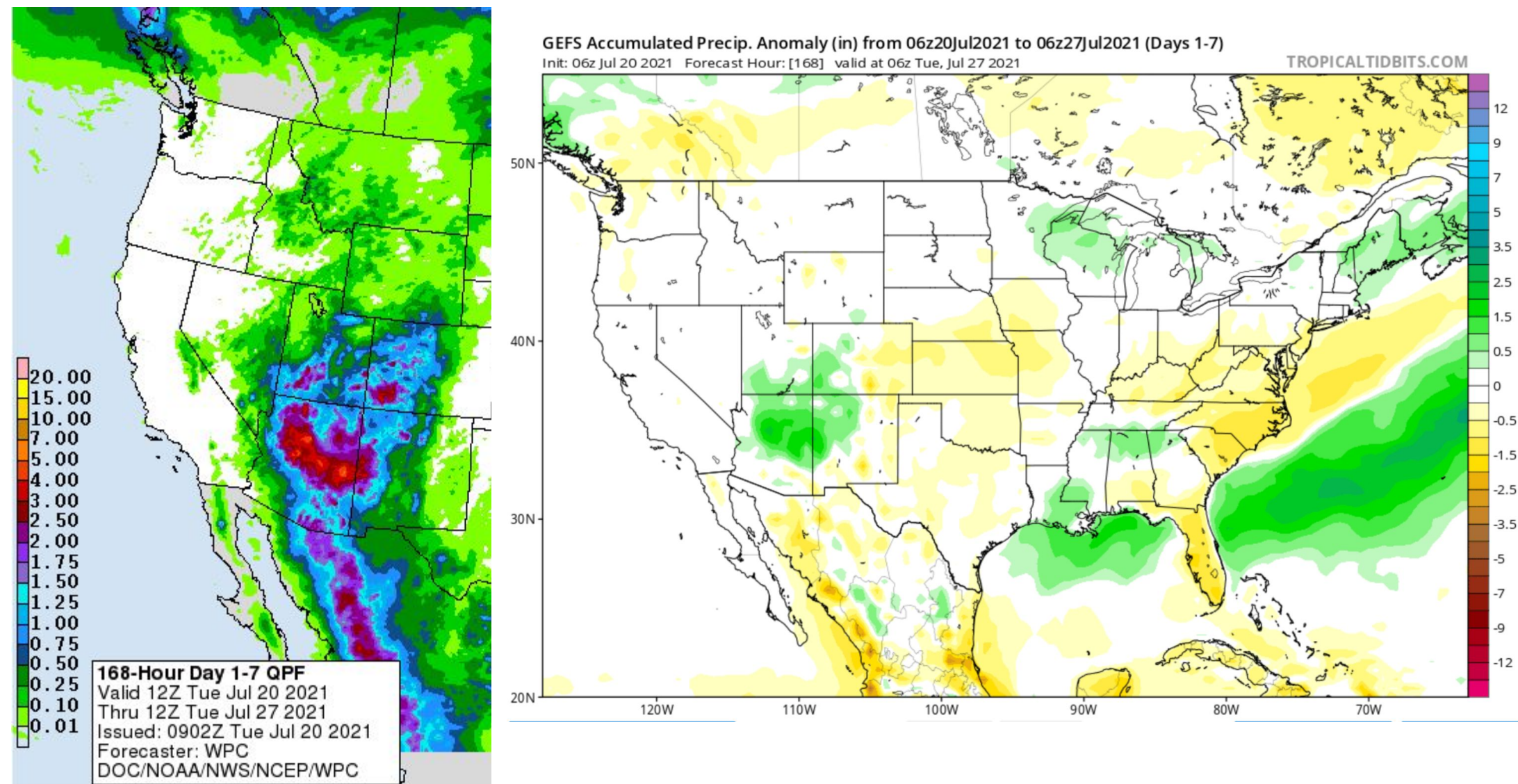
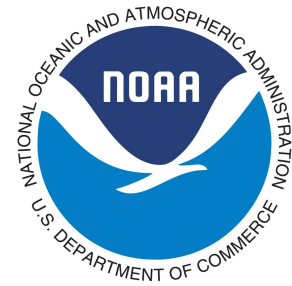
Reservoir Fill % Updated 7/19/2021



