

# Maine 2021 Drought Update

## II:00 AM EDT Wednesday, June 30, 2021 Prepared by: WFO Gray/Caribou



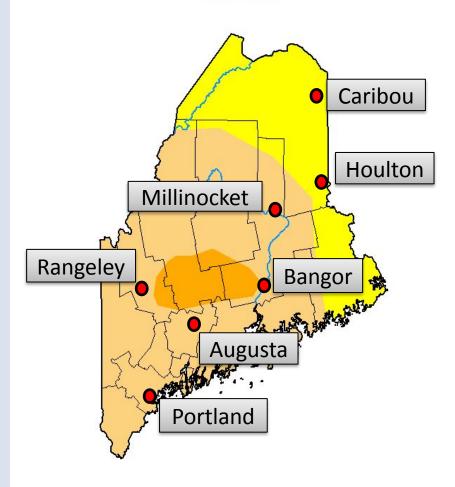
www.weather.gov/Gray

## Latest Drought Conditions



### **Gray/Portland** WEATHER FORECAST OFFICE

#### U.S. Drought Monitor Maine



June 22, 2021 (Released Thursday, Jun. 24, 2021) Valid 8 a.m. EDT

	Drought Conditions (Percent Area)					
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	0.00	100.00	70.44	6.97	0.00	0.00
Last Week 06-15-2021	0.00	100.00	40.38	0.00	0.00	0.00
3 Month s Ago 03-23-2021	86.36	13.64	0.00	0.00	0.00	0.00
Start of Calendar Year 12-29-2020	91.54	8.46	0.00	0.00	0.00	0.00
Start of Water Year 09-29-2020	0.00	100.00	100.00	83.86	7.28	0.00
One Year Ago	0.00	100.00	47.36	0.00	0.00	0.00



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

<u>Author:</u> Curtis Riganti National Drought Mitigation Center



droughtmonitor.unl.edu

2021 Yea	r To Date
Rainfall D	eficits (in)
Caribou	-1.51
Houlton	-4.56
Millinocket	-6.03
Bangor	-7.79
Augusta	-7.08
Portland	-8.67
Rangeley	-7.85

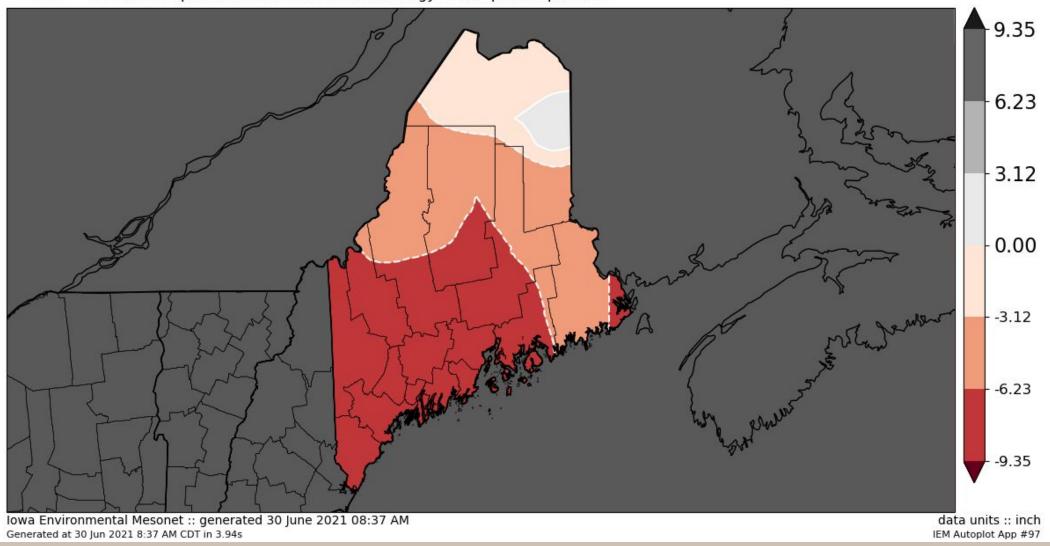
## Rainfall Deficits Year To Date



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1 Jan 2021 thru 29 Jun 2021 Precipitation Departure [inch] 2021 is compared with 1981-2020 Climatology to compute departures



