



Utah Water Conditions (drought webinar)

The meeting will begin shortly



Thank you to our contributors

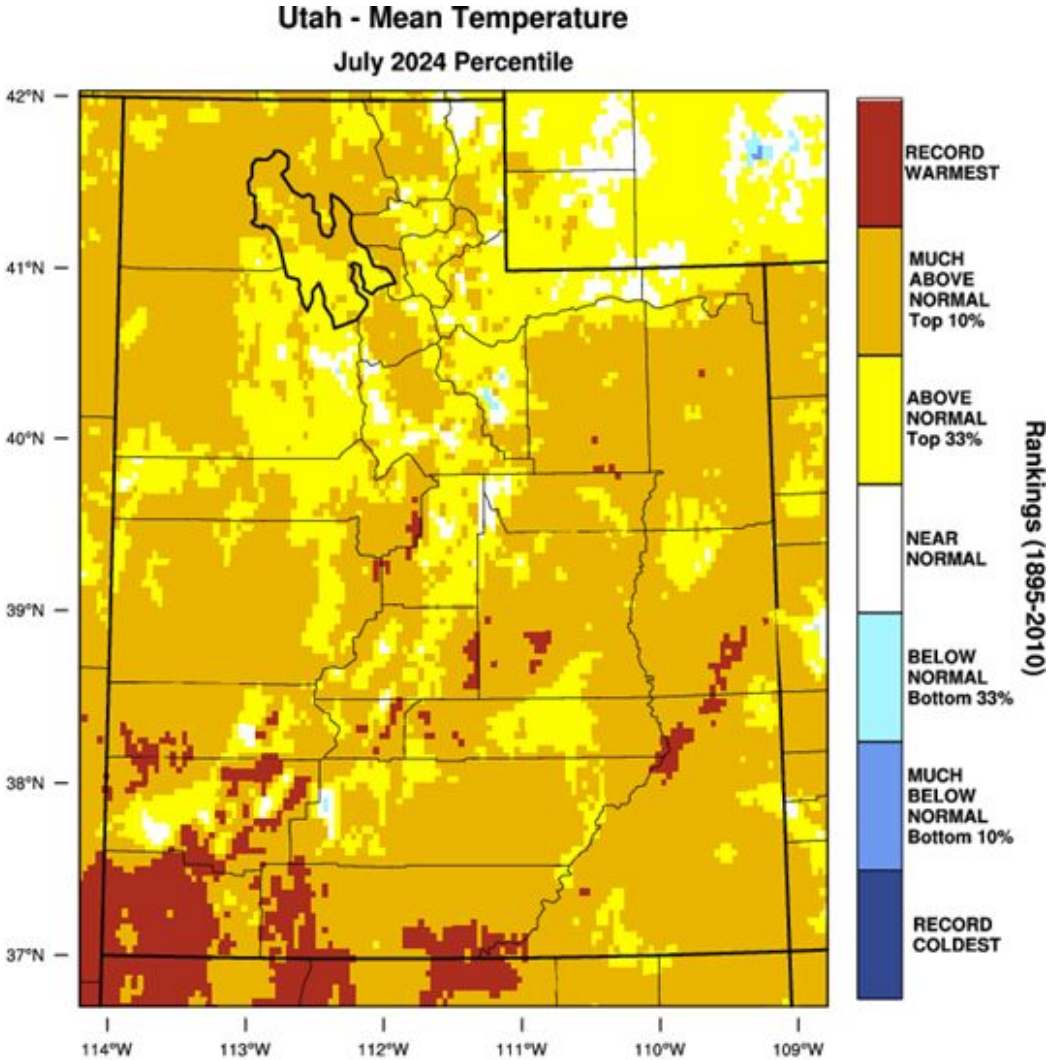
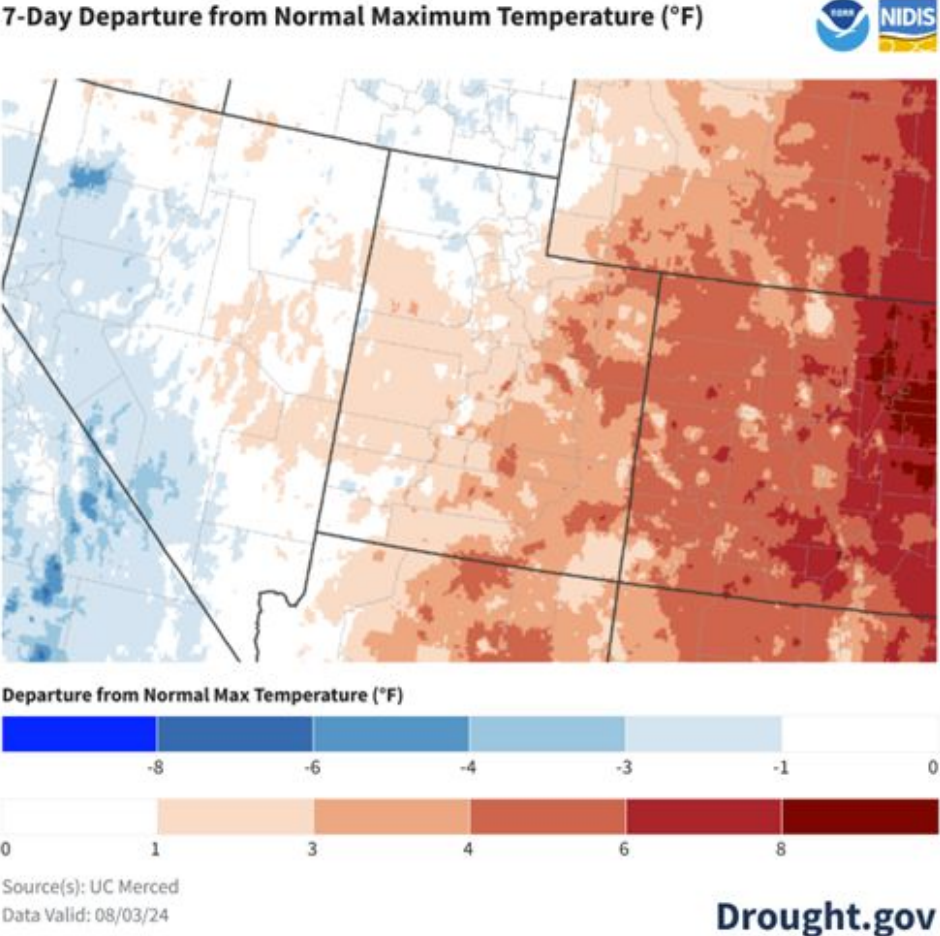




Utah Water Conditions Update

August 6, 2024

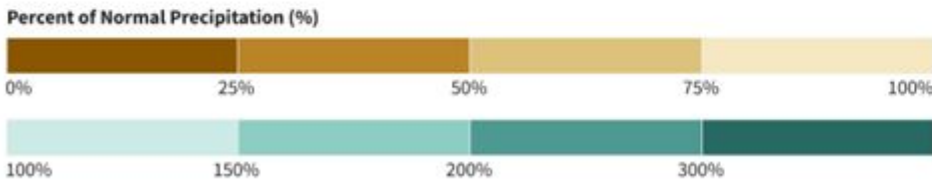
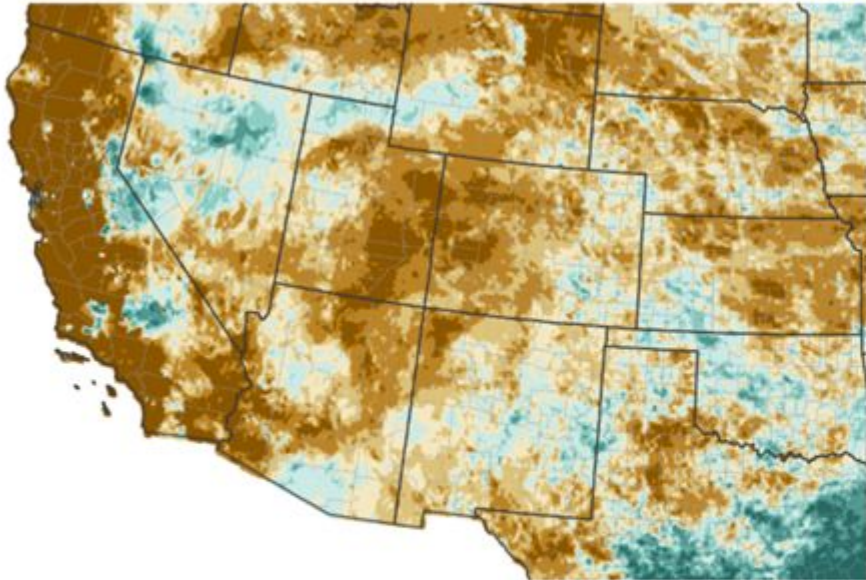
Temperatures



Agency - Utah Climate Center
Presenter - Jon Meyer

Precipitation

30-Day Percent of Normal Precipitation

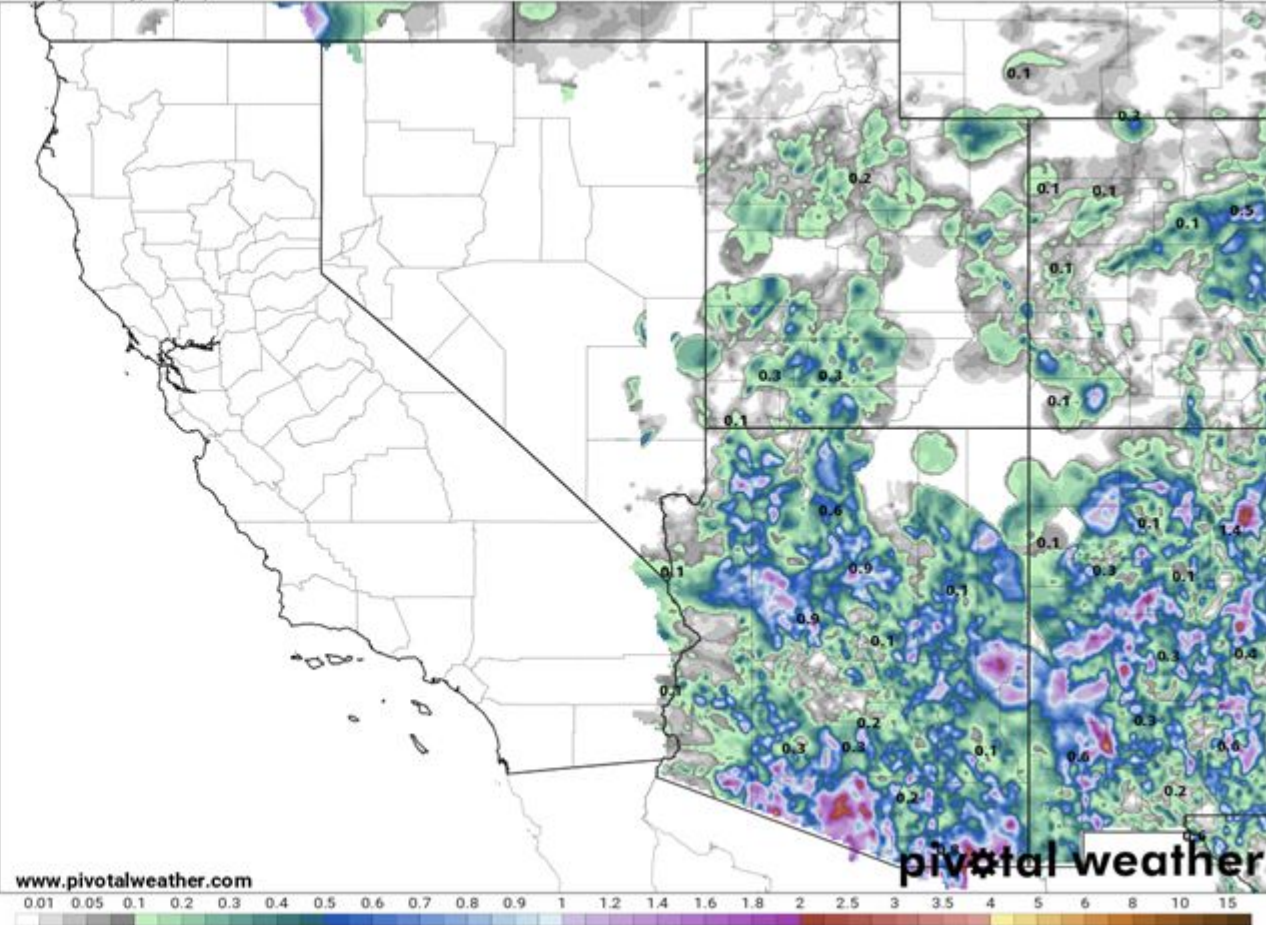


Source(s): UC Merced
Data Valid: 08/03/24

Drought.gov

168-Hour Stage IV Precipitation Analysis (in)
Ending Monday, Aug. 5, 2024 at 5 a.m. PDT

Init: Mon 2024-08-05 12z NCEP Stage IV

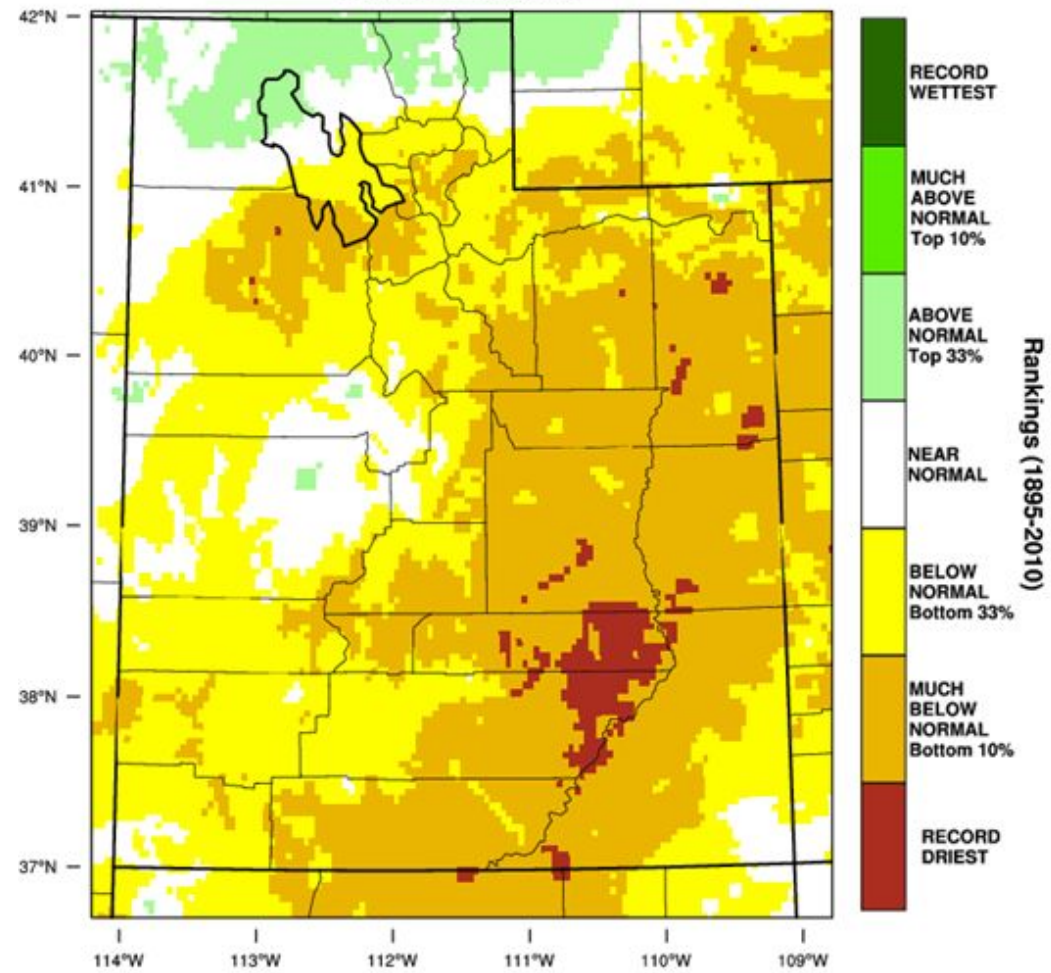


www.pivotalweather.com

pivotal weather

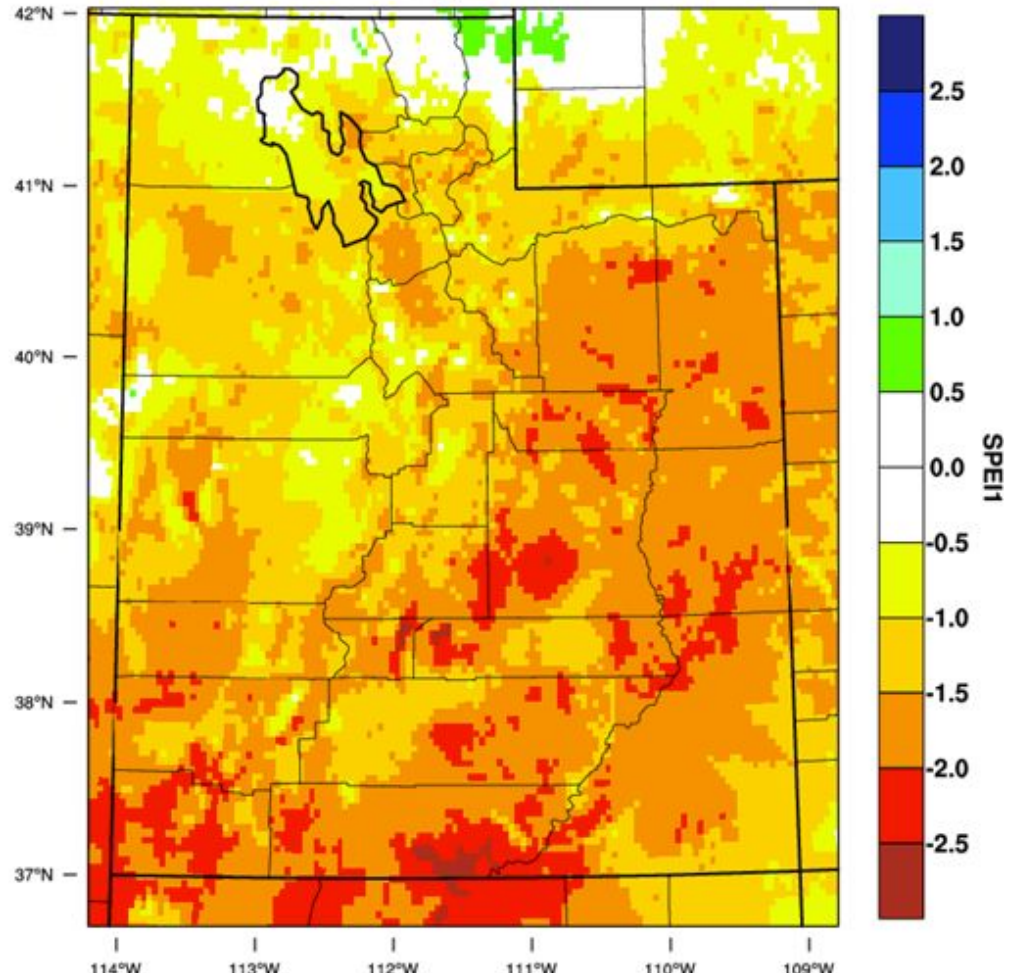
Precipitation

Utah - Precipitation
July 2024 Percentile



WestWide Drought Tracker, U Idaho/WRCC Data Source: PRISM (Prelim), created 5 AUG 2024