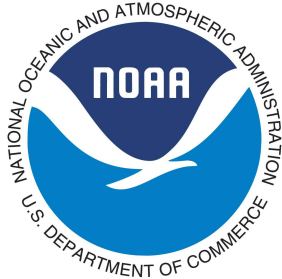
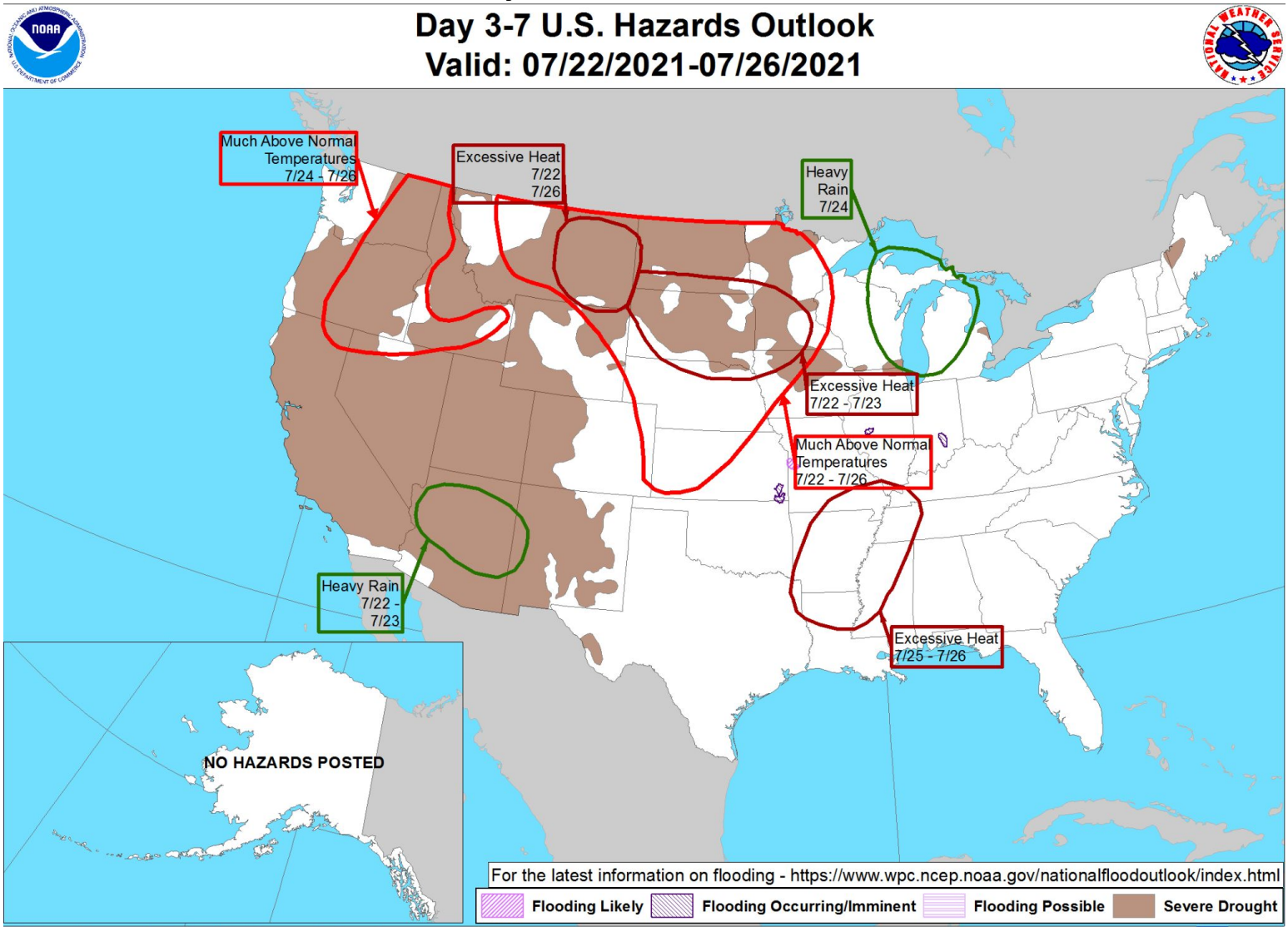
Agency - Division of Water
Resources w/NRCS & BOR data
Presenter - Laura Haskell