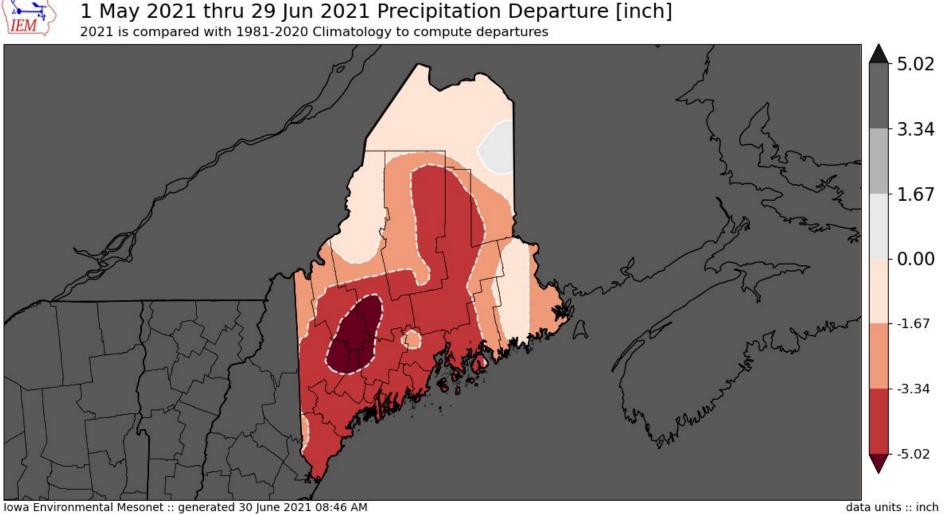
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# Rainfall Deficits



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- Most of the yearly rainfall departures have occurred over the last 5-6 weeks.
- This period is normally one of the wettest times of the year.
- Sunny weather and dry Canadian air also increased evaporation



Generated at 30 Jun 2021 8:46 AM CDT in 4.39s

IEM Autoplot App #97

### Short Term Drought Portland



#### Gray/Portland WEATHER FORECAST OFFICE

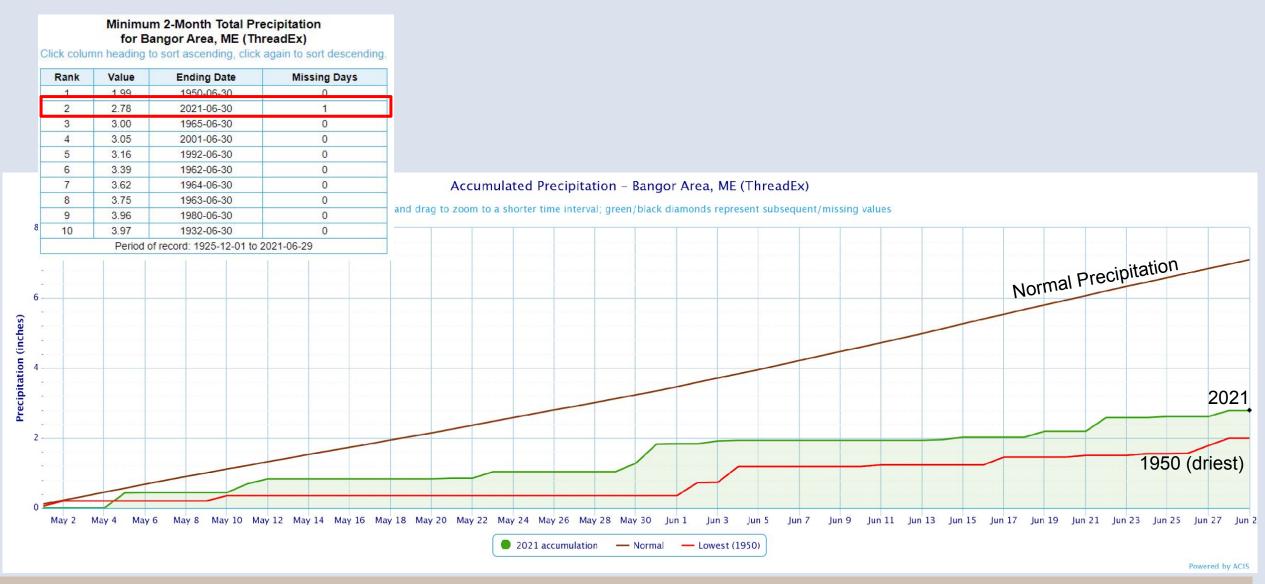
 Dry conditions began in May and continued in Rank Ending Date Total Precipitation May 1 to Jun 29 1899-06-29 1.77 1 June 2 1941-06-29 2.16 1932-06-29 2.35 3 4 1965-06-29 2.65 2021-06-29 3.03 5 6 1997-06-29 3.17 1950-06-29 7 3.18 Accumulated Precipitation - Portland Area, ME (ThreadEx) 1939-06-29 8 3.24 Click and drag to zoom to a shorter time interval; green/black diamonds represent subsequent/missing values 9 1964-06-29 3.40 10 1913-06-29 10 3.51 Normal Precipitation 8 Precipitation (inches) 2021 2 1899 (driest) May 6 May 10 May 12 May 14 May 16 May 18 May 20 May 22 May 24 May 26 May 28 May 30 Jun 1 Jun 3 Jun 5 Jun 7 Jun 9 Jun 11 Jun 13 Jun 15 Jun 17 Jun 19 Jun 21 Jun 23 Jun 25 Jun 27 Jun 2 May 2 May 4 May 8 - Lowest (1899) 2021 accumulation - Normal Powered by ACIS