Utah - 1 month SPEI
July 2024

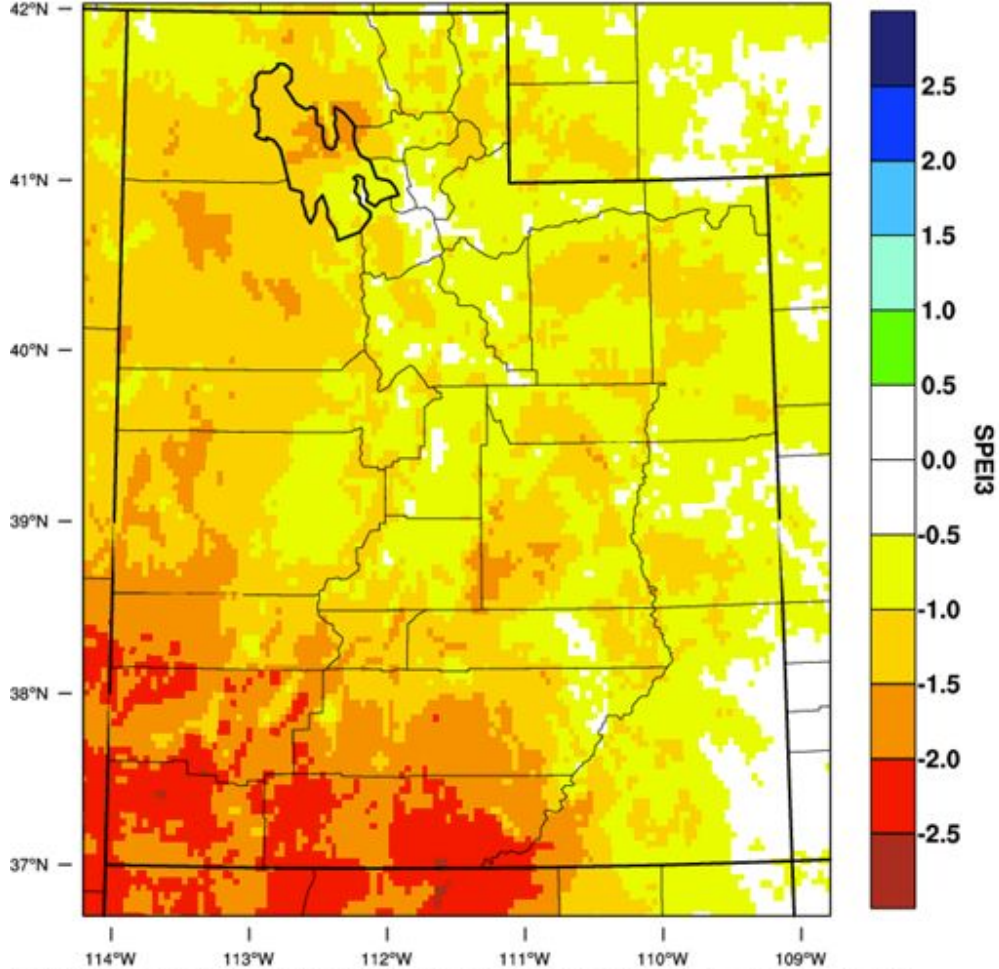


WestWide Drought Tracker, U Idaho/WRCC Data Source: PRISM (Prelim), created 5 AUG 2024

Agency - Utah Climate Center
Presenter - Jon Meyer

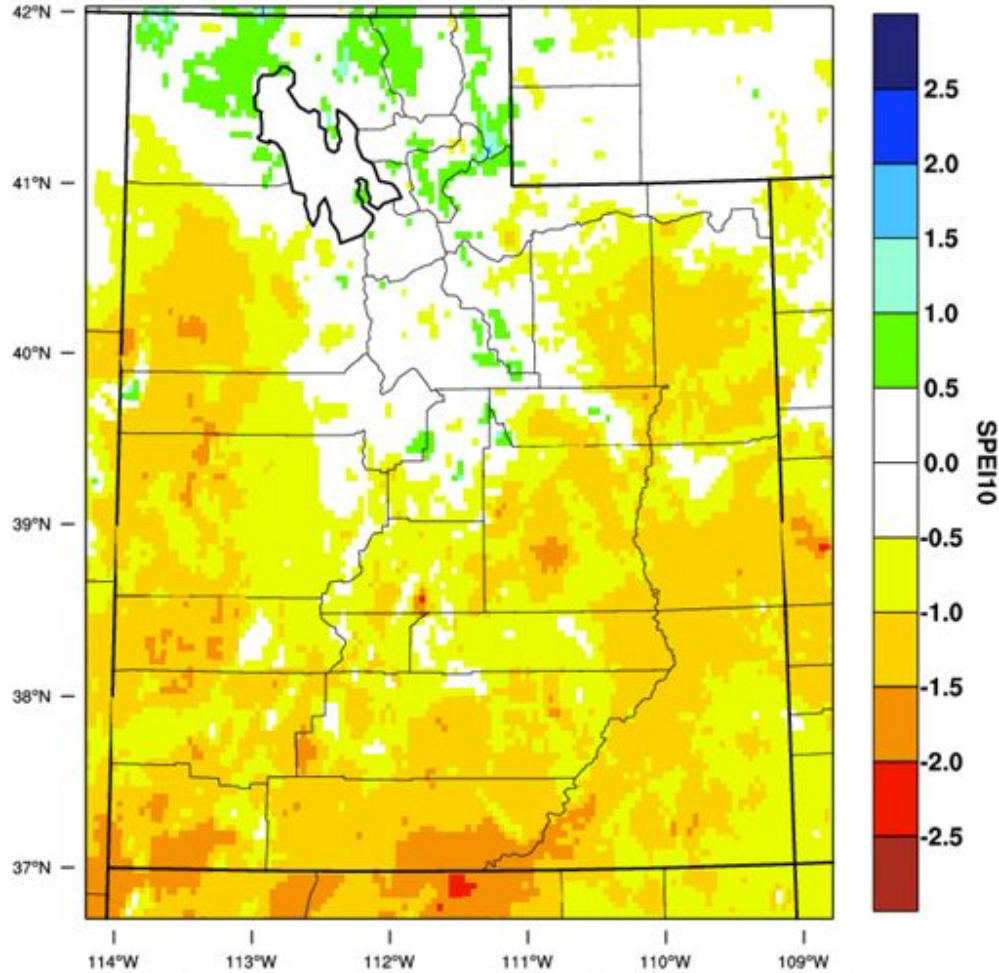
Longer-range Precipitation Summary

Utah - 3 month SPEI
July 2024



WestWide Drought Tracker, U Idaho/WRCC Data Source: PRISM (Prelim), created 5 AUG 2024

Utah - 10 month SPEI
July 2024

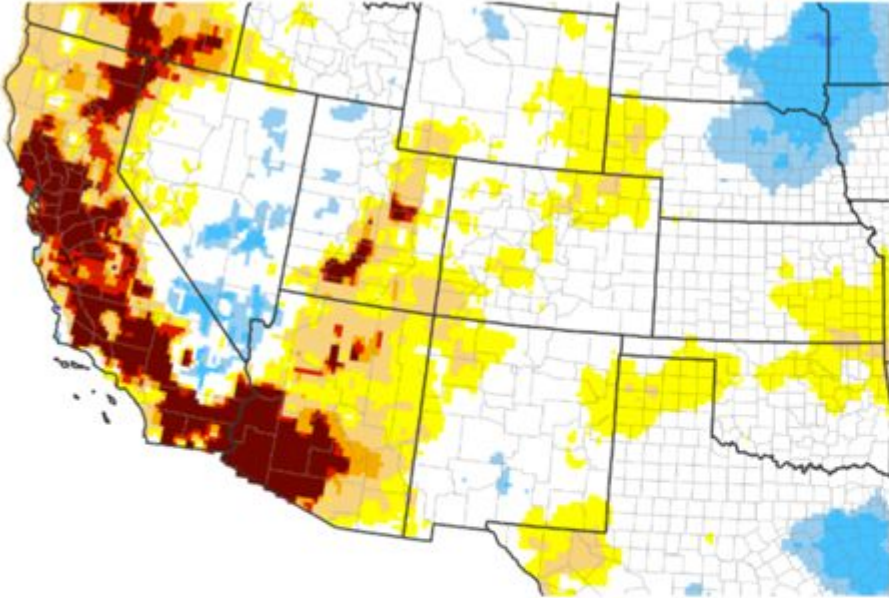


WestWide Drought Tracker, U Idaho/WRCC Data Source: PRISM (Prelim), created 5 AUG 2024

Agency - Utah Climate Center
Presenter - Jon Meyer

Evaporative Demand Drought Index (EDDI)

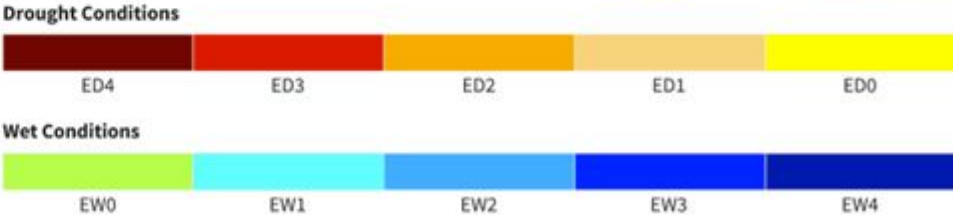
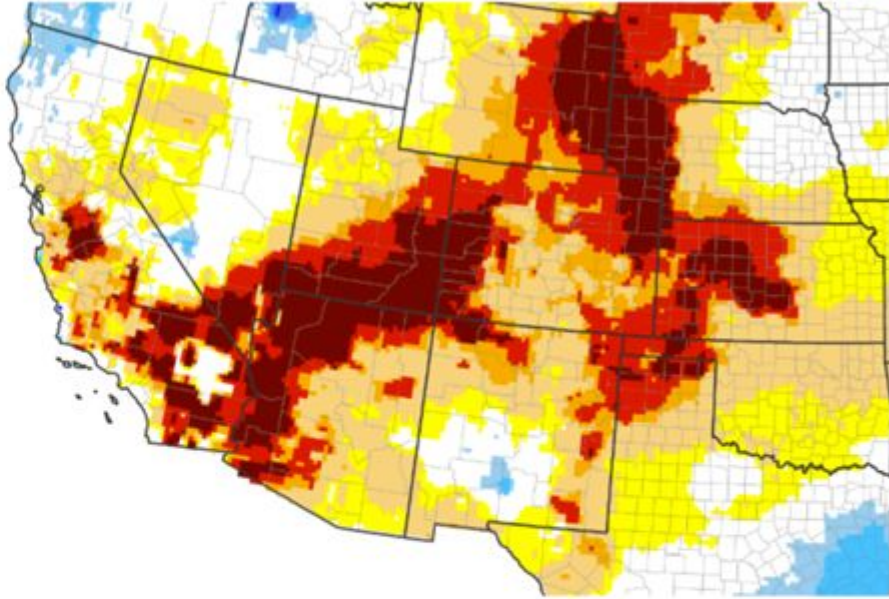
Evaporative Demand Drought Index (EDDI): 4 Week



Source(s): NOAA Physical Sciences Laboratory
Data Valid: 07/31/24

Drought.gov

Evaporative Demand Drought Index (EDDI): 1 Week

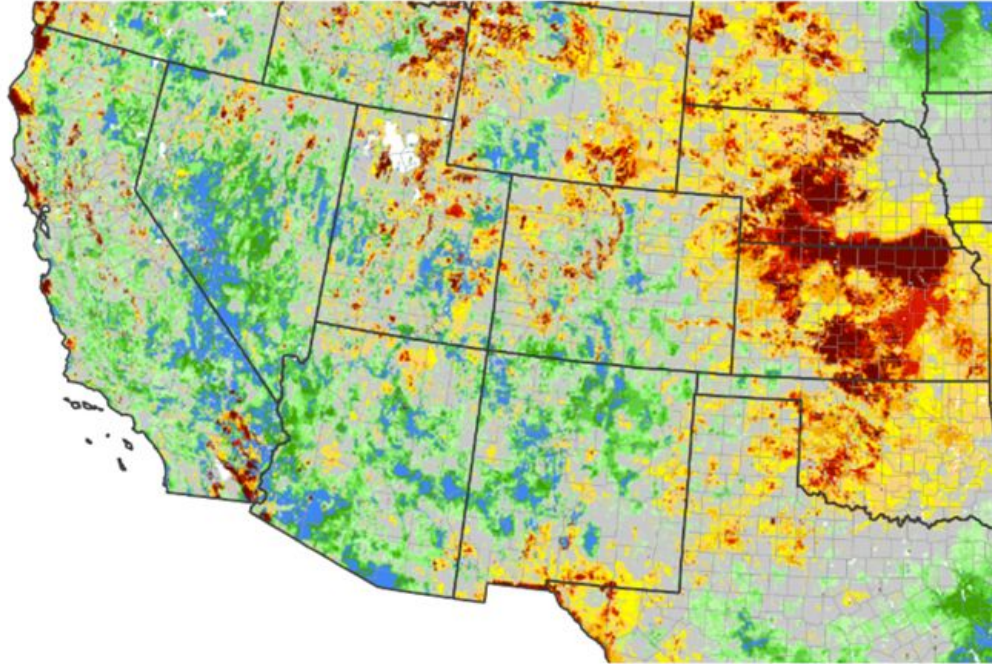


Source(s): NOAA Physical Sciences Laboratory
Data Valid: 07/31/24

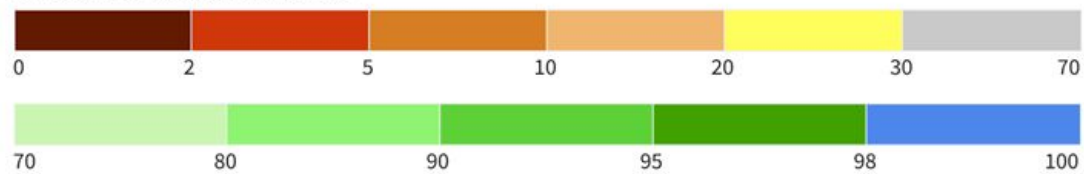
Drought.gov

NASA SPoRT Model: Soil Moisture

0-100 cm Soil Moisture Percentile



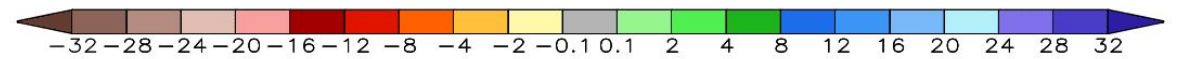
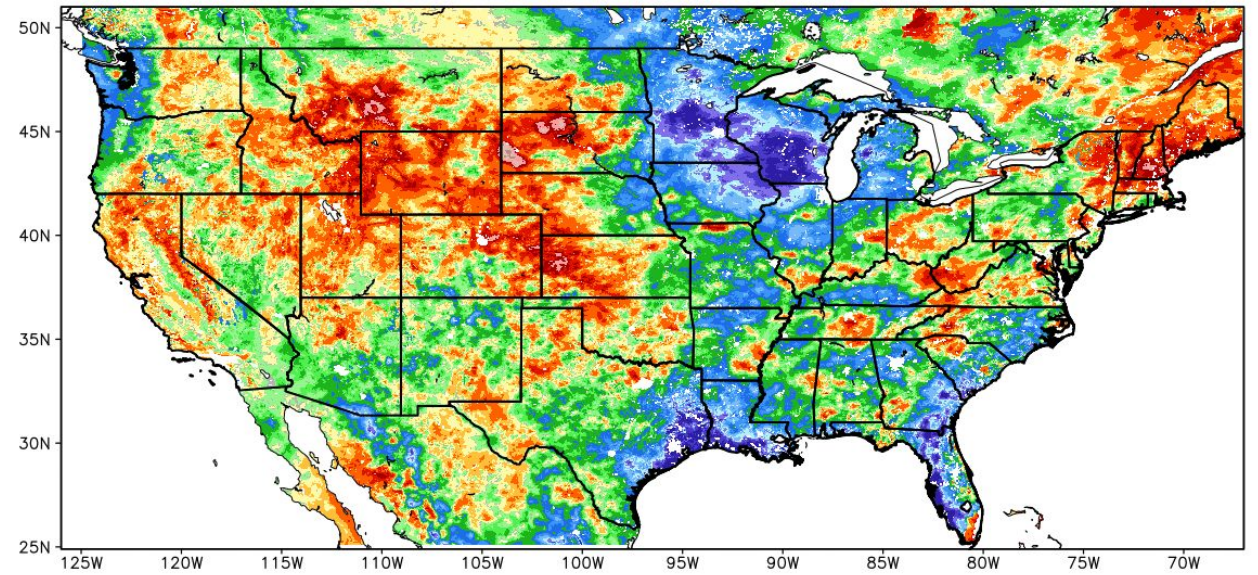
0-100 cm Soil Moisture Percentile