Weather Forecast Office Utah Day 1-7 Outlook



Weather Prediction Center U.S. Day 3-7 Hazards Outlook



Weather Prediction Center

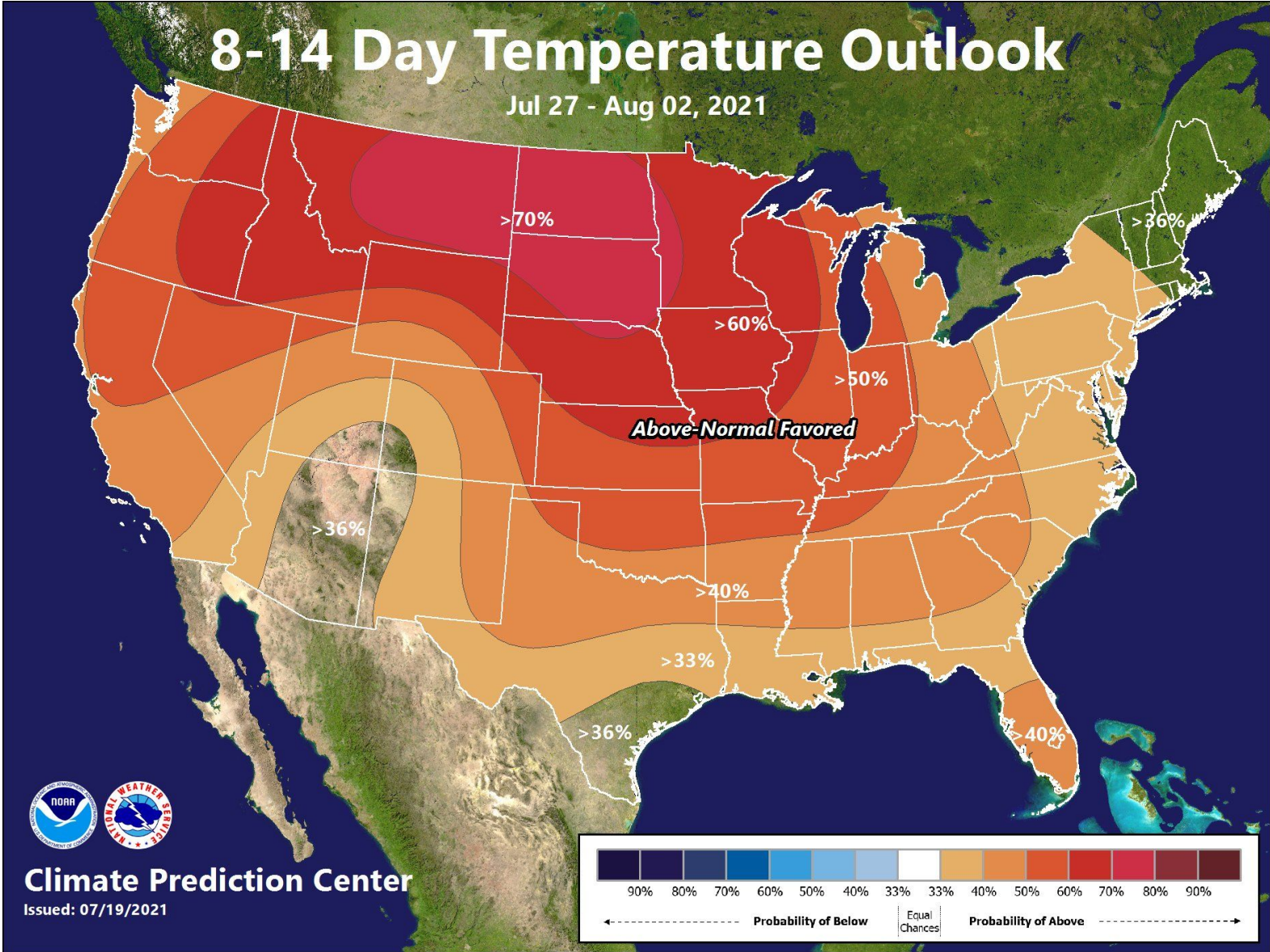
Made: 07/19/2021 3PM EDT

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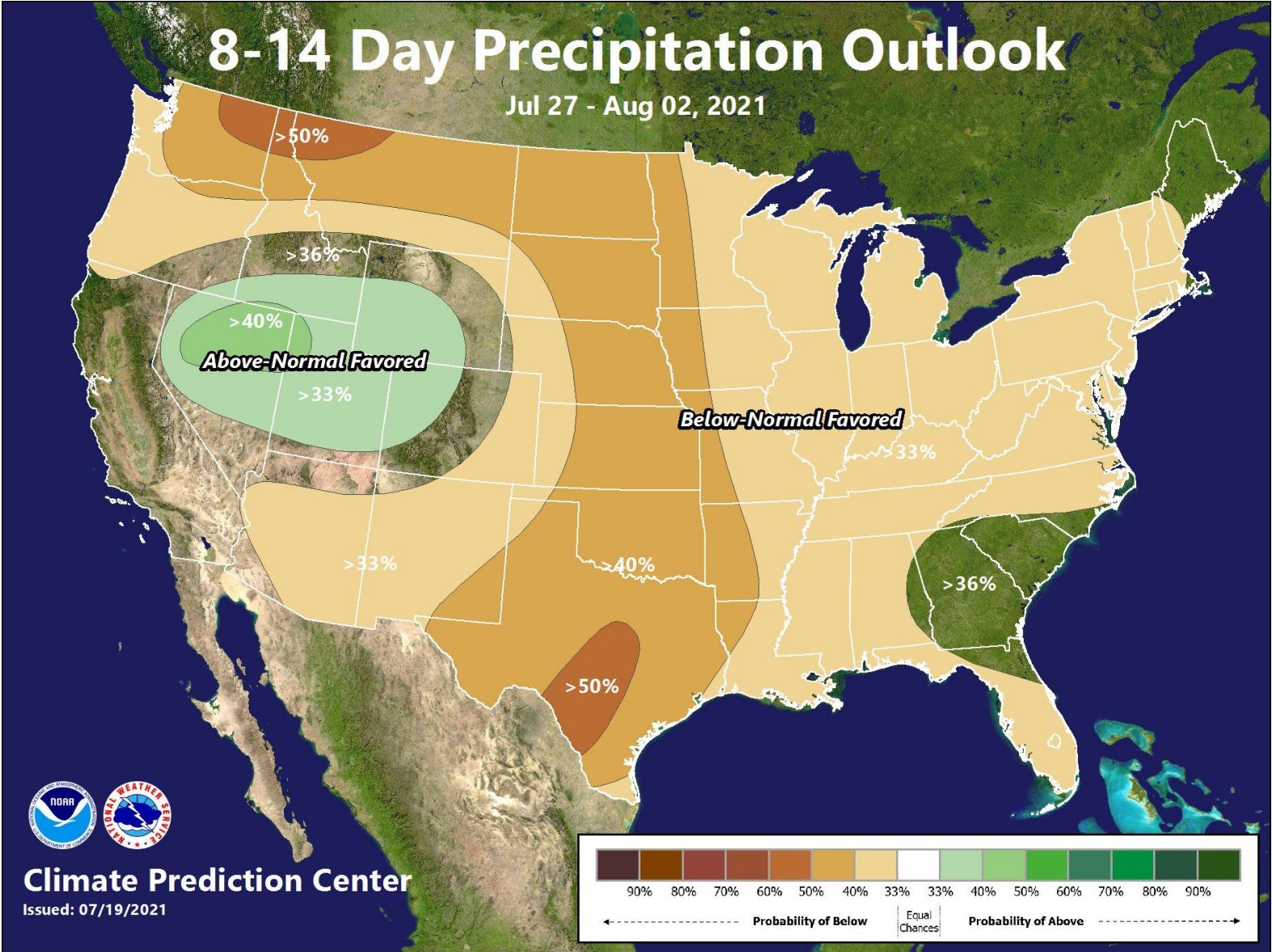
Agency - National Weather Service Weather Forecast Office
Presenter - Glen Merrill