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### Short Term Drought Bangor

# THE ATTREE

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6/25/2021 8:41 AM

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### Short Term Drought Houlton



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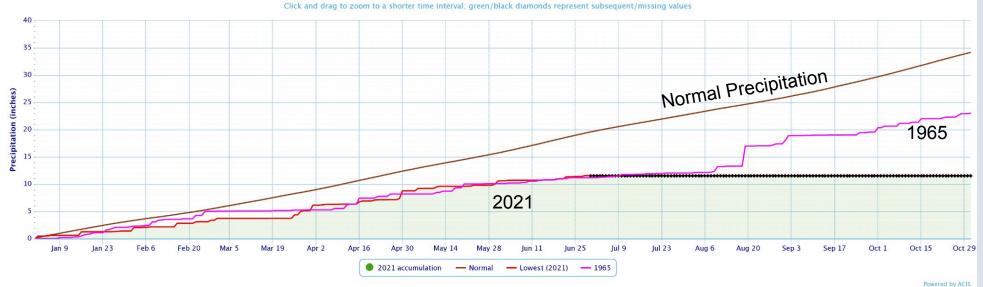


# Short Term Drought Historical Analog



#### Gray/Portland WEATHER FORECAST OFFICE

Similar Year to ٠ Date precipitation as observed in 1965 for southern and central Maine



Accumulated Precipitation - Bangor Area, ME (ThreadEx)