Source(s): NASA
Data Valid: 08/06/24

Drought.gov

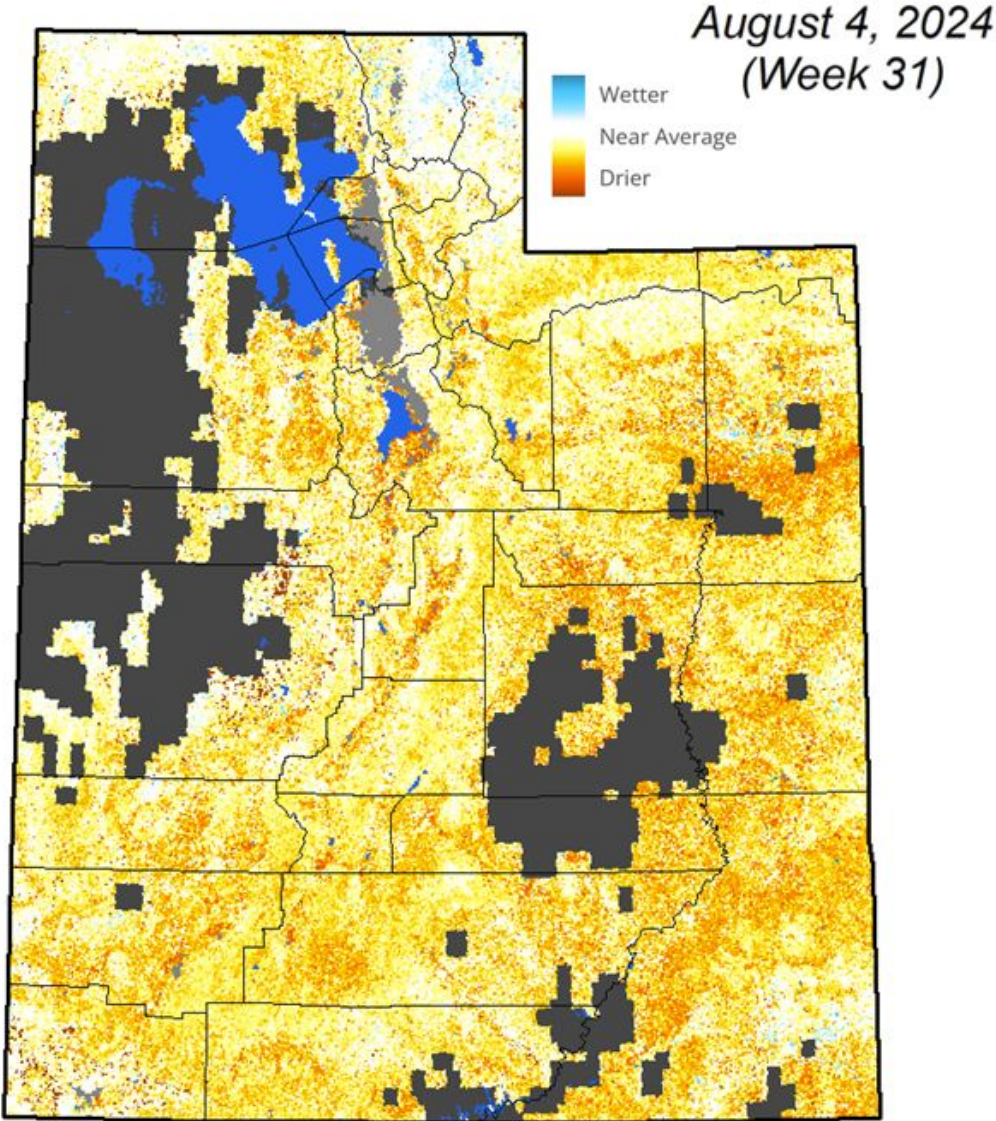
1-Year Difference in Column Relative Soil Moisture (%) valid 12z 06 Aug 2024



****NOTE****
****Experimental****

Agency - Utah Climate Center
Presenter - Jon Meyer

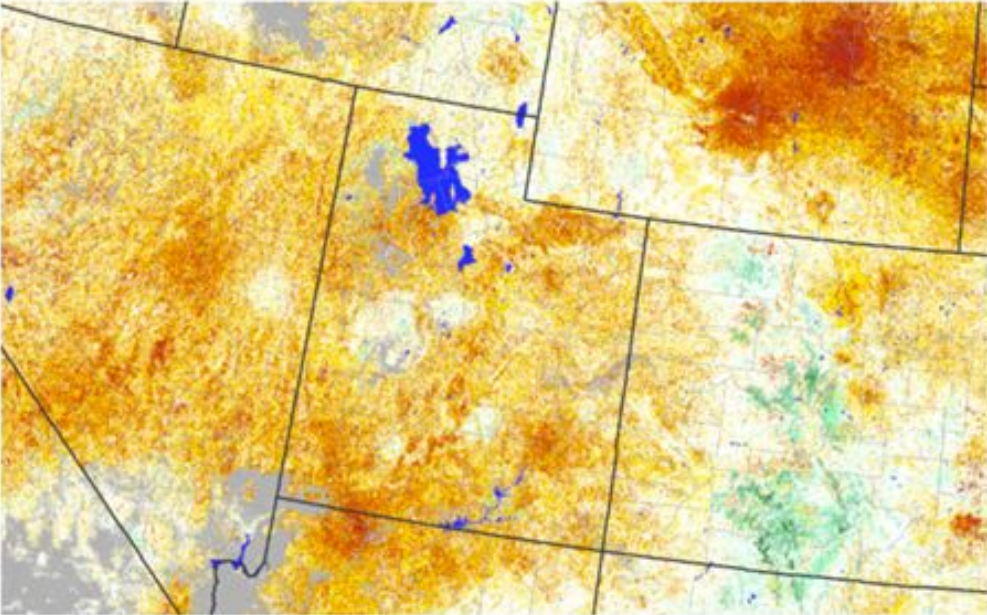
Quick-DRI



Agency - Utah Climate Center
Presenter - Jon Meyer

Vegetation Conditions

Vegetation Drought Response Index (VegDRI)



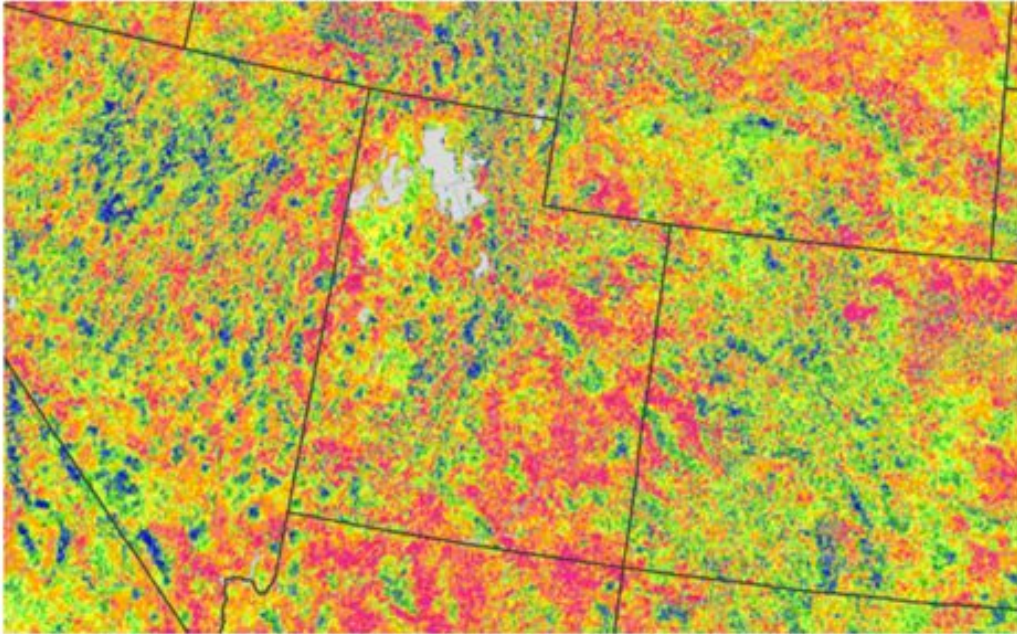
Vegetation Conditions

- Extreme Drought
- Very Moist
- Severe Drought
- Extremely Moist
- Moderate Drought
- Out of Season
- Pre-Drought Stress
- Water
- Near Normal
- Other Landcover
- Unusually Moist

Source(s): NDMC, USGS, HPRCC
 Updates Weekly: 08/04/24

Drought.gov

Vegetation Health Index



Unfavorable Conditions



Favorable Conditions



Source(s): NOAA STAR
 Data Valid: 07/30/24

Drought.gov

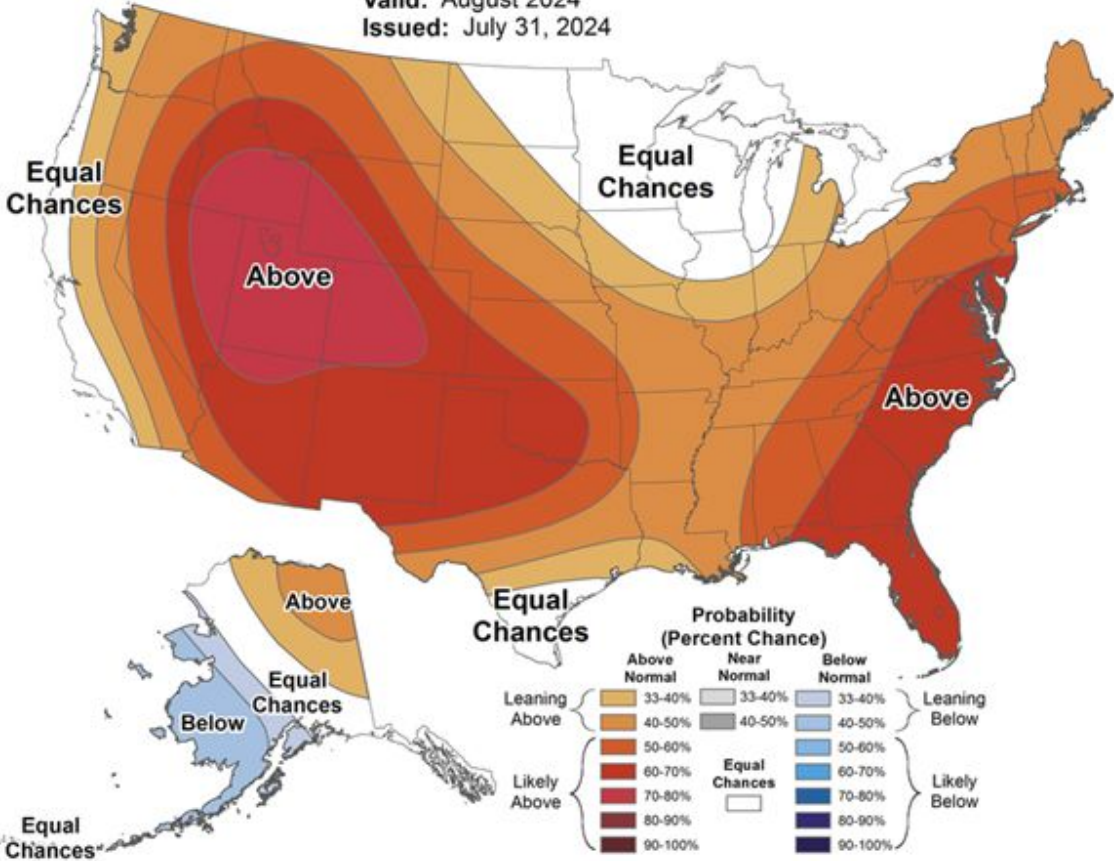
August CPC Outlook



Monthly Temperature Outlook



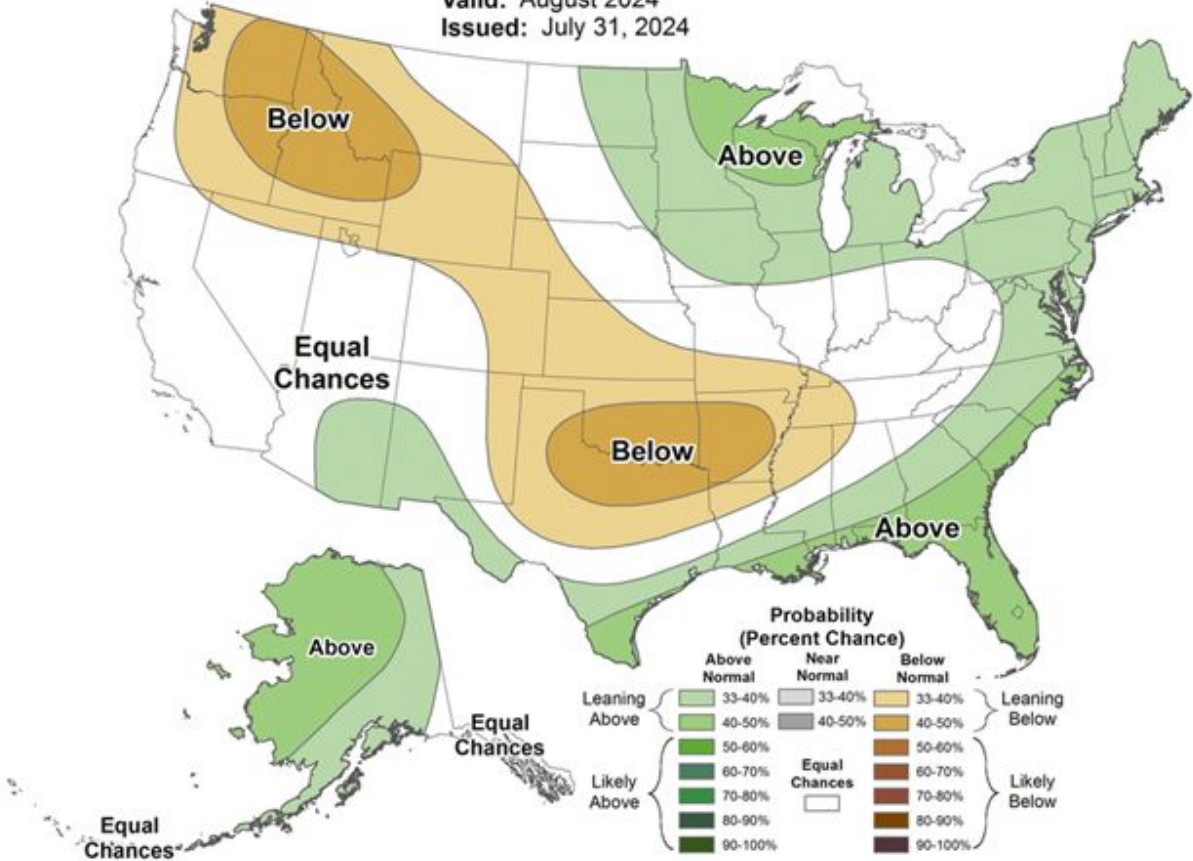
Valid: August 2024
Issued: July 31, 2024



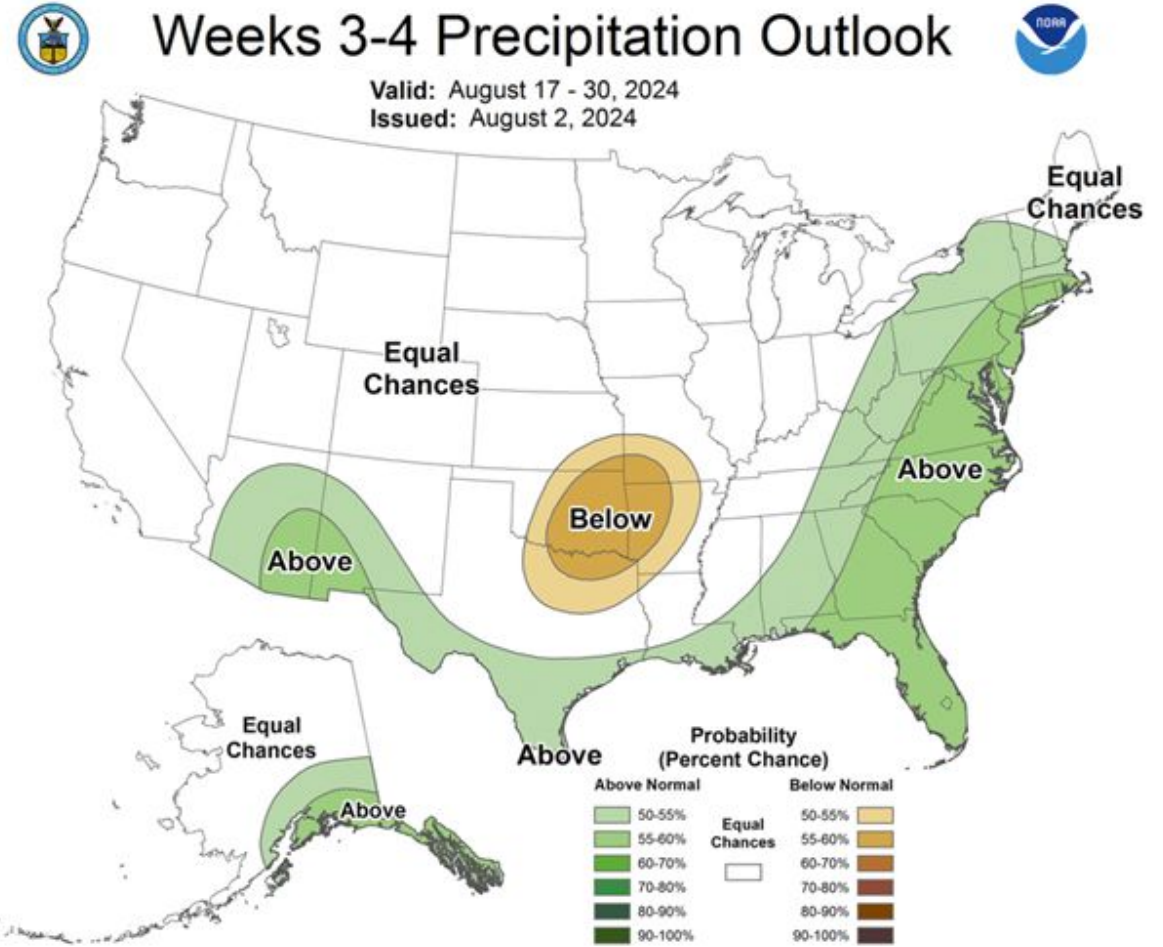
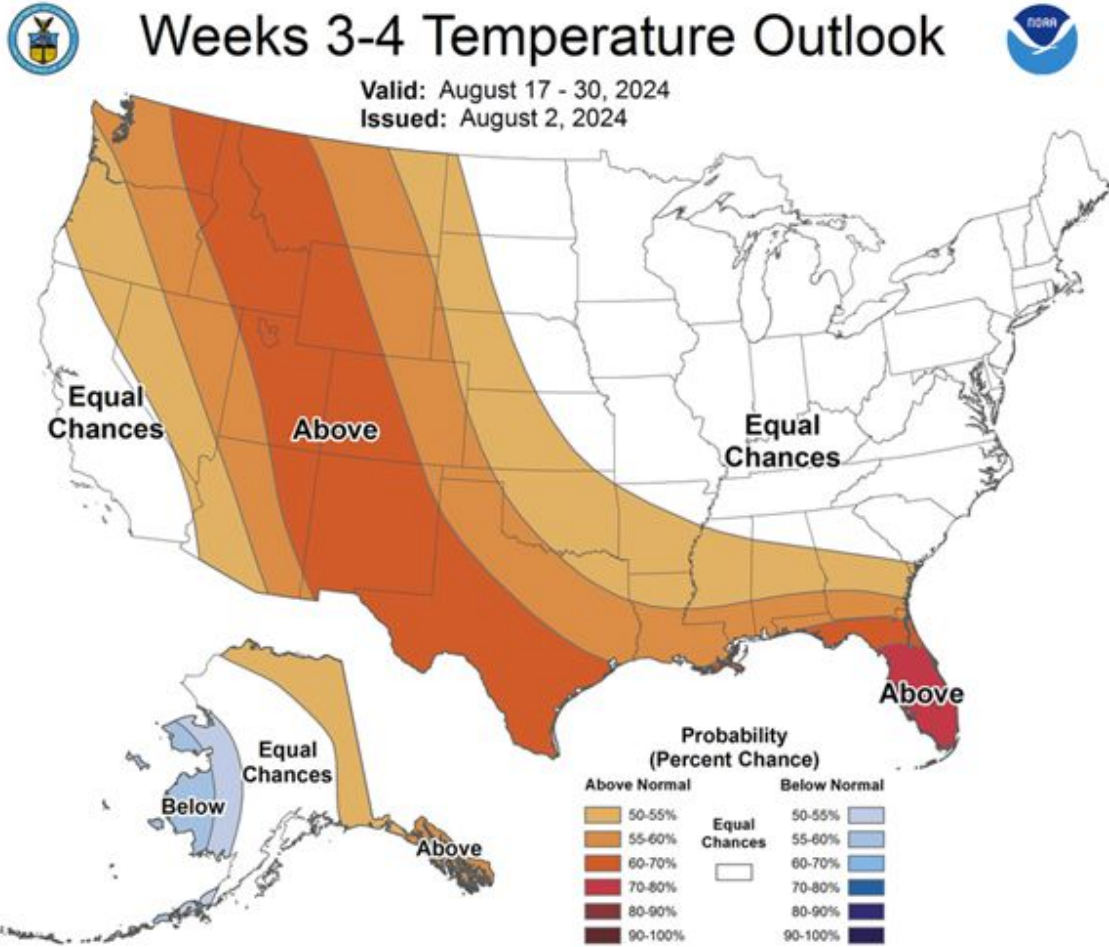
Monthly Precipitation Outlook