Climate Prediction Center 8 to 14 Day Outlooks - Temperature



Agency - National Weather Service Weather Forecast Office
Presenter - Glen Merrill

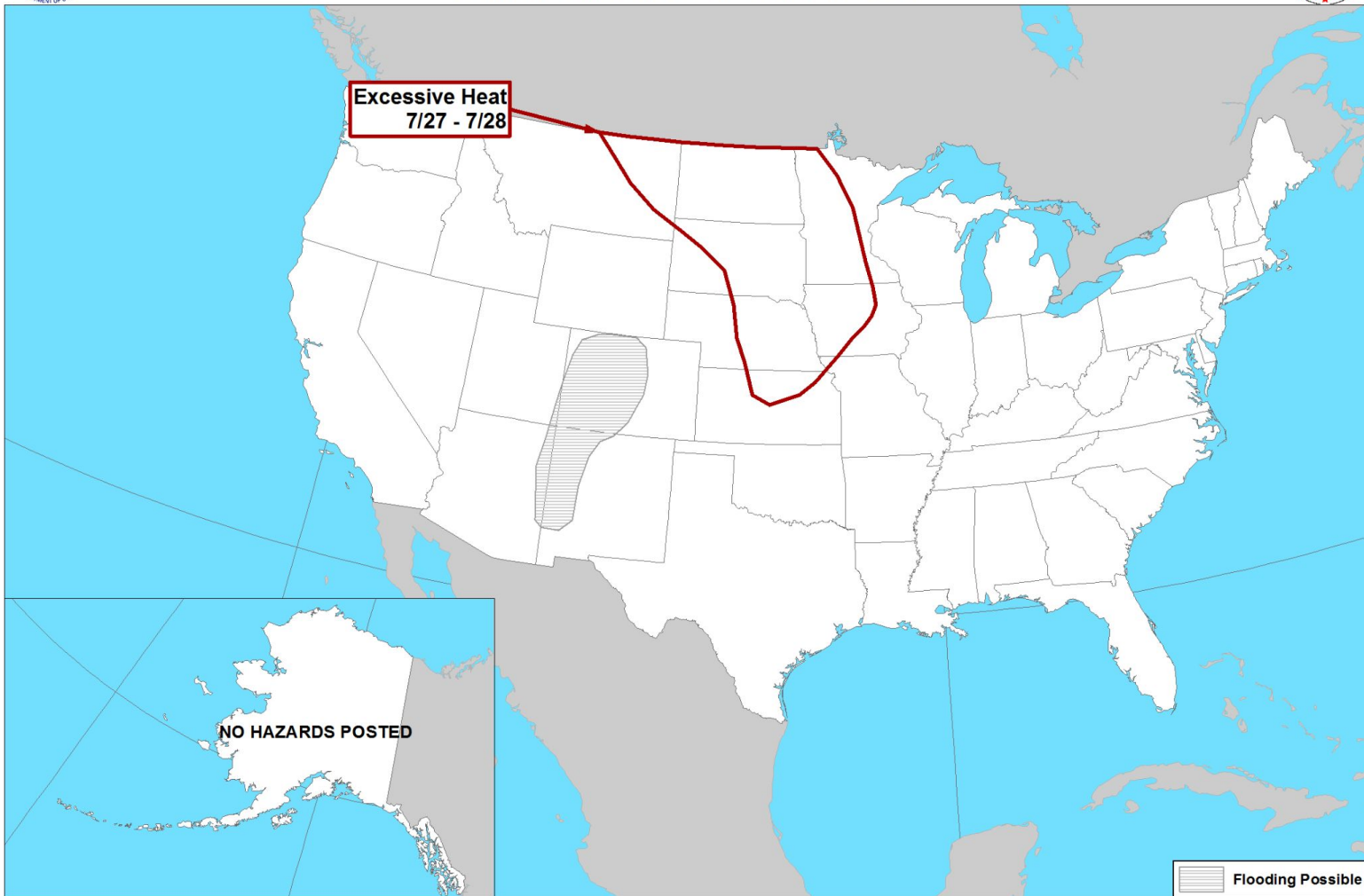
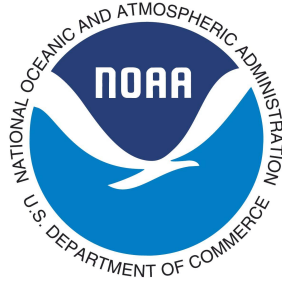
Climate Prediction Center 8 to 14 Day Outlooks - Precipitation



Agency - National Weather Service Weather Forecast Office
Presenter - Glen Merrill