#### Accumulated Precipitation - Portland Area, ME (ThreadEx)

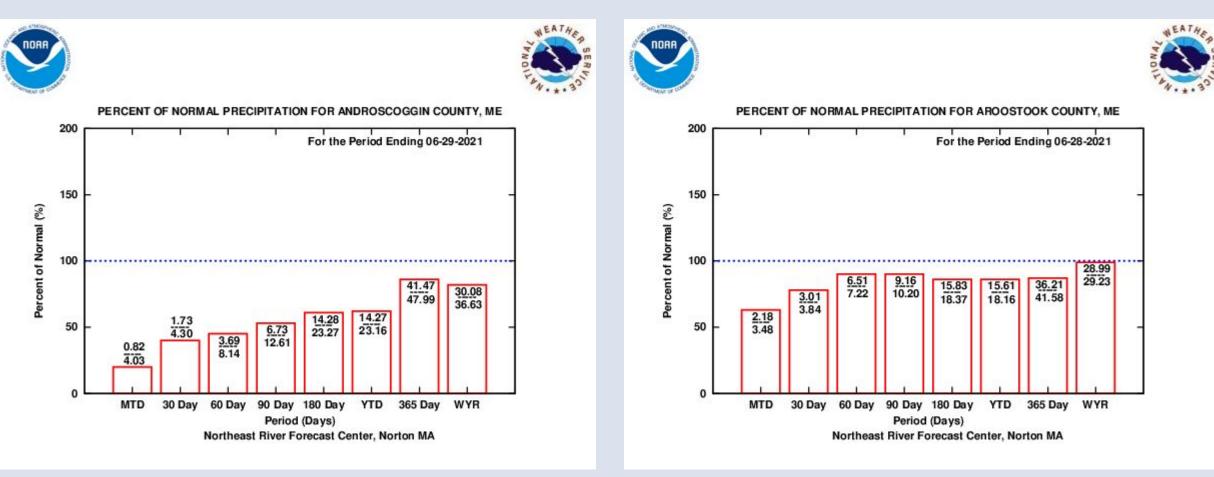


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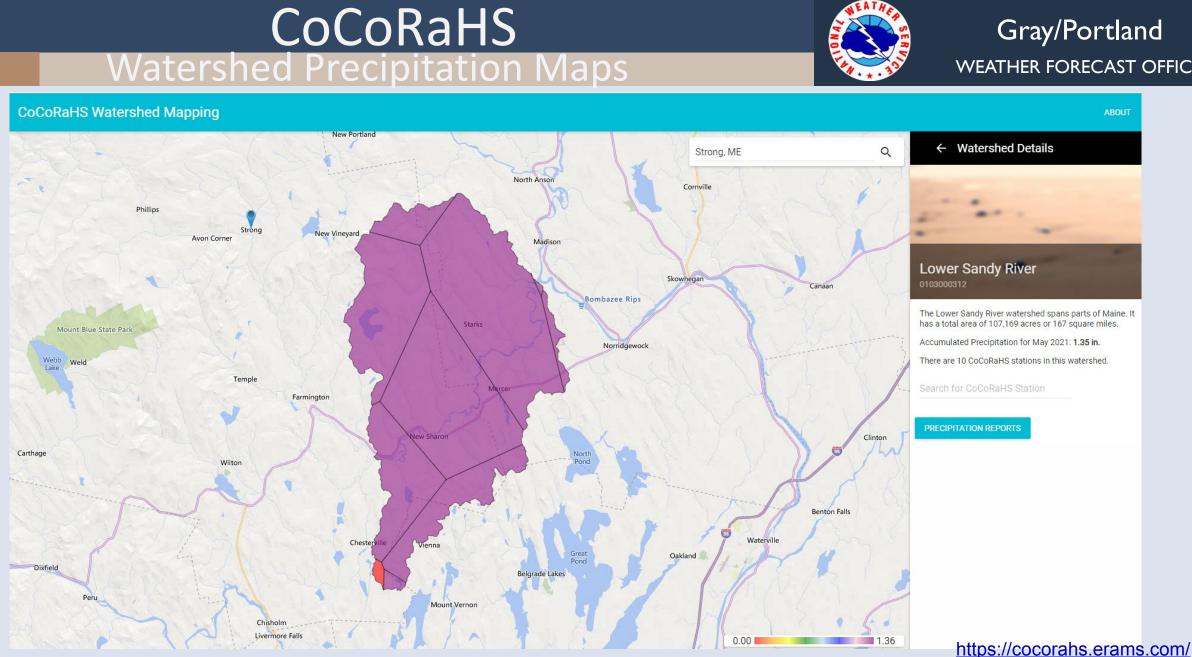
# **Rainfall Percent of Normal**



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For more county specific charts visit <a href="http://www.weather.gov/nerfc/Barcharts">www.weather.gov/nerfc/Barcharts</a>



#### 6/25/2021 8:41 AM

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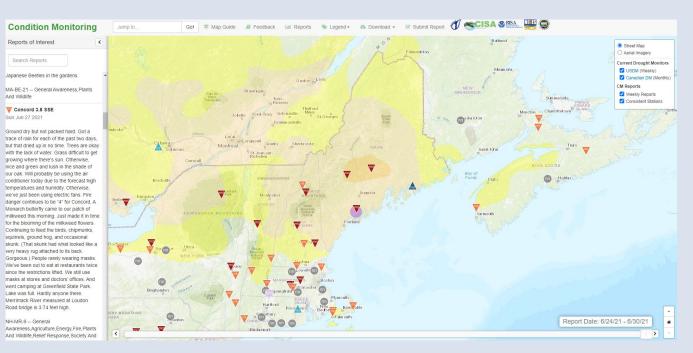