Valid: August 2024
Issued: July 31, 2024



Week 3-4 CPC Outlook (End of August)

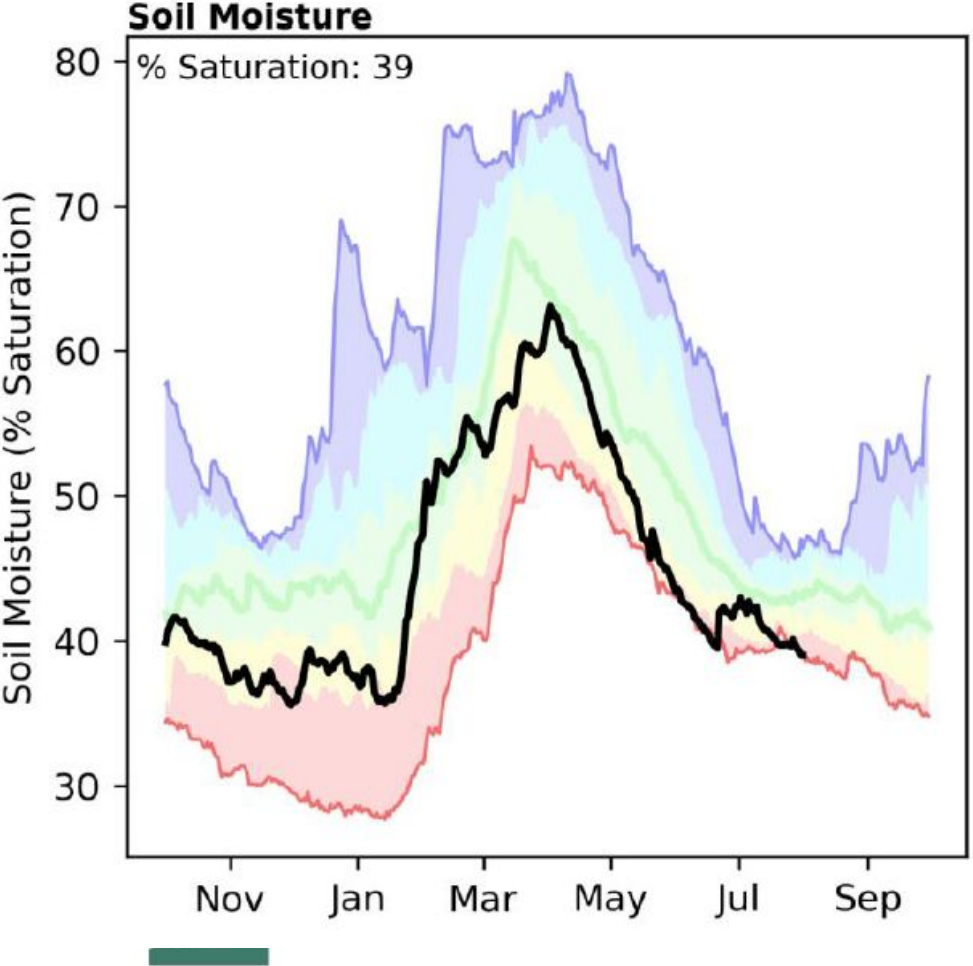
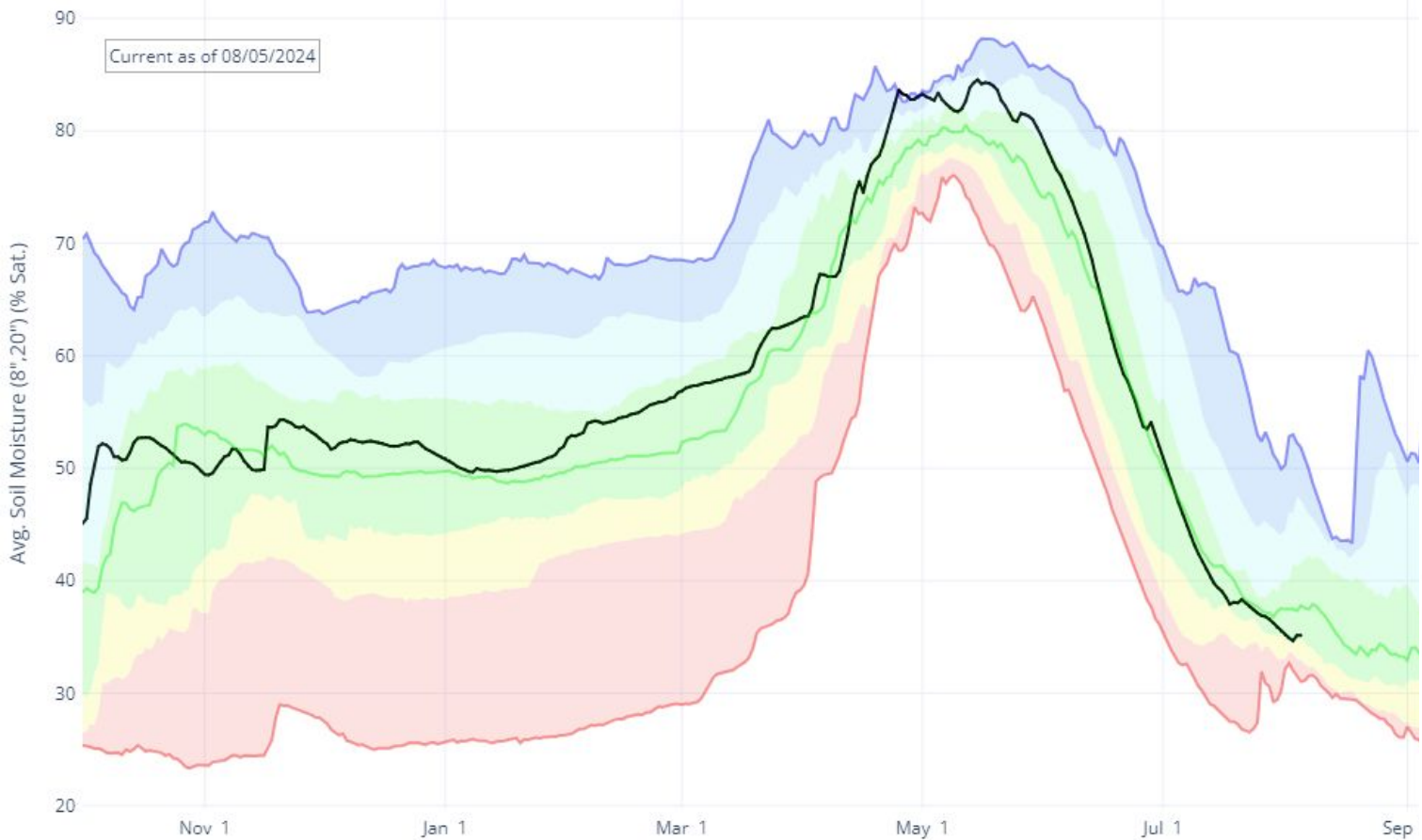


Soil Moisture

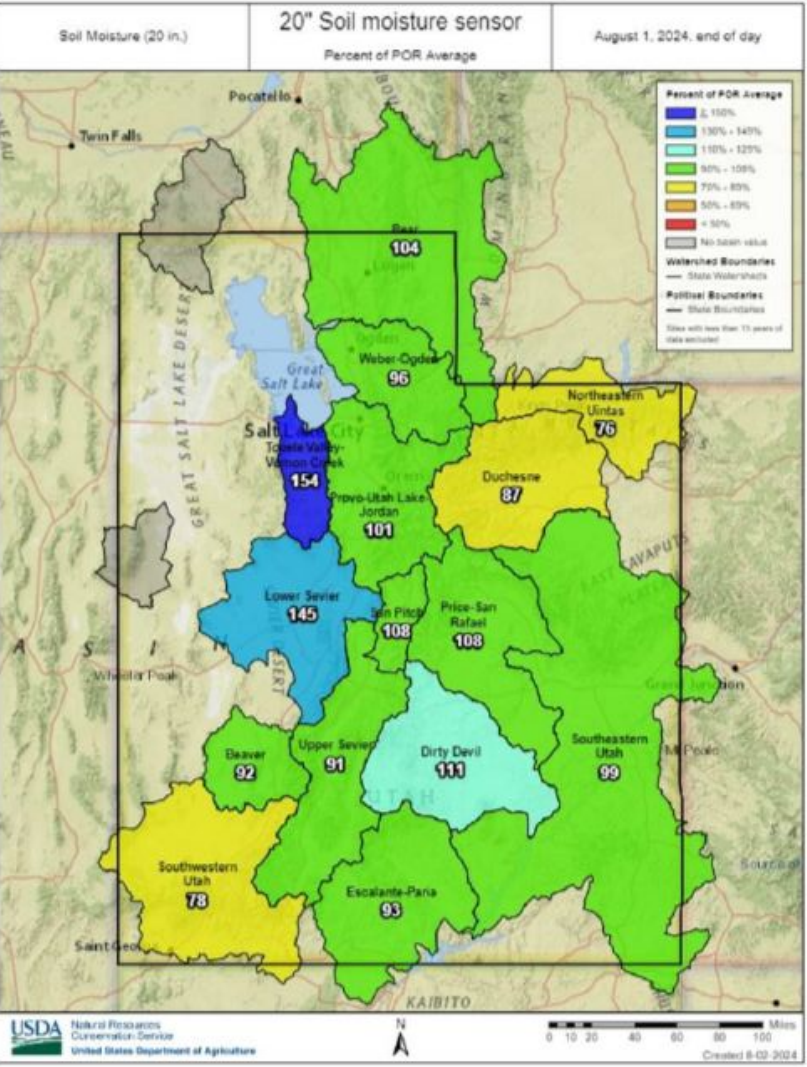
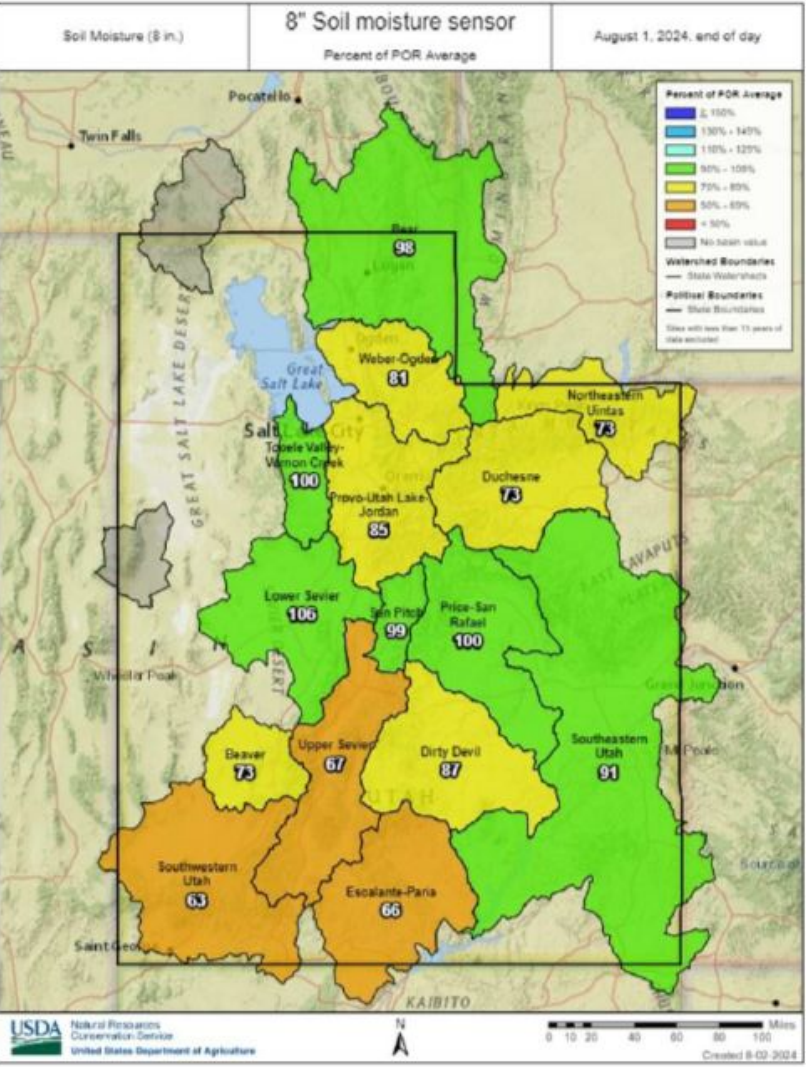
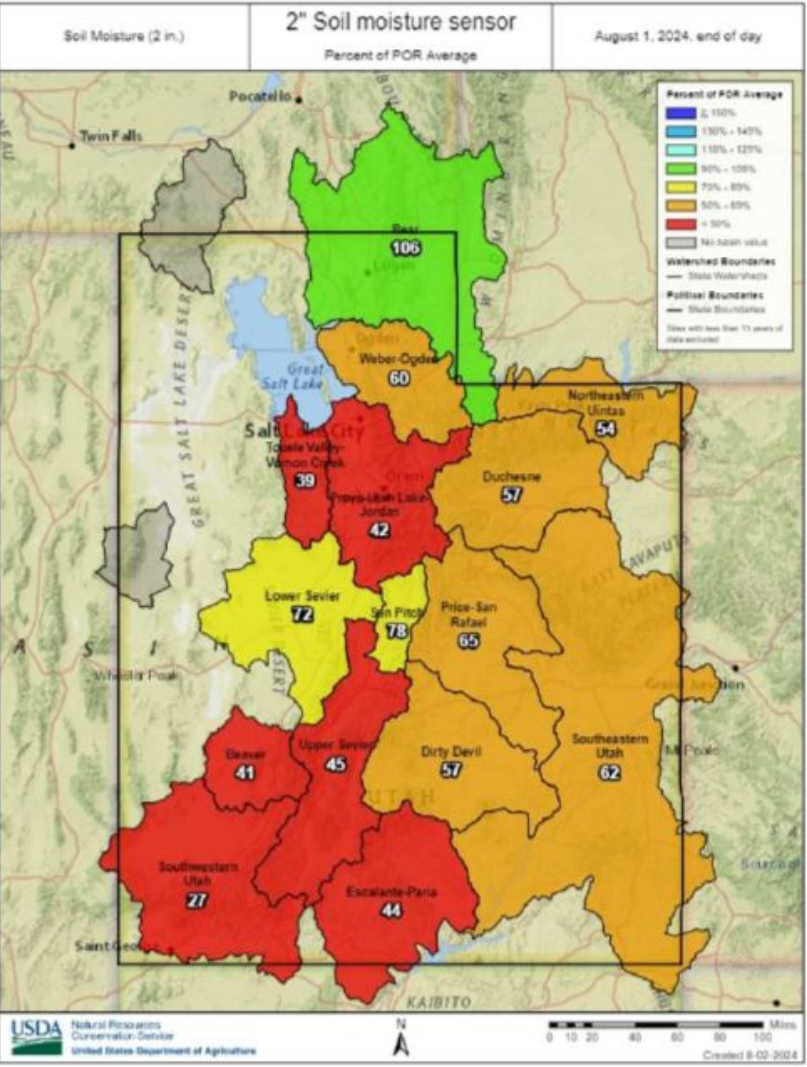
AVG. SOIL MOISTURE (8",20") IN STATE OF UTAH