Climate Prediction Center U.S. Week-2 Hazards Outlook

Day 8-14 U.S. Hazards Outlook
Valid: 07/27/2021-08/02/2021



Climate Prediction Center

Made: 07/19/2021 3PM EDT

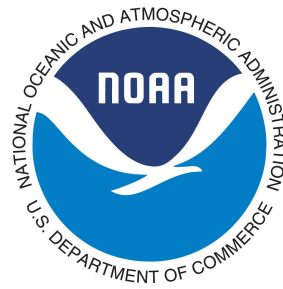
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Agency - National Weather Service Weather Forecast Office
Presenter - Glen Merrill

2021 Seasonal Water Supply Volume Forecasts

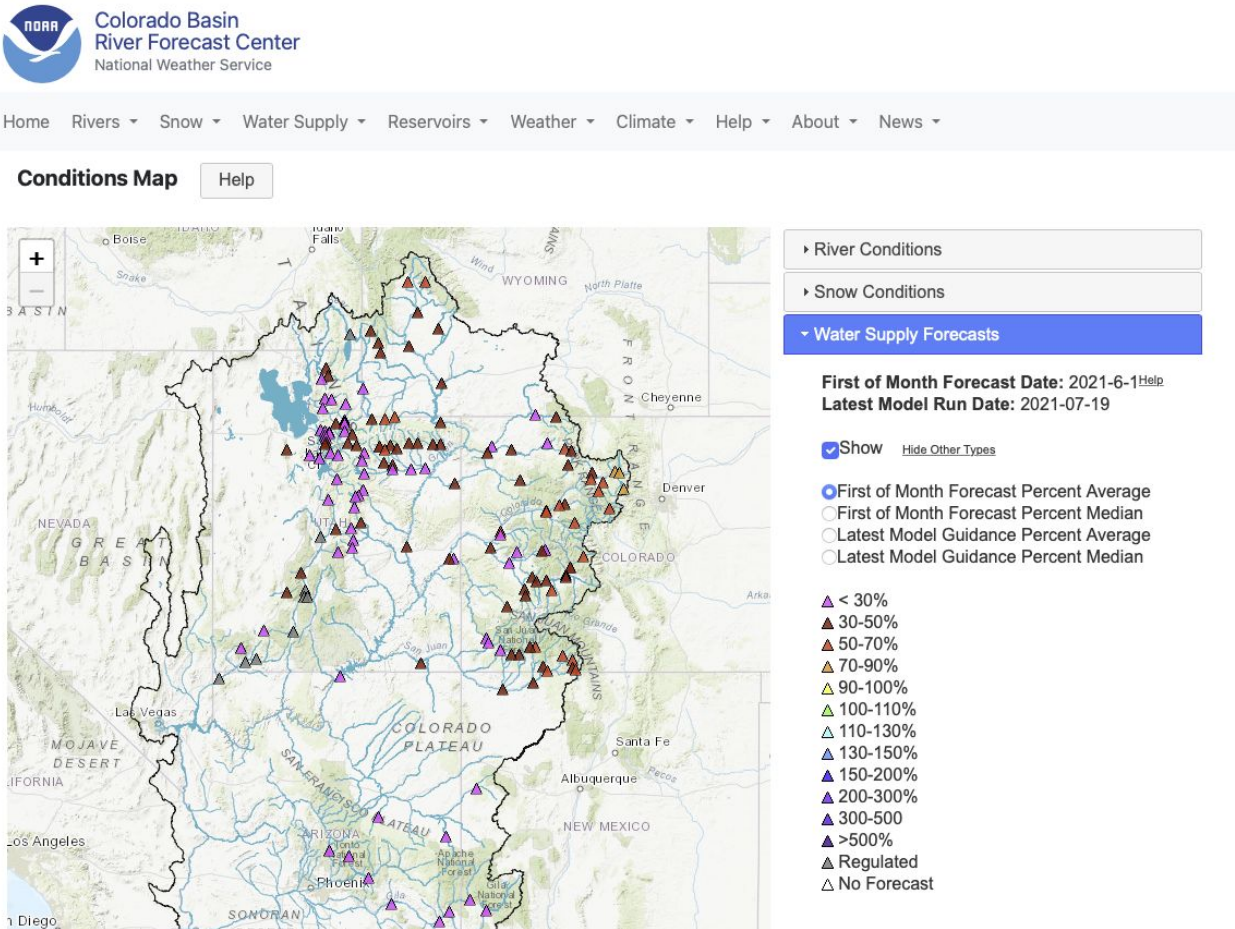
April - July Runoff, as Percent of Average (KAF)