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## Drought Reports from CoCoRaHS observers

Close

Topsham (	3.7 NE ×
Station Number	ME-SG-16 (52 CM Reports in prior 12 months)
Report	More frequent and sustained showers have lessened the need to water the garden and lawn grass remains mostly green. Poor grown in the fields bodes for poor hay crops. Trees show sign of need for water with leaves curling. Heavier rain is needed.
Condition	Moderately Dry
Date	Sun Jun 27 2021
Summary Data	CoCoRaHS summary data by week for this station.



https://www.cocorahs.org/Maps/conditionmonitoring/#

# Record June Heat....Again



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## • \*Not official until end of the month

#### Maximum 1-Month Mean Avg Temperature for Portland Area, ME (ThreadEx)

Click column heading to sort ascending, click again to sort descending.

Rank	Value	Ending Date	Missing Days
1	68.4	2021-06-30	1
2	67.1	2001-06-30	0
3	67.0	1884-06-30	0
4	66.8	1883-06-30	0
5	66.5	1876-06-30	0
6	66.5	1930-06-30	0
7	66.3	1999-06-30	0
8	66.2	2020-06-30	0
9	66.0	1877-06-30	0
10	66.0	1994-06-30	0

#### Maximum 1-Month Mean Avg Temperature for Caribou Area, ME (ThreadEx)

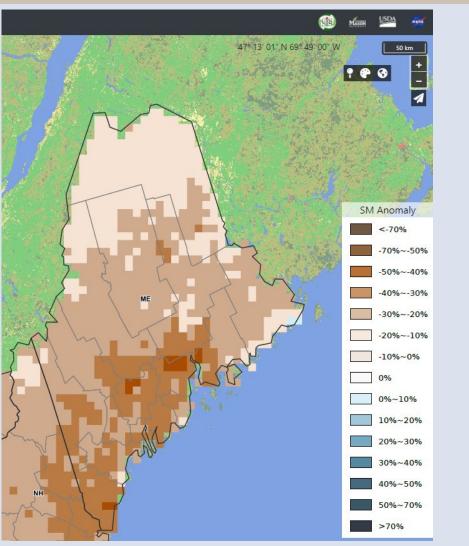
Click column heading to sort ascending, click again to sort descending.

Rank	Value	Ending Date	Missing Days
1	64.8	2021-06-30	1
2	64.4	2020-06-30	0
3	64.0	1976-06-30	0
4	64.0	2006-06-30	0
5	63.8	1999-06-30	0
6	63.6	1994-06-30	0
7	63.2	2005-06-30	0
8	63.0	1973-06-30	0
9	63.0	2014-06-30	0
-	63.0	1995-06-30	0

# Soil Moisture Deficits

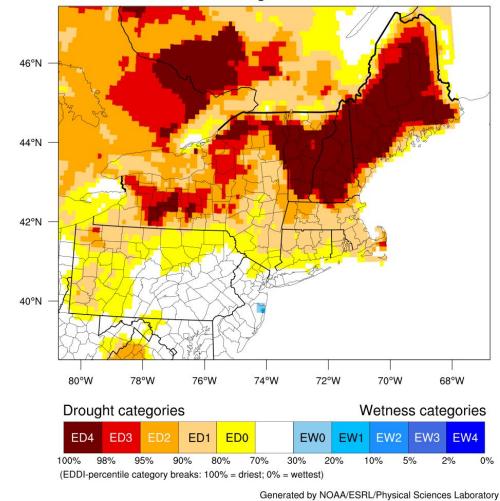


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Crop-CASMA (Crop Condition and Soil Moisture Analytics) credit NASA and USDA-NASS