SNOTEL

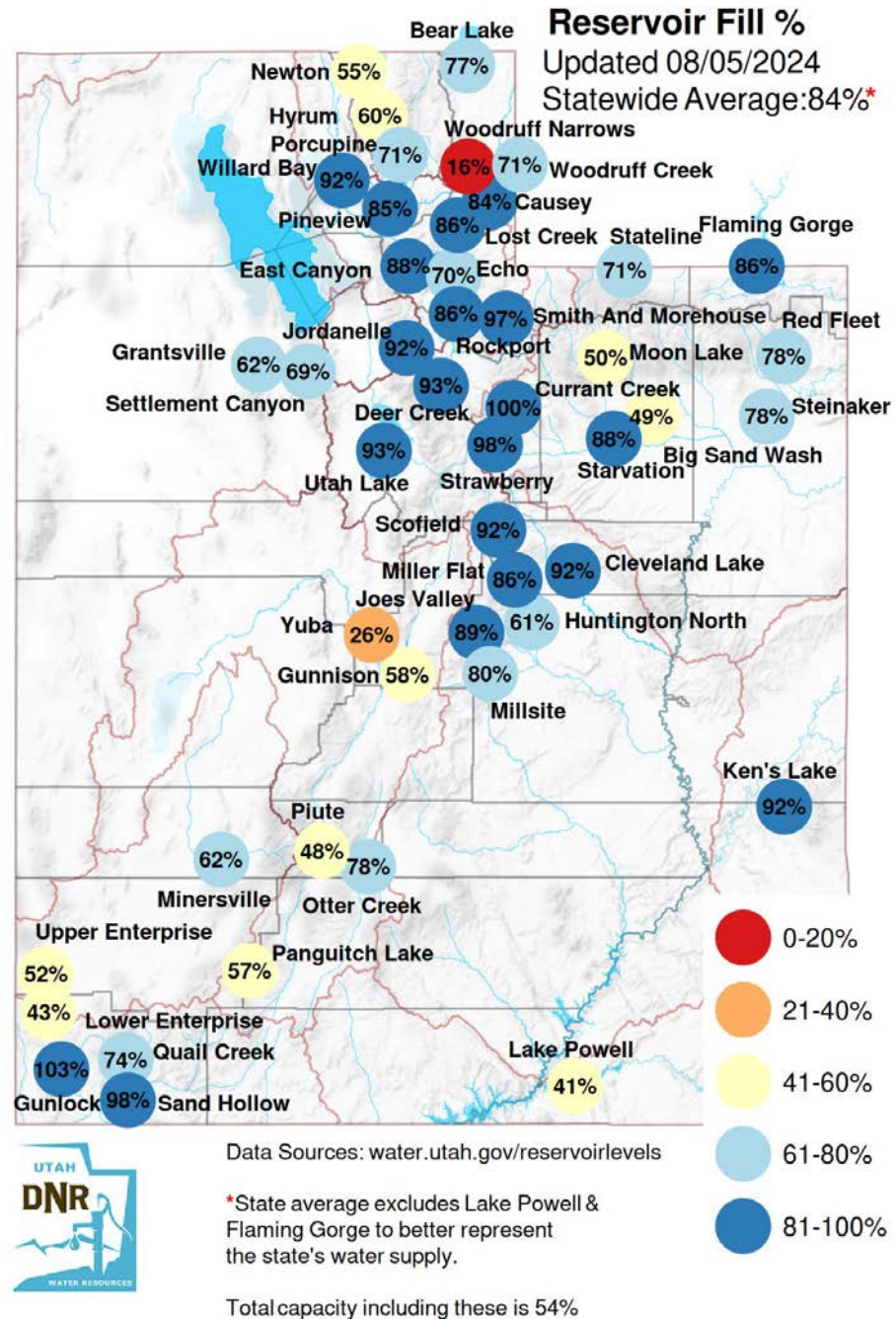
SCAN



Soil Moisture



Agency - NRCS Snow Survey
 Presenter - Jordan Clayton



Agency - Division of Water Resources
 Presenter - Laura Haskell

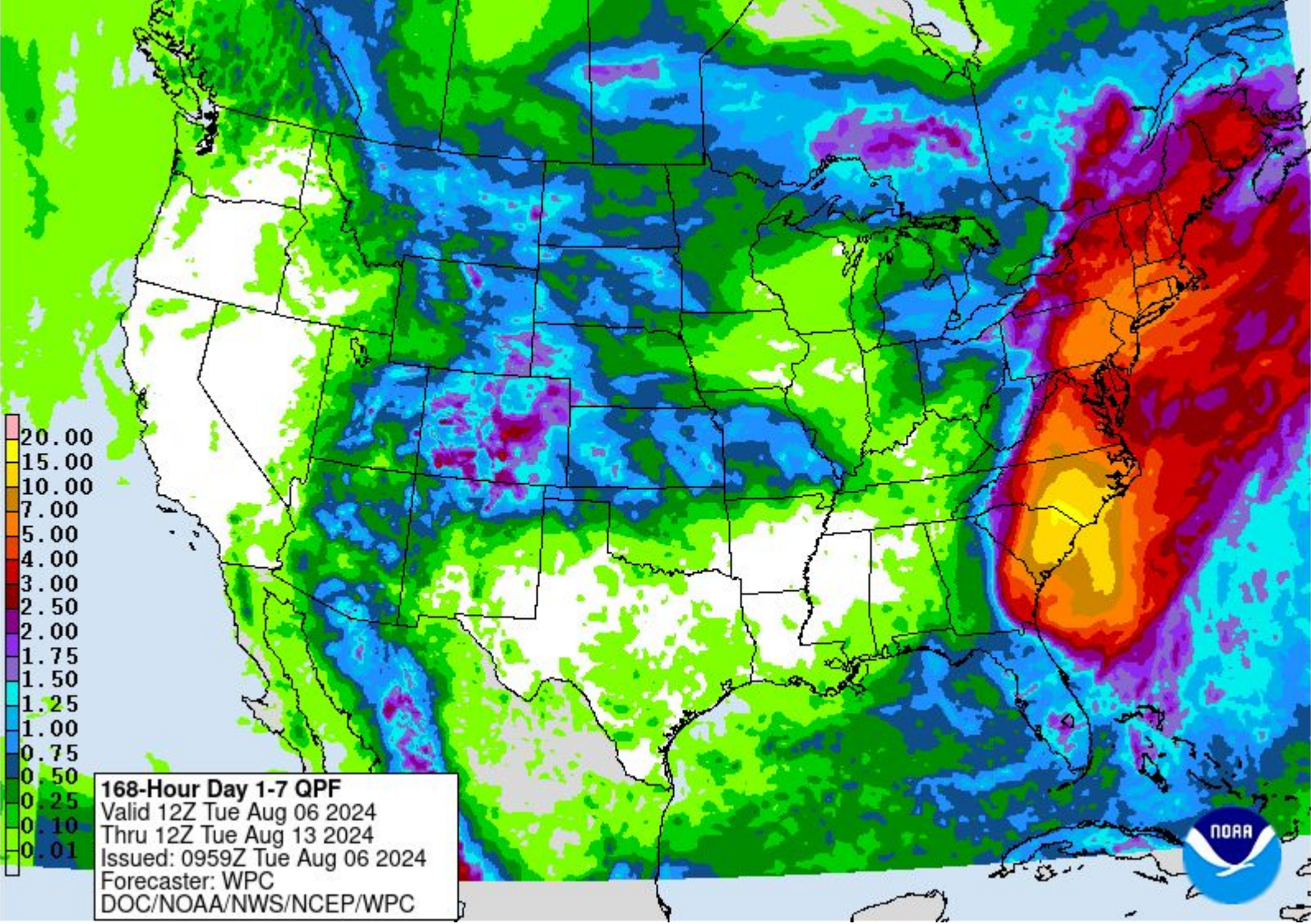
Reservoirs

Reservoir percent capacity changes per basin: from July 1 to August 1, 2024

units = percent

	1-Jul	1-Aug	% change
Bear	81	75	-6
Beaver	90	67	-23
Duchesne	99	94	-5
Lower Sevier	35	25	-10
NE Uintas	86	85	-1
Price-San Rafael	100	91	-9
Provo-Utah Lake-Jordan	100	92	-8
San Pitch	91	57	-34
SE Utah	100	92	-8
SW Utah	83	76	-7
Tooele-Vernon Creek	89	63	-26
Upper Sevier	77	60	-17
Weber-Ogden	98	87	-11

Weather Forecast Office Utah Day 1-7 Outlook

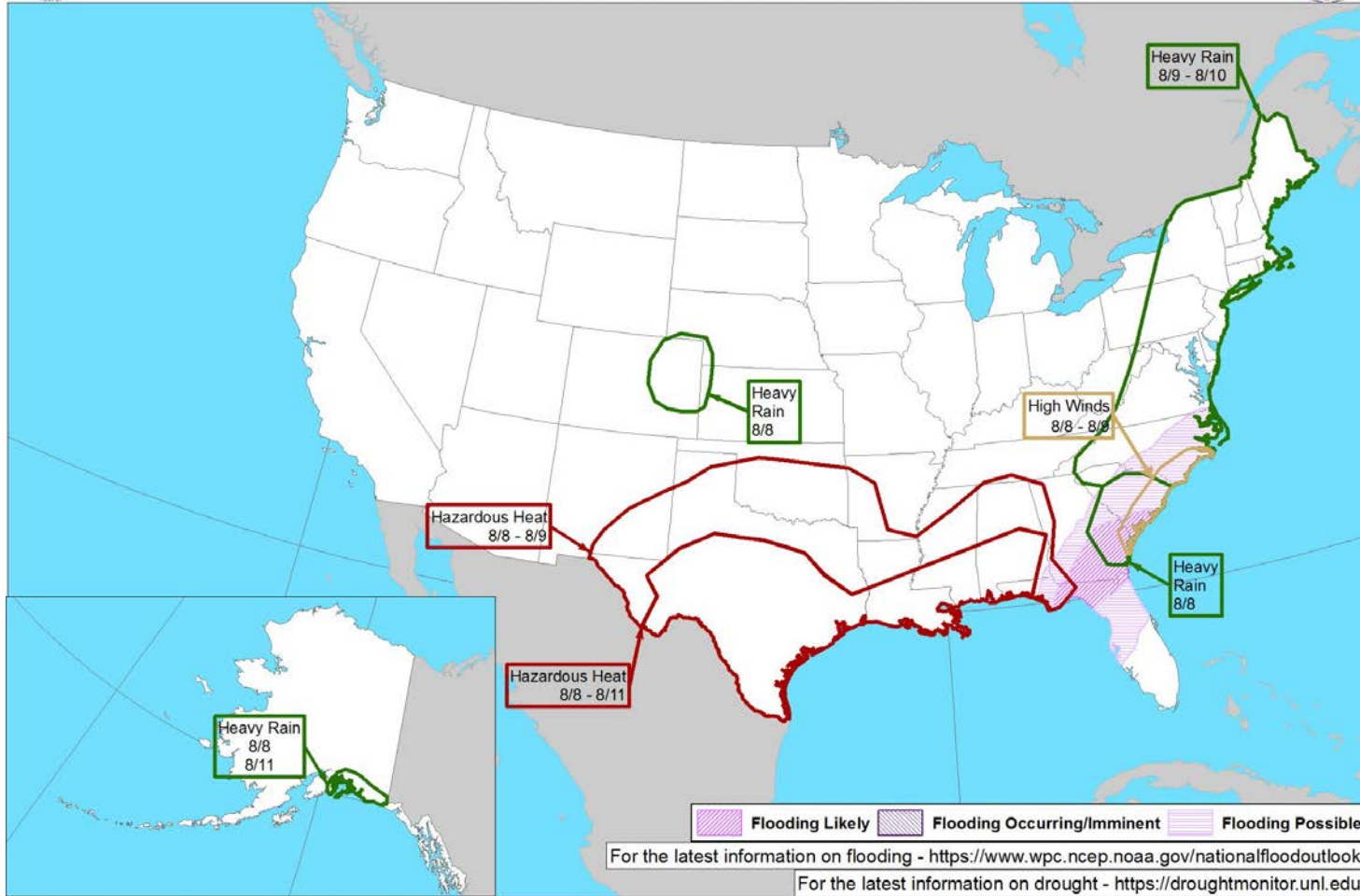


Agency - National Weather Service Weather Forecast Office
Presenter - Christine Kruse

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



Day 3-7 U.S. Hazards Outlook
Valid: 08/08/2024-08/12/2024



Weather Prediction Center

Made: 08/05/2024 03:33 PM EDT

Follow us:  

www.wpc.ncep.noaa.gov

Agency - National Weather Service Weather Forecast Office

Presenter - Christine Kruse

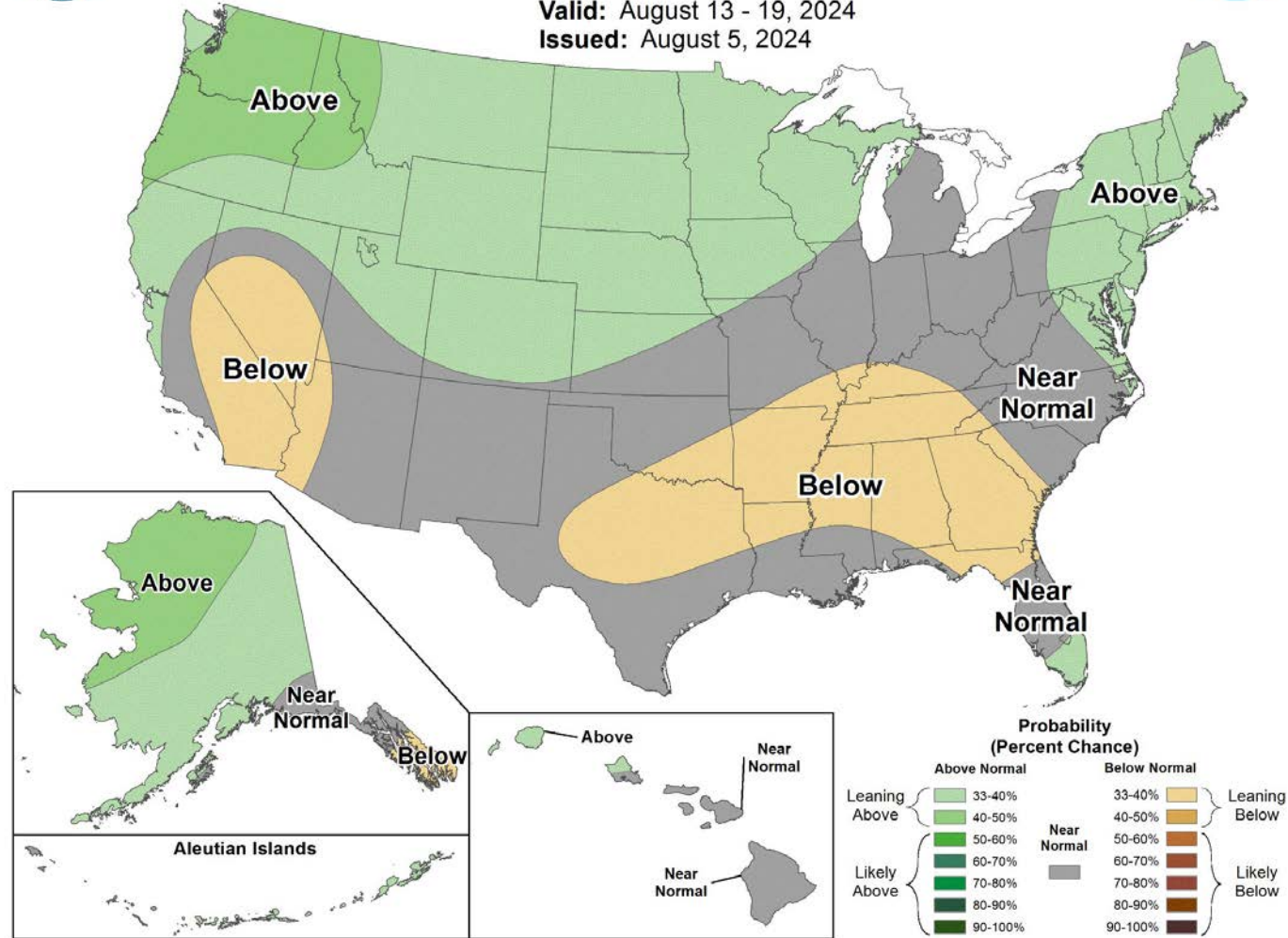
Climate Prediction Center 8 to 14 Day Outlooks - Precipitation