<https://www.cbrfc.noaa.gov/lmap/lmap.php?interface=wsup>

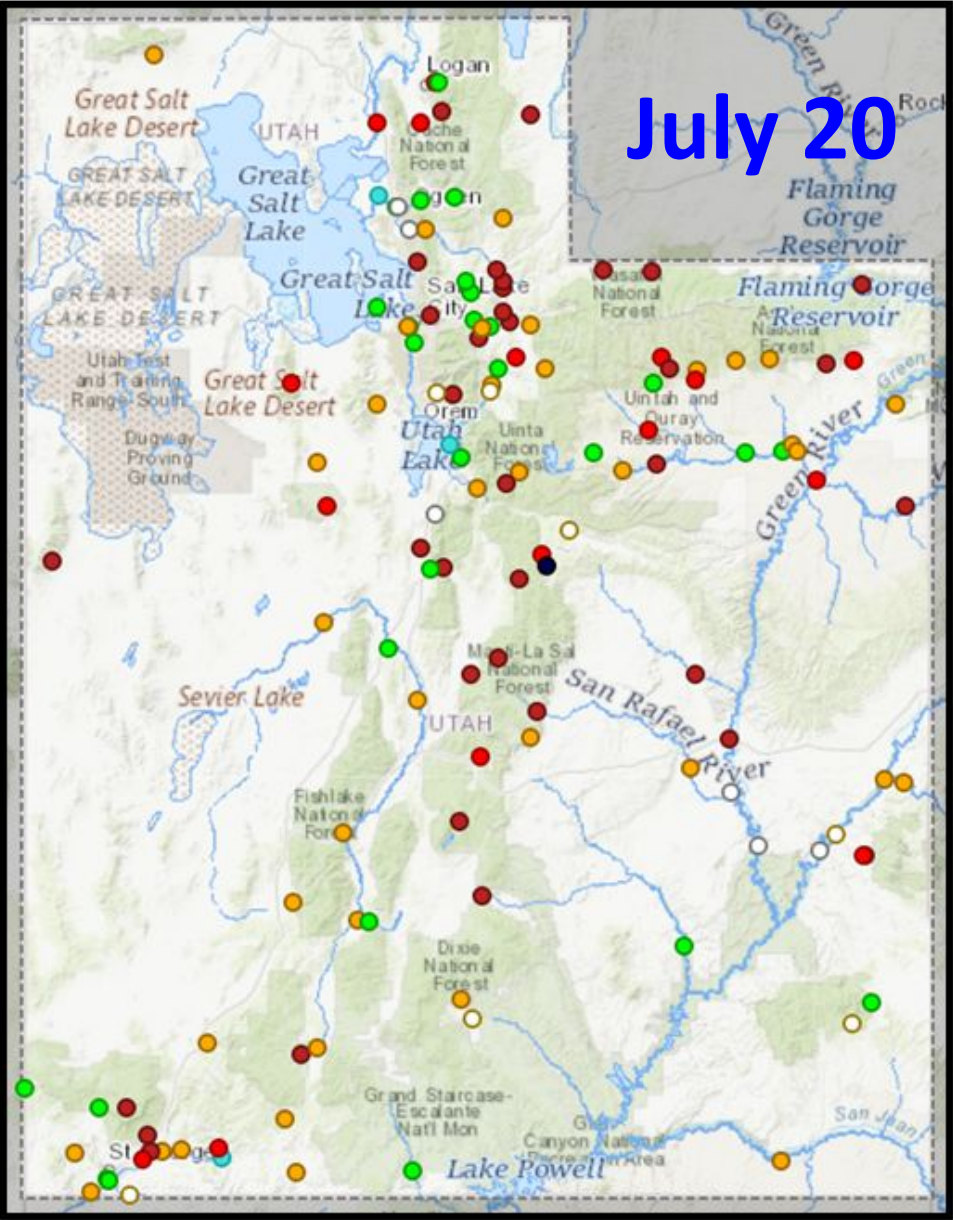
Summary of conditions at:

Weber Gateway	18%
Bear UT/WY	49%
Six Creeks LCC	51%
Utah Lake	27%
Sevier Piute	33%
Green River UT	29%
San Juan Bluff	42%
Lake Powell	25%