8-14 Day Precipitation Outlook

Valid: August 13 - 19, 2024

Issued: August 5, 2024



Agency - National Weather Service Weather Forecast Office

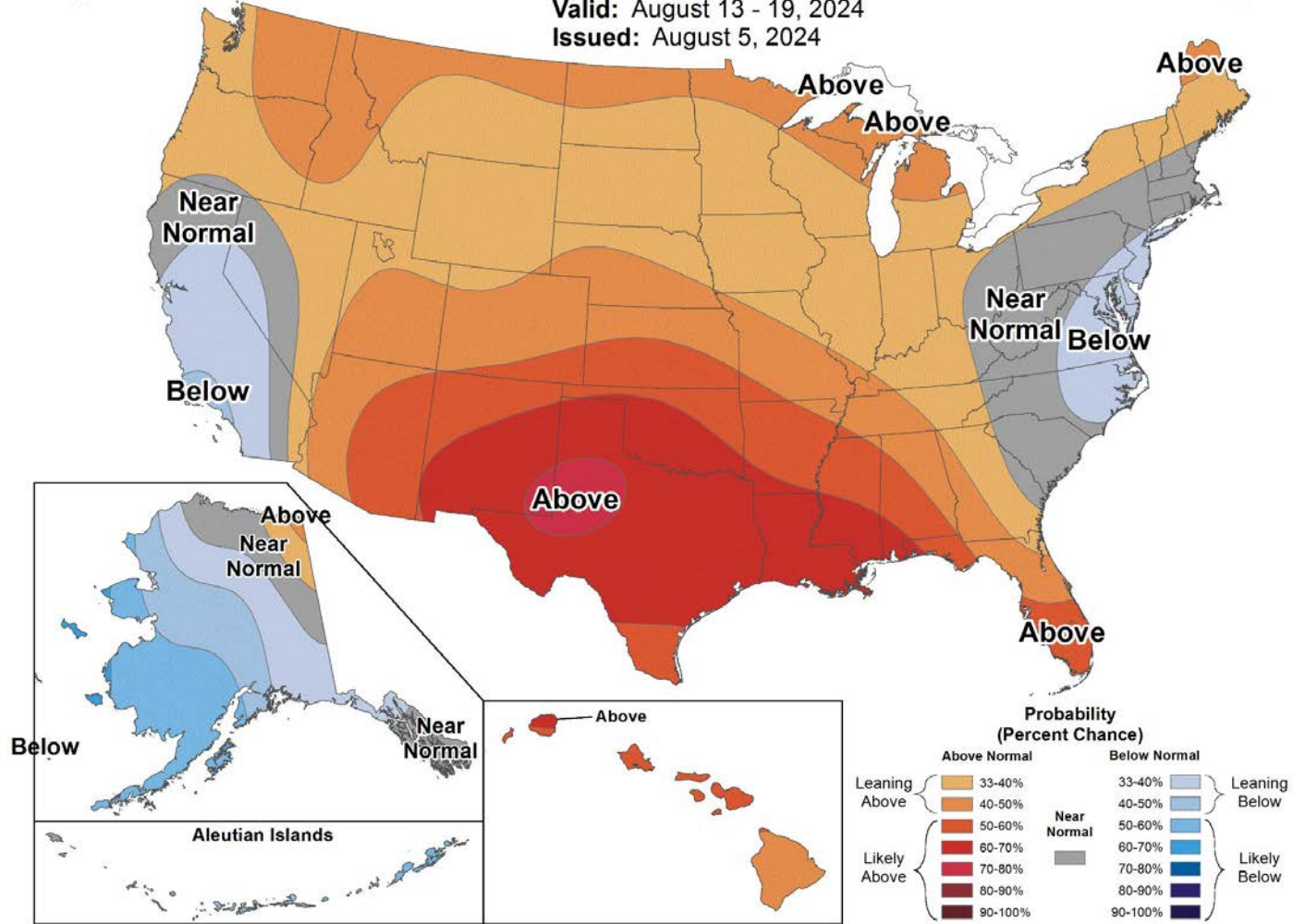
Presenter - Christine Kruse

Climate Prediction Center 8 to 14 Day Outlooks - Temperature



8-14 Day Temperature Outlook

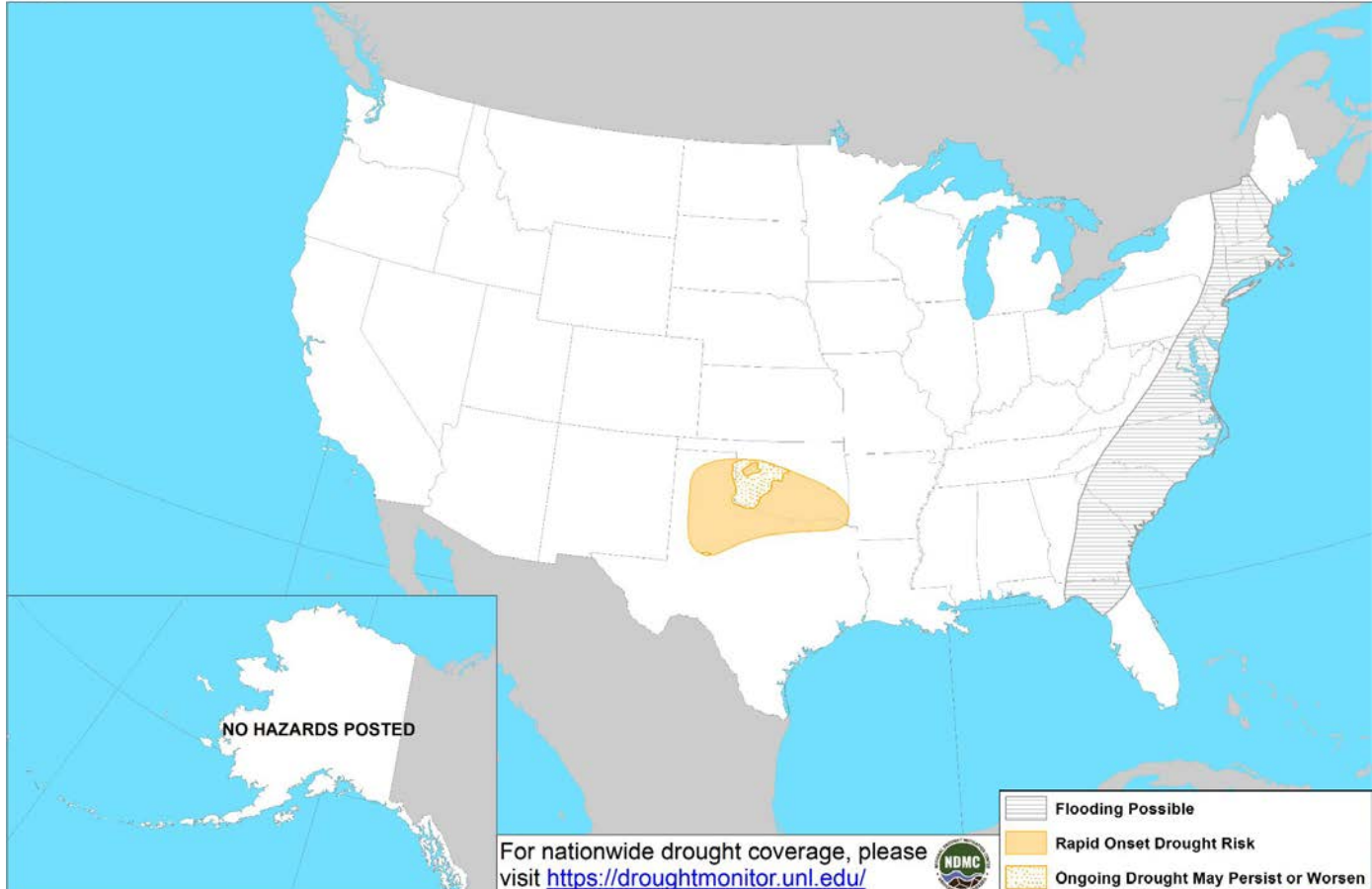
Valid: August 13 - 19, 2024
Issued: August 5, 2024



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

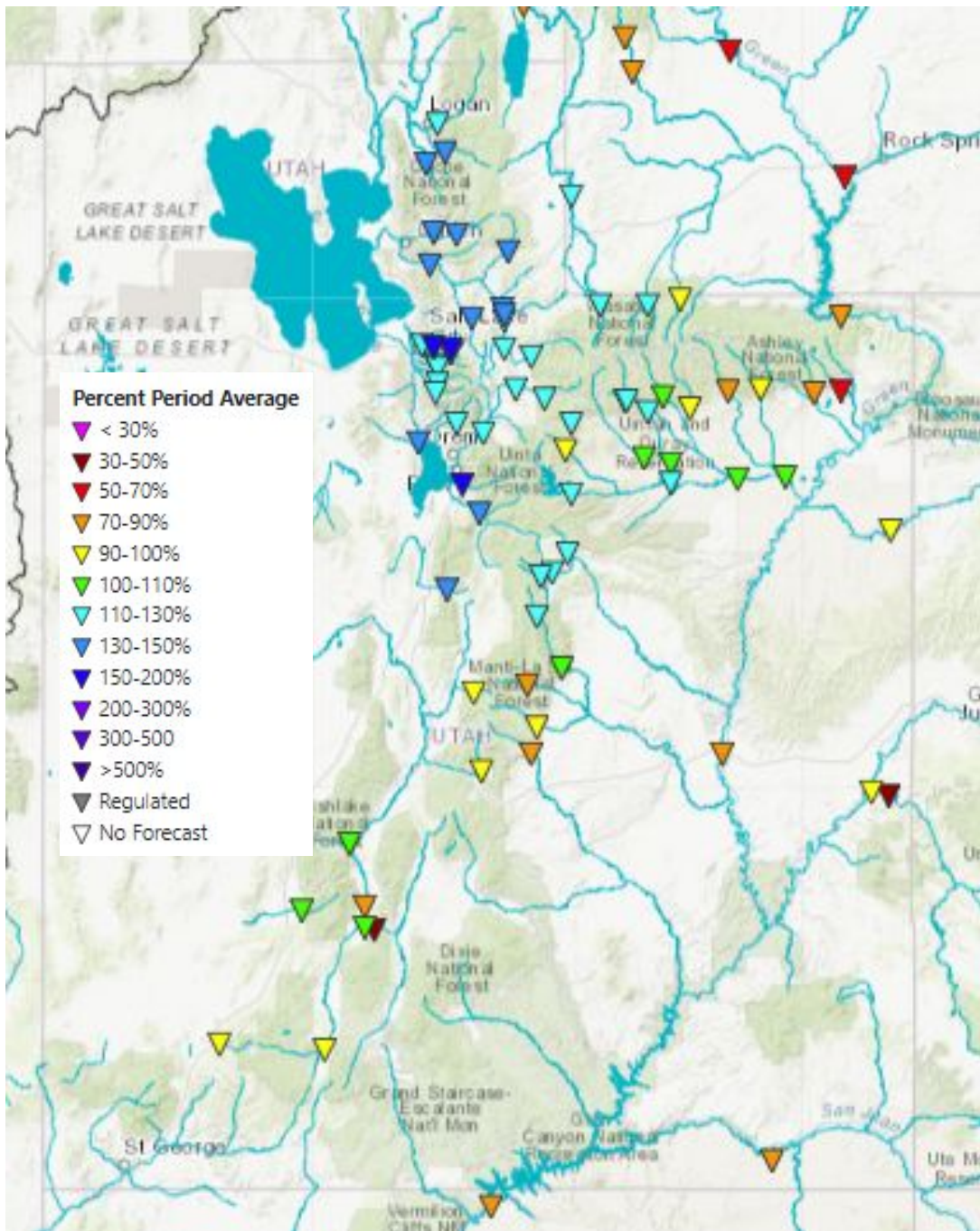


Day 8-14 U.S. Hazards Outlook
Valid: 08/13/2024-08/19/2024



Climate Prediction Center
Made: 08/05/2024 3PM EDT

Follow us:
www.cpc.ncep.noaa.gov

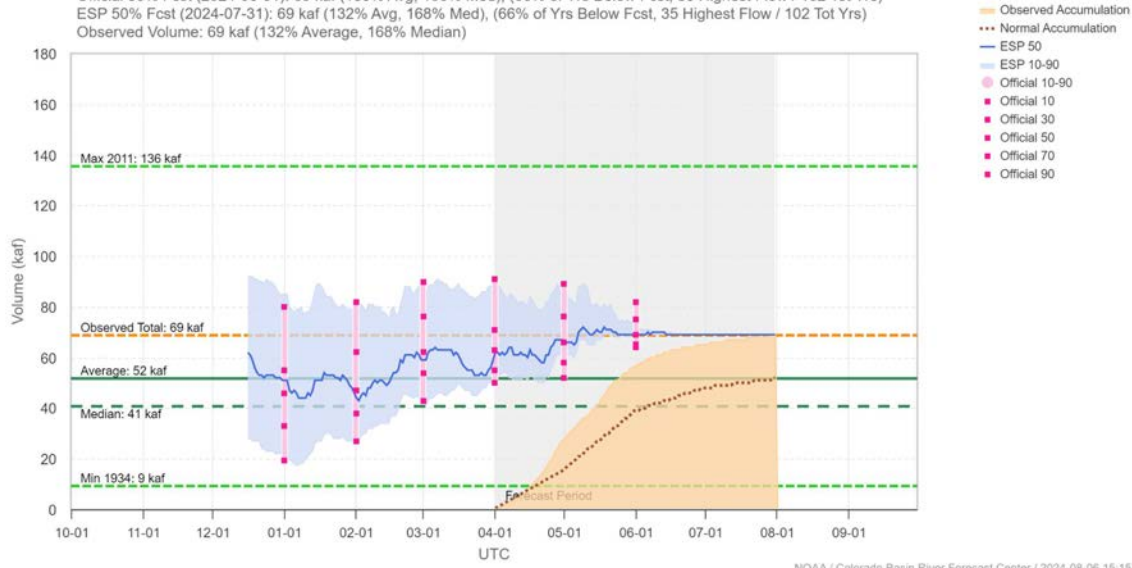


Preliminary observed April through July streamflow volumes were generally above average throughout much of the northern Great Basin. Drier conditions towards the east and southern portions of Utah.

Trevor Grout has left the CBRFC, so I'm the best point of contact for the Great Basin
paul.miller@noaa.gov

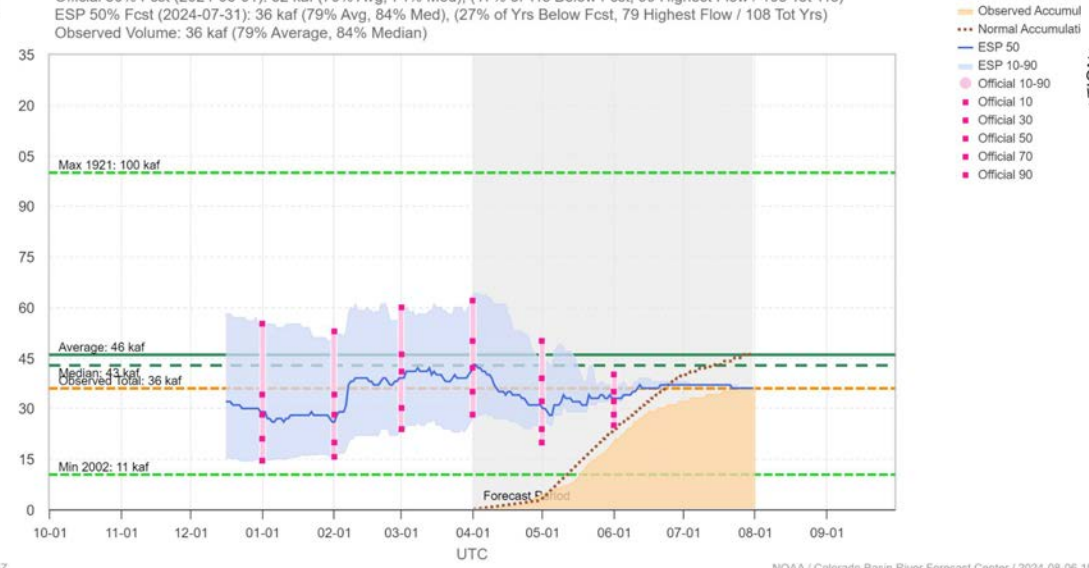
2024 Water Supply Forecast - Sf Ogden - Huntsville, Nr (OGHU1)

ESP is Unregulated and No Precipitation Forecast Included
 Official 50% Fcst (2024-06-01): 69 kaf (133% Avg, 168% Med), (66% of Yrs Below Fcst, 35 Highest Flow / 102 Tot Yrs)
 ESP 50% Fcst (2024-07-31): 69 kaf (132% Avg, 168% Med), (66% of Yrs Below Fcst, 35 Highest Flow / 102 Tot Yrs)
 Observed Volume: 69 kaf (132% Average, 168% Median)



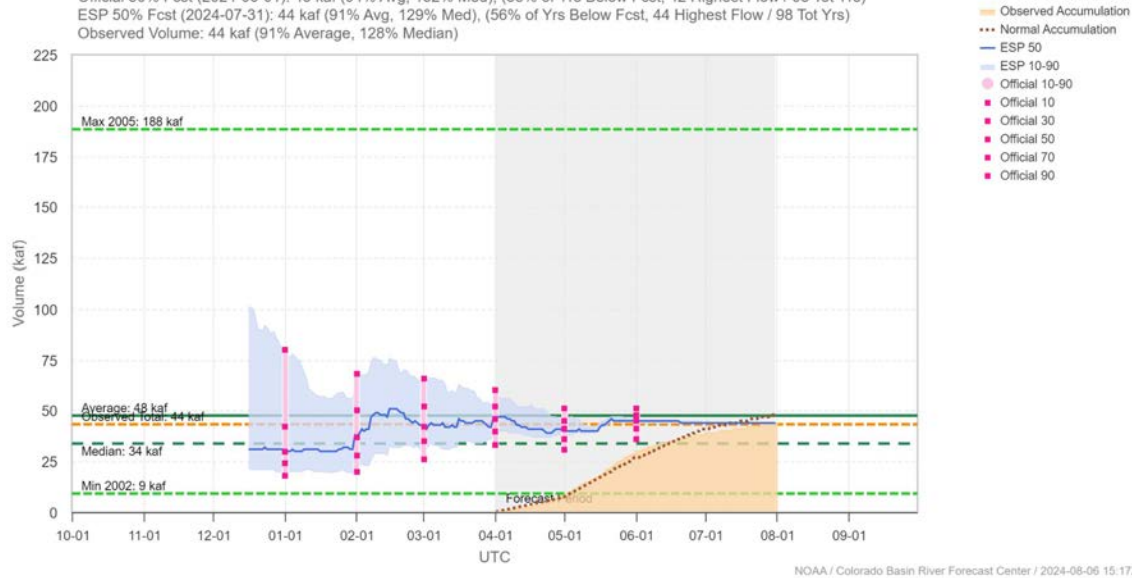
2024 Water Supply Forecast - Ashley Ck - Vernal, Nr (ASHU1)

ESP is Unregulated and No Precipitation Forecast Included
 Official 50% Fcst (2024-06-01): 32 kaf (70% Avg, 74% Med), (17% of Yrs Below Fcst, 90 Highest Flow / 108 Tot Yrs)
 ESP 50% Fcst (2024-07-31): 36 kaf (79% Avg, 84% Med), (27% of Yrs Below Fcst, 79 Highest Flow / 108 Tot Yrs)
 Observed Volume: 36 kaf (79% Average, 84% Median)



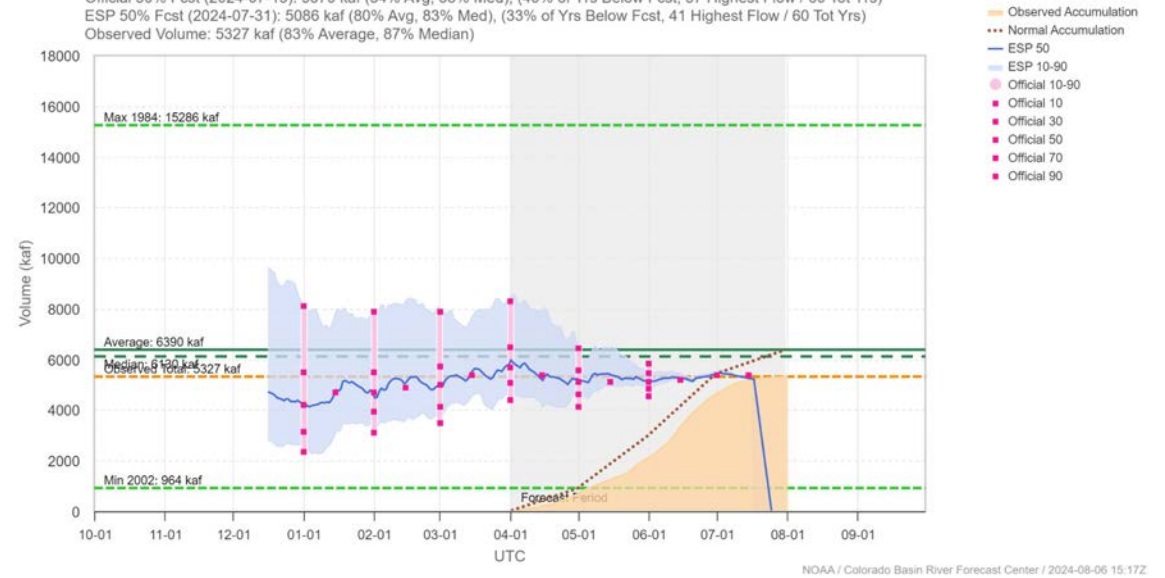
2024 Water Supply Forecast - Sevier - Hatch (HATU1)

ESP is Regulated and No Precipitation Forecast Included
 Official 50% Fcst (2024-06-01): 45 kaf (94% Avg, 132% Med), (58% of Yrs Below Fcst, 42 Highest Flow / 98 Tot Yrs)
 ESP 50% Fcst (2024-07-31): 44 kaf (91% Avg, 129% Med), (56% of Yrs Below Fcst, 44 Highest Flow / 98 Tot Yrs)
 Observed Volume: 44 kaf (91% Average, 128% Median)