Current Streamflow Conditions

July 20



Streamflow Summary

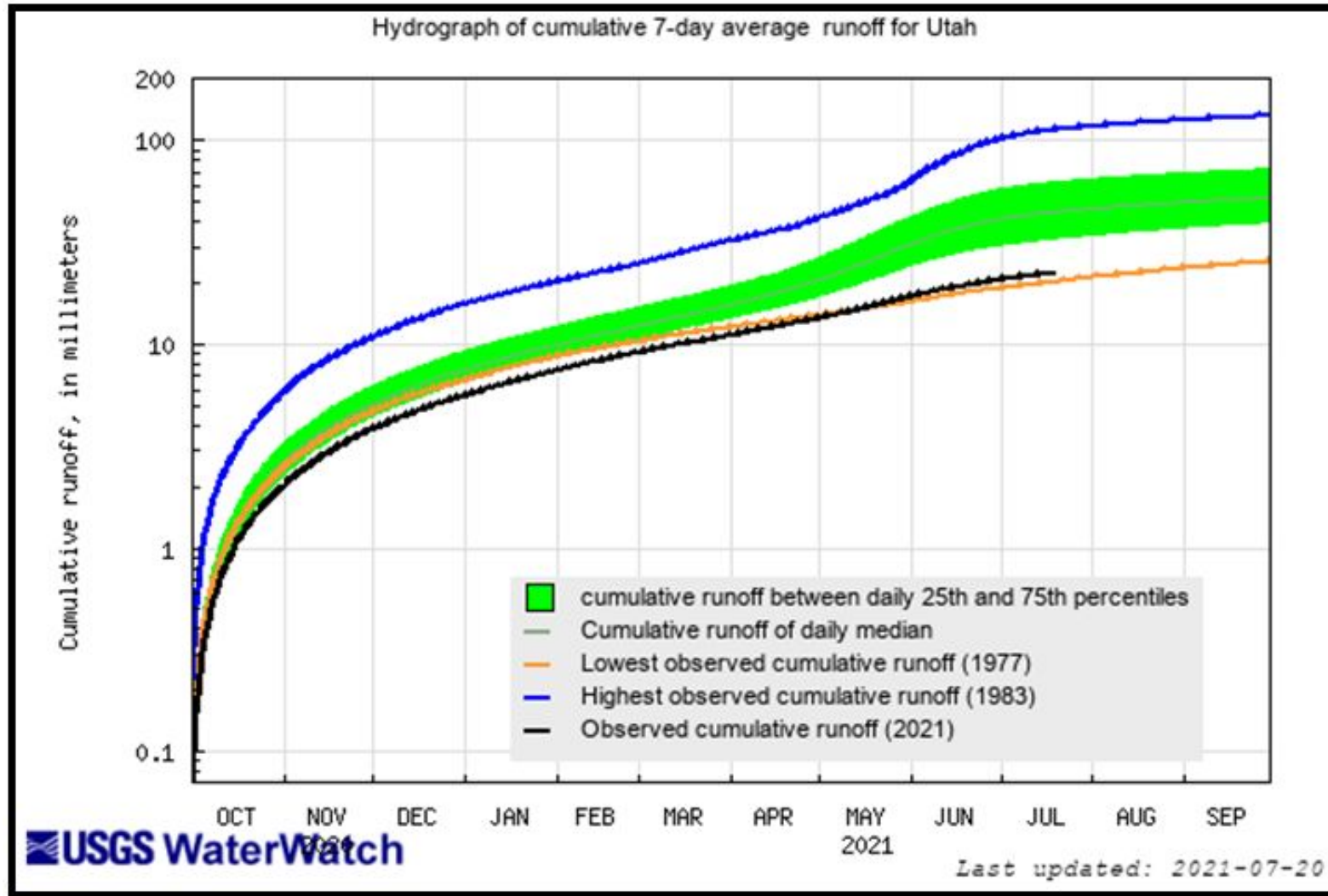
STATION COUNTS BY FLOW STATUS

All-time low for this day-of-year	16	11.9%	■
Much below normal for this day-of-year	34	25.4%	■
Below normal for this day-of-year	40	29.9%	■
Normal for this day-of-year	26	19.4%	■
Above normal for this day-of-year	4	3.0%	■
Much above normal for this day-of-year	0	0.0%	■
All-time high for this day-of-year	1	0.7%	
Not ranked - insufficient record	13	9.7%	■

Streams: Flow status

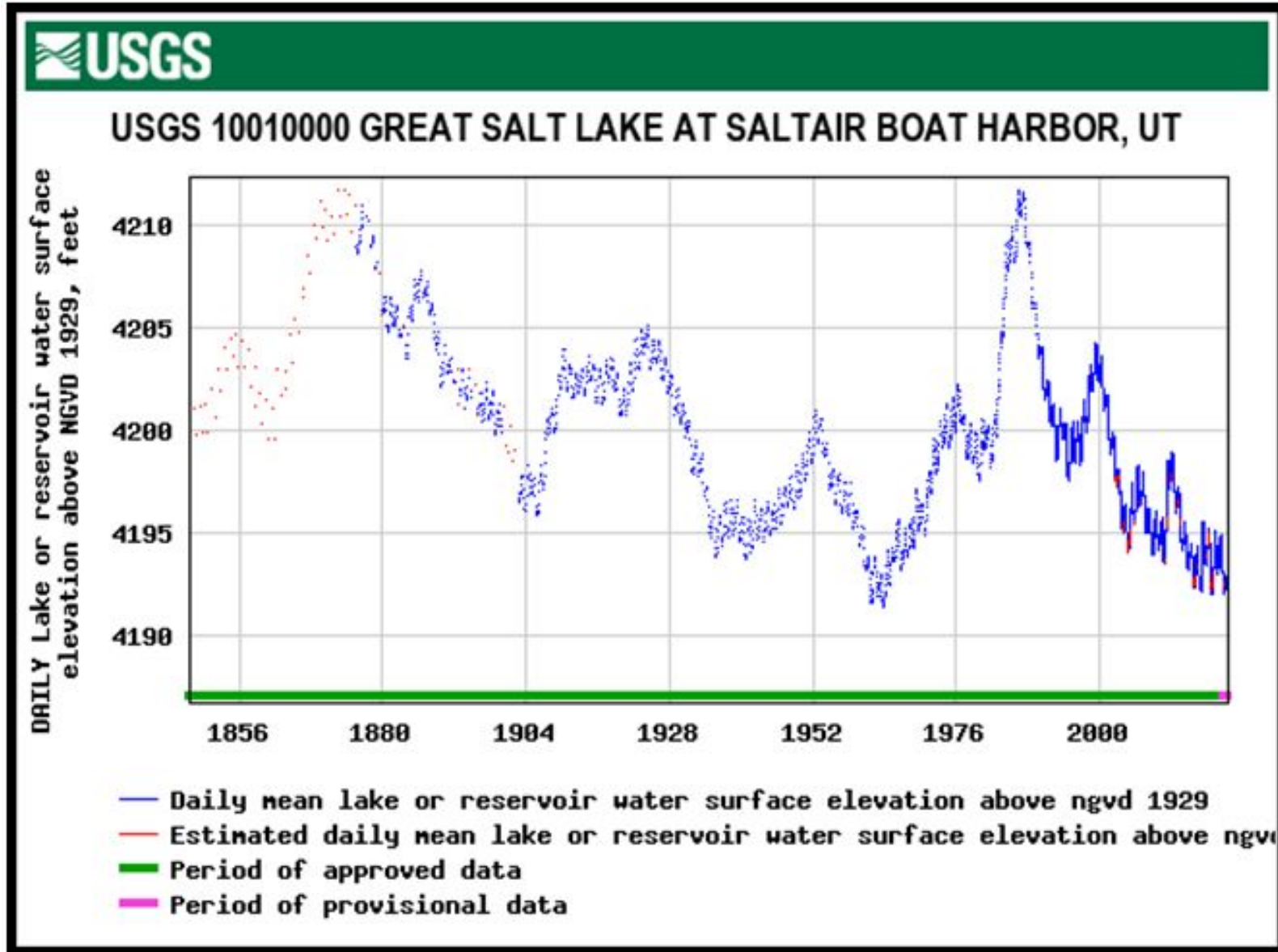
● All-Time Low for this Day	0 th percentile (minimum)
● Much Below Normal	<10 th percentile
● Below Normal	10 th – 24 th percentile
● Normal	25 th – 75 th percentile
● Above Normal	76 th – 90 th percentile
● Much Above Normal	>90 th percentile
● All-Time High for this Day	100 th percentile (maximum)
● Not Flowing	0 cubic feet per second
● Above NWS Flood Stage	See Comments
● Not Ranked	See Comments