2024 Water Supply Forecast - Colorado - Lake Powell, Glen Cyn Dam, At (GLDA3)

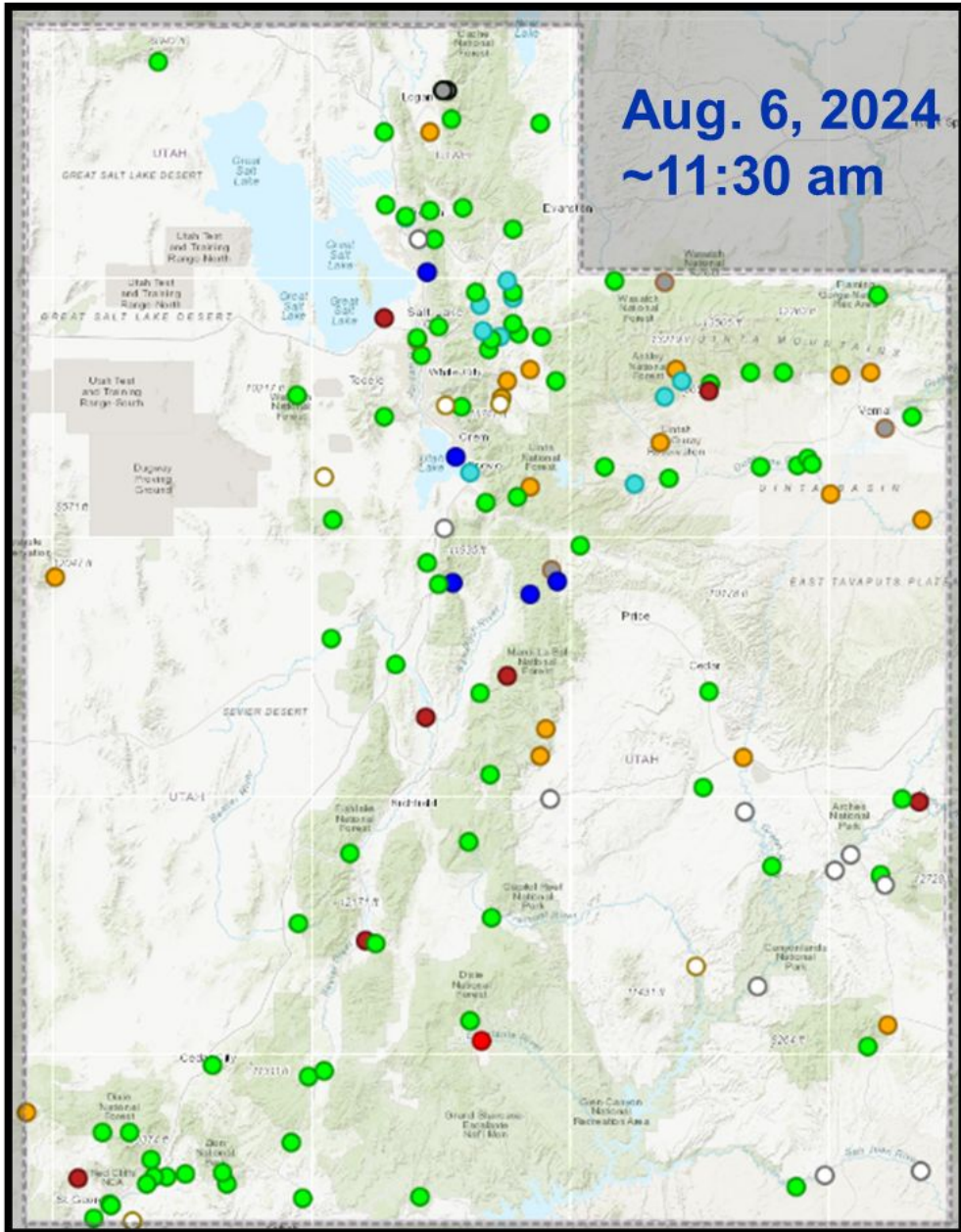
ESP is Unregulated and No Precipitation Forecast Included
 Official 50% Fcst (2024-07-15): 5370 kaf (84% Avg, 88% Med), (40% of Yrs Below Fcst, 37 Highest Flow / 60 Tot Yrs)
 ESP 50% Fcst (2024-07-31): 5086 kaf (80% Avg, 83% Med), (33% of Yrs Below Fcst, 41 Highest Flow / 60 Tot Yrs)
 Observed Volume: 5327 kaf (83% Average, 87% Median)



Current Streamflow Conditions

07/09/2024

08/06/2024



Aug. 6, 2024
~11:30 am

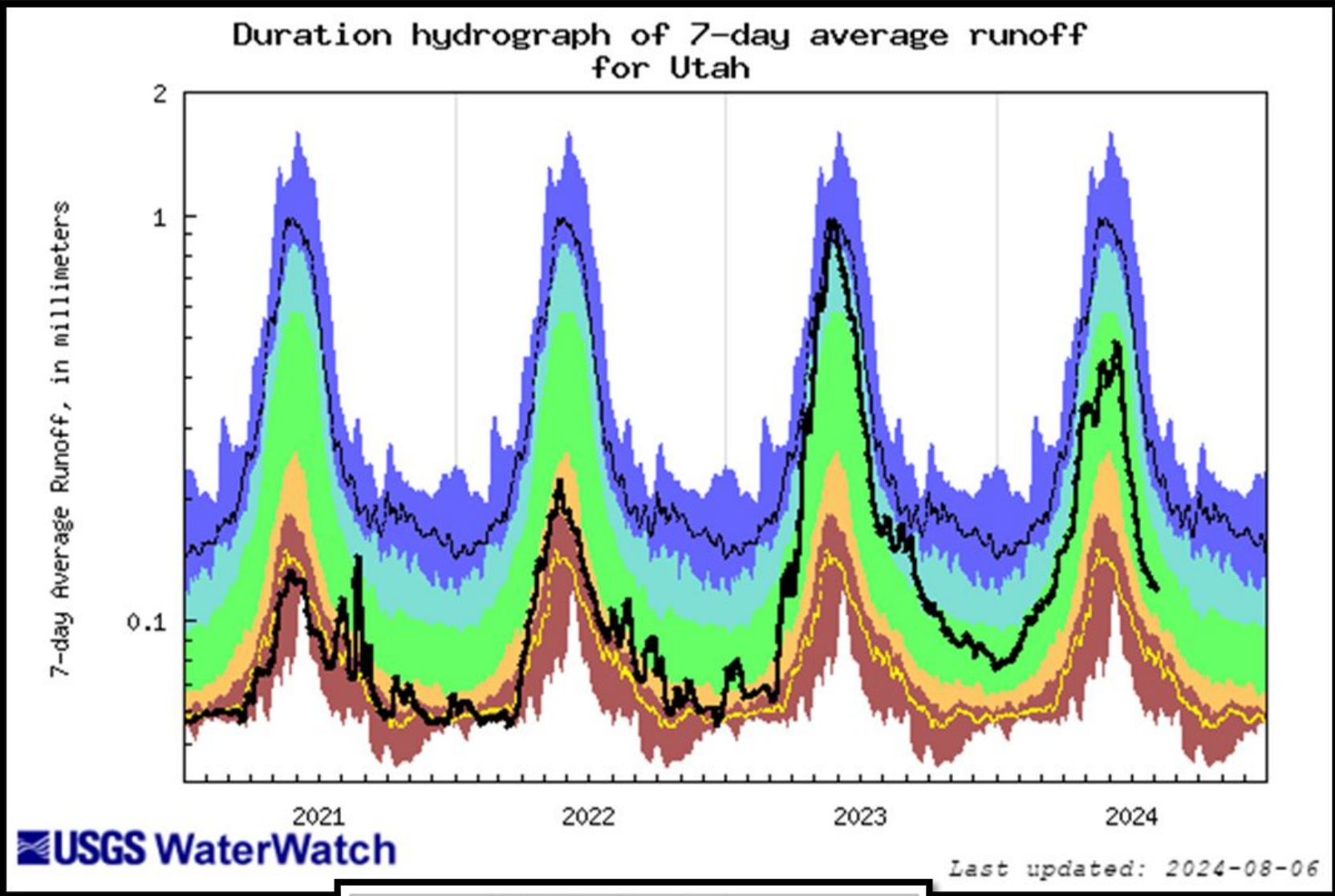
Day-of-Year Status	% Gages	% Gages
All-time high for this day-of-year	0.0%	0.0%
Much above normal for this day-of-year	1.4%	3.5%
Above normal for this day-of-year	6.5% █	7.1% █
Normal for this day-of-year	67.6% █	56.7% █
Below normal for this day-of-year	11.5% █	12.8% █
Much below normal for this day-of-year	2.2%	5.0%
All-time low for this day-of-year	0.7%	0.7%
Not ranked - insufficient record	7.2% █	8.5% █
Not ranked - no measurement	2.2%	1.4%
Not ranked - stream not flowing	0.7%	2.8%

Provisional data,
subject to revision

Streamflow: Status

- Above flood stage
- All-time high for this day (100th percentile (maximum))
- Much above normal (>90th percentile)
- Above normal (76th – 90th percentile)
- Normal (25th – 75th percentile)
- Below normal (10th – 24th percentile)
- Much below normal (<10th percentile)
- All-time low for this day (0th percentile (minimum))
- Not flowing
- Not ranked
- Measurement flag
- Recent measurement unavailable

Utah Area-Based Runoff Duration Hydrograph



□ **The Runoff Duration Hydrograph is a graphical presentation of area-based runoff (the black line) calculated as a weighted average of HUC 8-runoff, plotted over the long-term statistics of runoff for each day or month of the year for each area.**

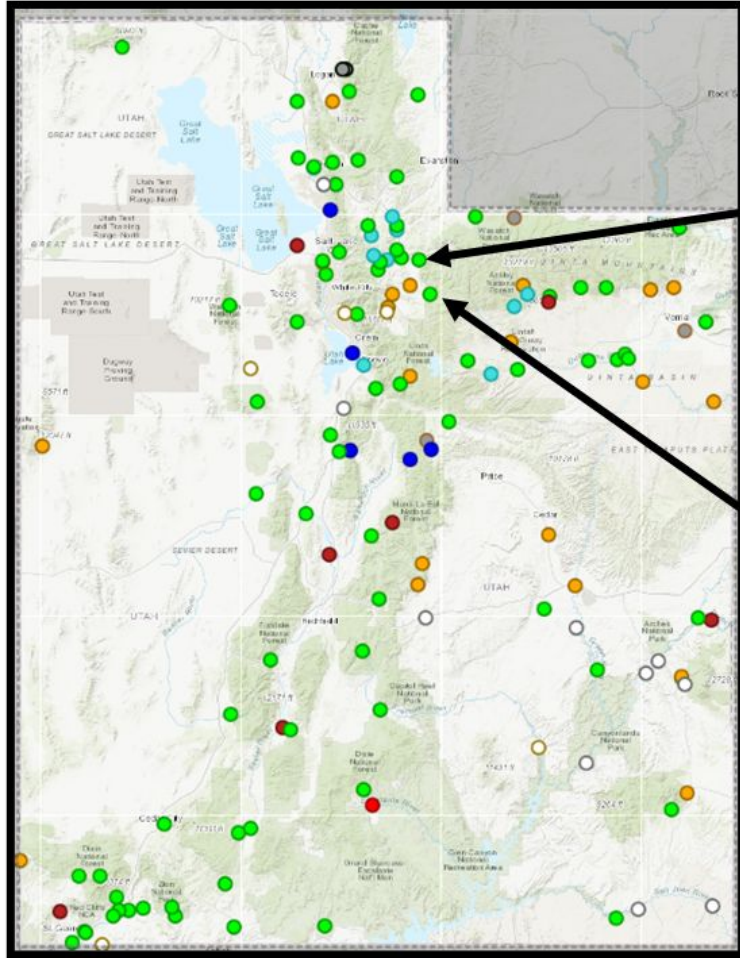
Explanation - Percentile classes						
lowest-10th percentile	5	10-24	25-75	76-90	95	90th percentile -highest
Much below Normal	Below normal	Normal	Above normal	Much above normal		Runoff

Provisional data, subject to revision

Agency - USGS Utah WSC
 Presenter - Ryan Rowland

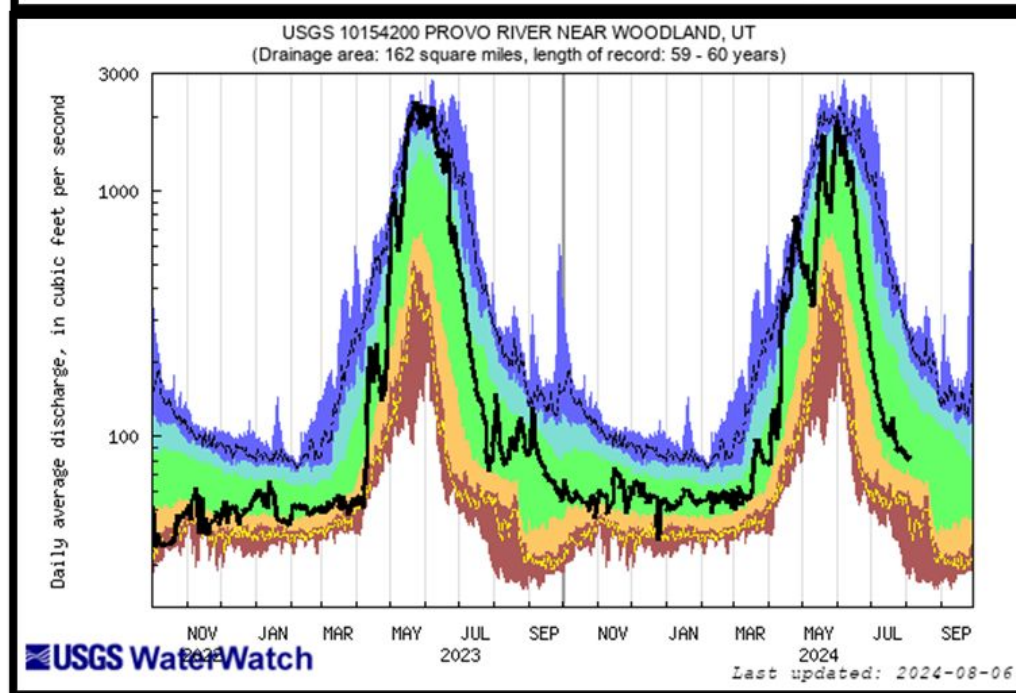
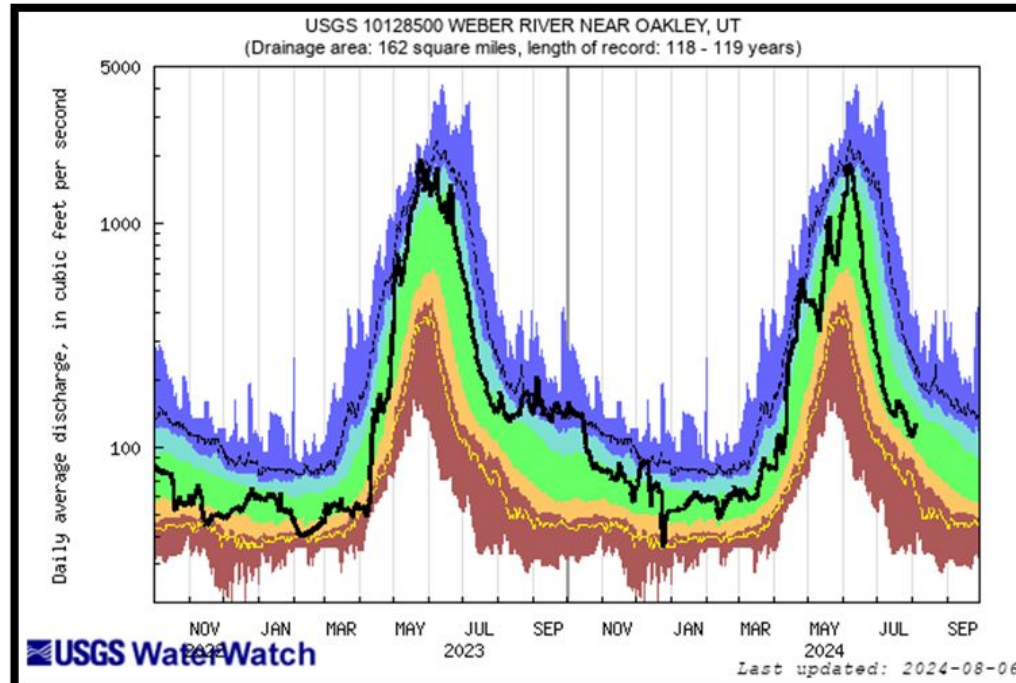


Streamflow at Selected Gages



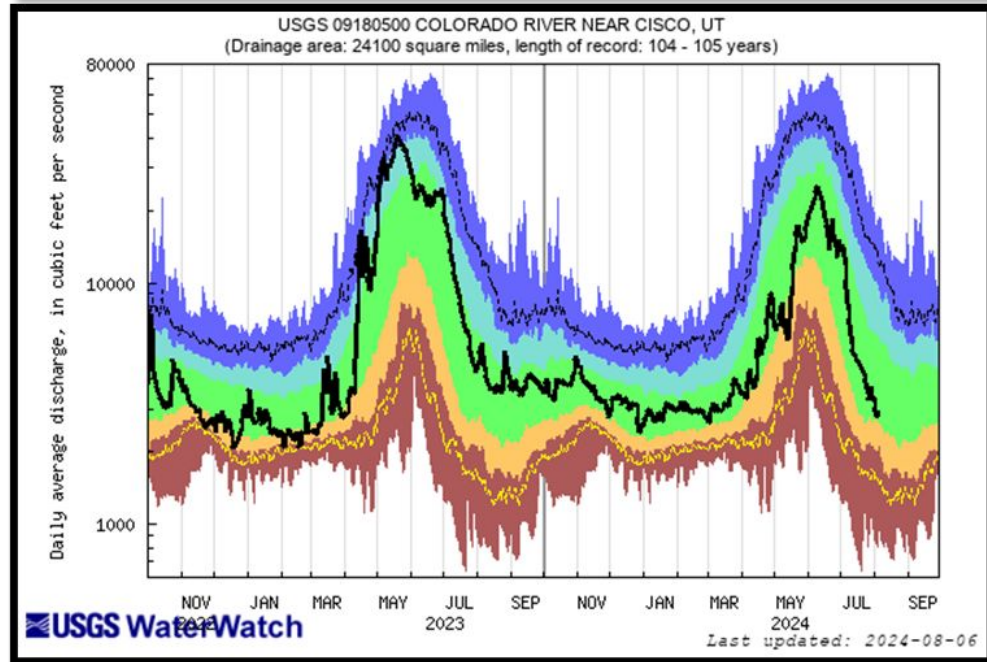
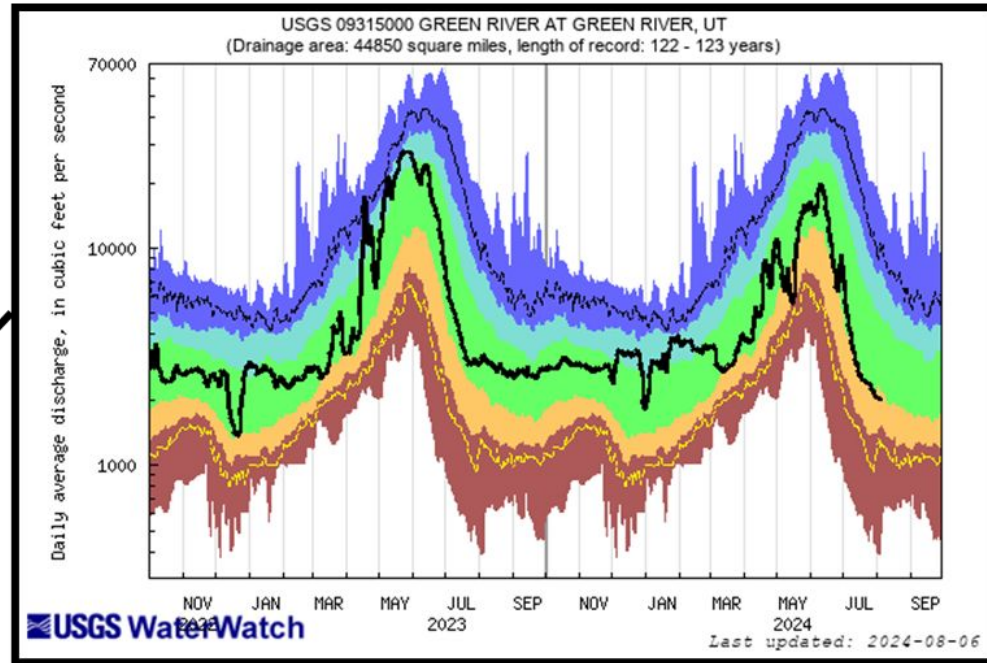
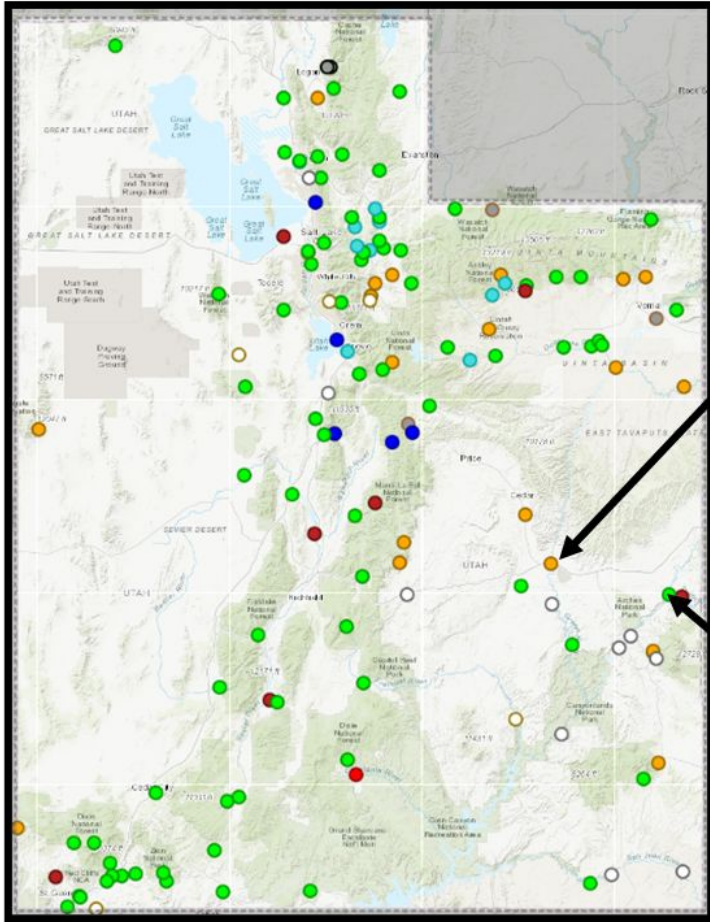
Explanation - Percentile classes

lowest-10th percentile	5	10-24	25-75	76-90	95	90th percentile-highest	Flow
Much below Normal	Below normal	Normal	Above normal	Much above normal			



Provisional data,
subject to revision

Streamflow at Selected Gages

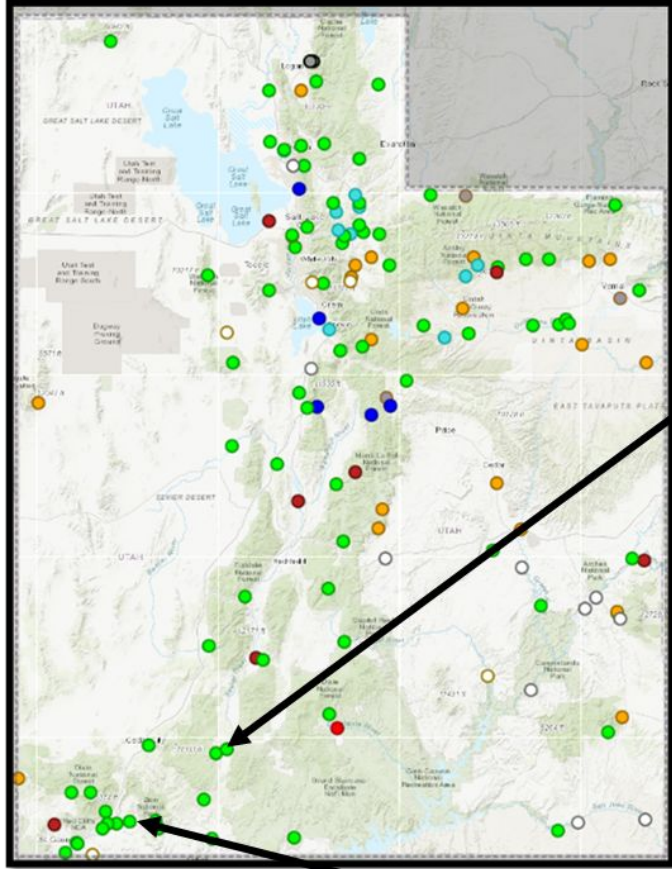


Provisional data,
subject to revision

Explanation - Percentile classes

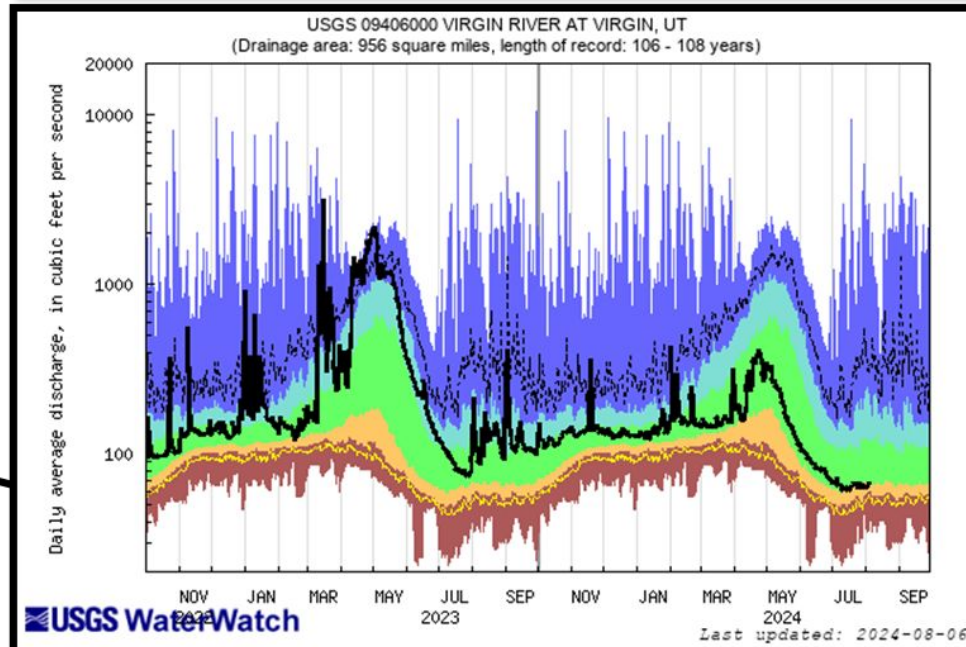
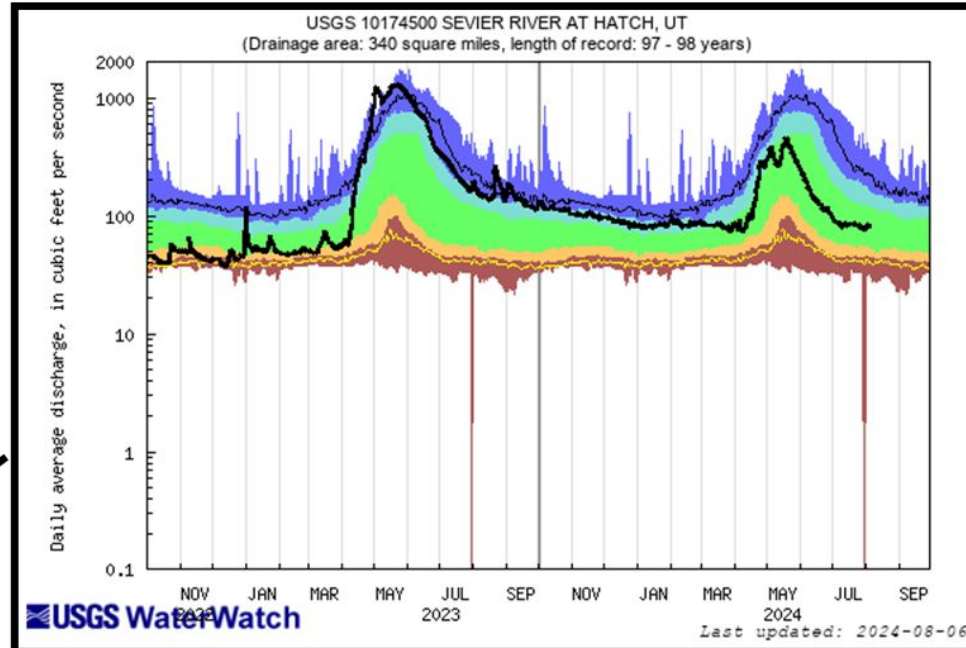
lowest-10th percentile	5	10-24	25-75	76-90	95	90th percentile-highest	Flow
Much below Normal	Below normal	Normal	Above normal	Much above normal			

Streamflow at Selected Gages



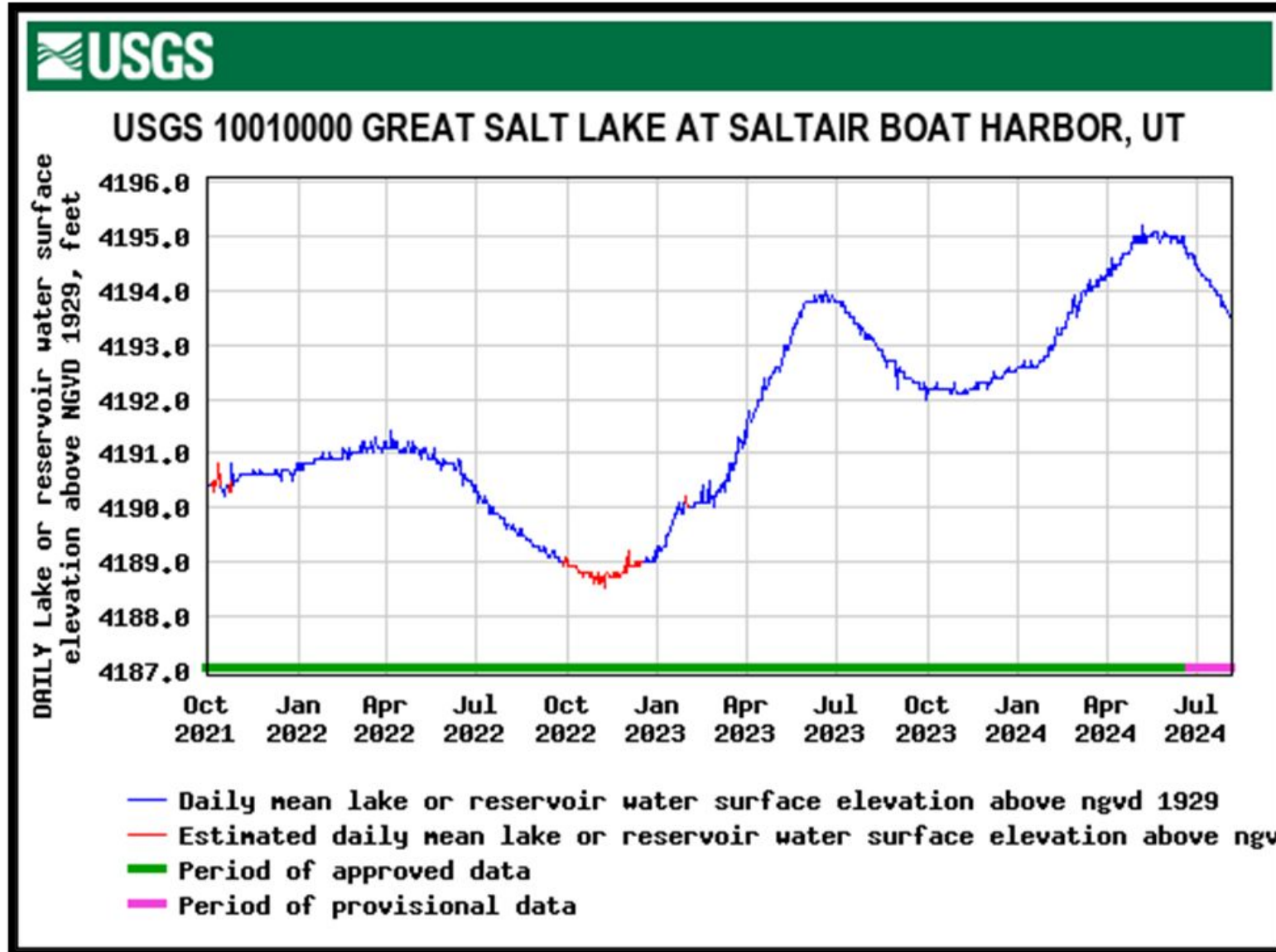
Explanation - Percentile classes

lowest-10th percentile	5	10-24	25-75	76-90	95	90th percentile - highest	Flow
Much below Normal	Below normal	Normal	Above normal	Much above normal			



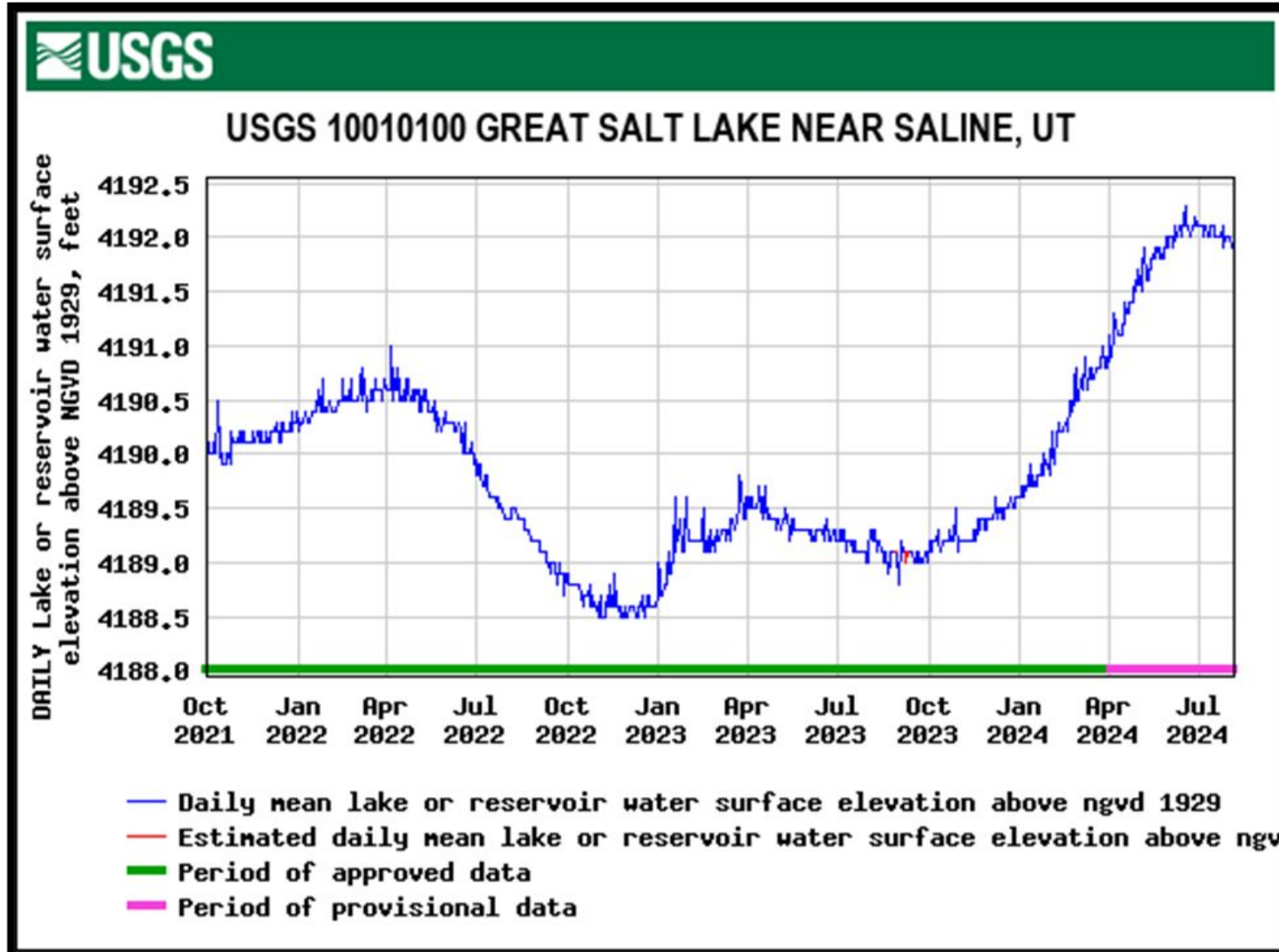
Provisional data, subject to revision

Great Salt Lake Water Surface Elevation - South Arm



- Daily value
8/5/2024 =
4,193.5'
- Daily value
7/8/2024 =
4,194.3'
- Seasonal peak
5/7/2024 =
4,195.2'

Great Salt Lake Water Surface Elevation - North Arm



□ Daily value
8/5/2024 =
4,192.0'

□ Daily value
7/8/2024 =
4,192.1'

□ Seasonal peak
6/17/2024 =
4,192.3'