Cumulative Streamflow



☐ Cumulative
7-day
average
runoff for
water year
2021 is
near the
lowest on
record

Great Salt Lake Water Surface Elevation

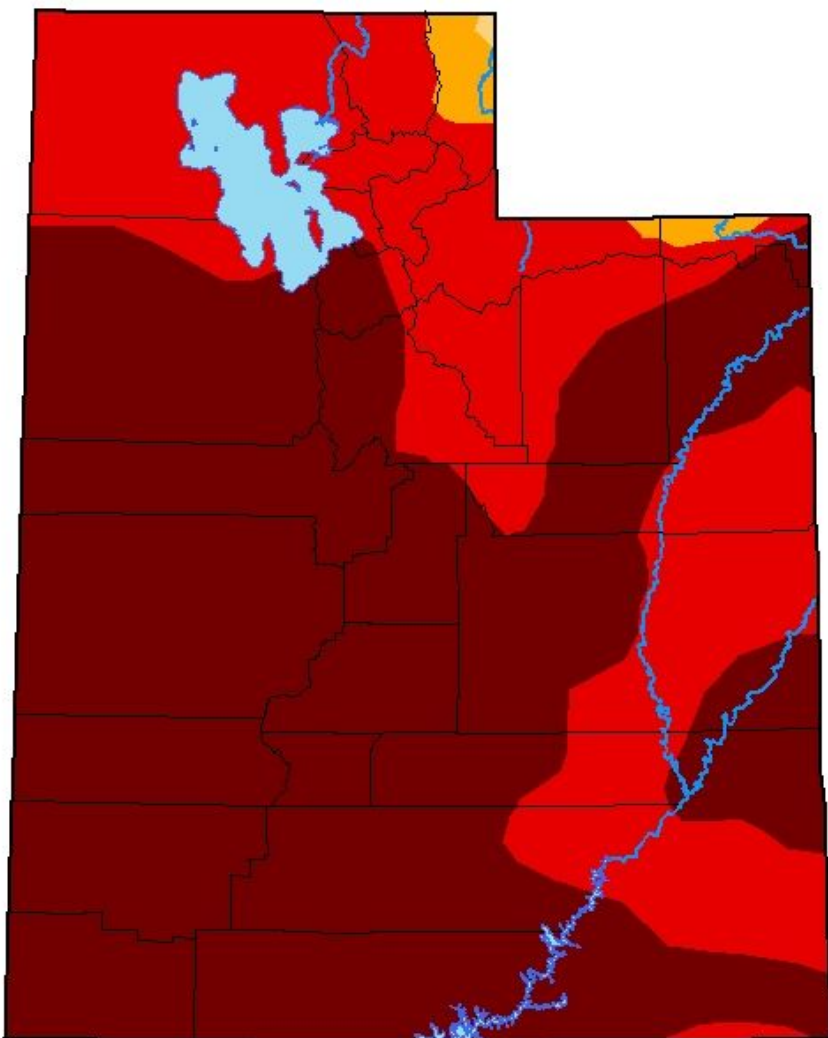


- ❑ 4,191.4' today
- ❑ Historic low measurement 4,191.35' (1963)

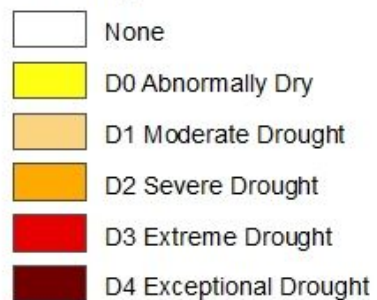
U.S. Drought Monitor

Utah

July 13, 2021
(Released Thursday, Jul. 15, 2021)
Valid 8 a.m. EDT



Intensity:



The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>

Author:

Adam Hartman
NOAA/NWS/NCEP/CPC



droughtmonitor.unl.edu