1-month EDDI categories for June 19, 2021



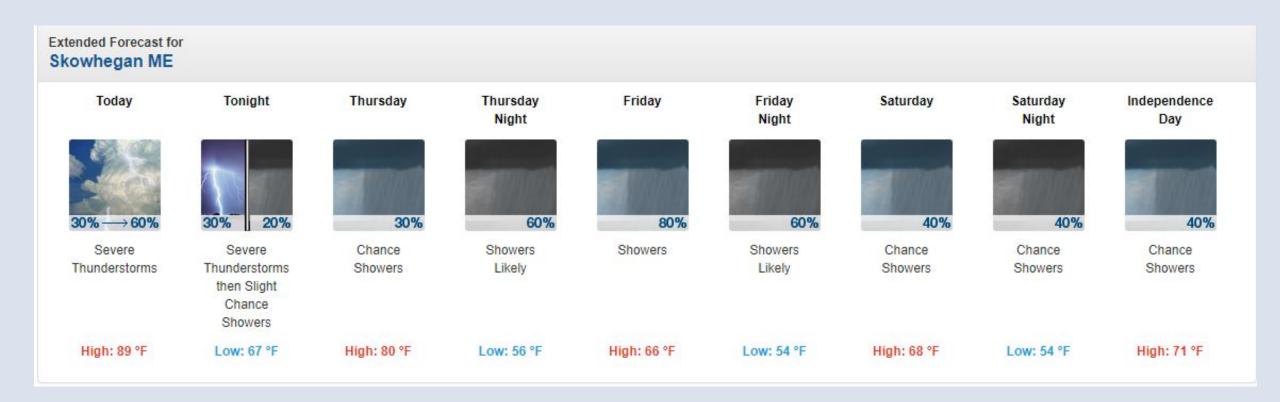
Evaporative Demand Drought Index Maps

# 7 – Day Forecast



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• Weather pattern will transition to cooler and wetter

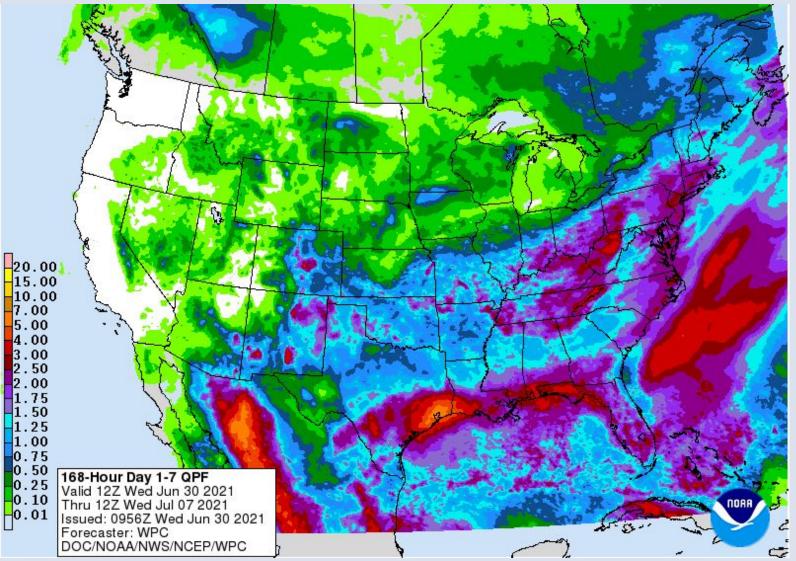


# 7 – Day Forecast



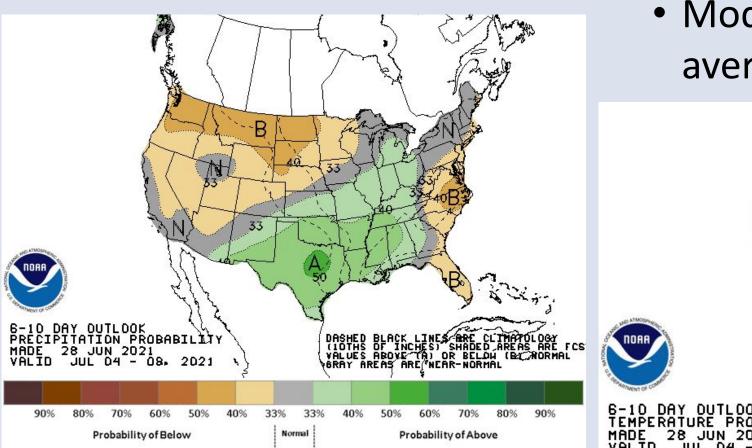
### Gray/Portland WEATHER FORECAST OFFICE

- 7-Day rainfall forecast over the next week shows near to below average rainfall for interior mountain locations.
- Near average rainfall for the coastal plain.



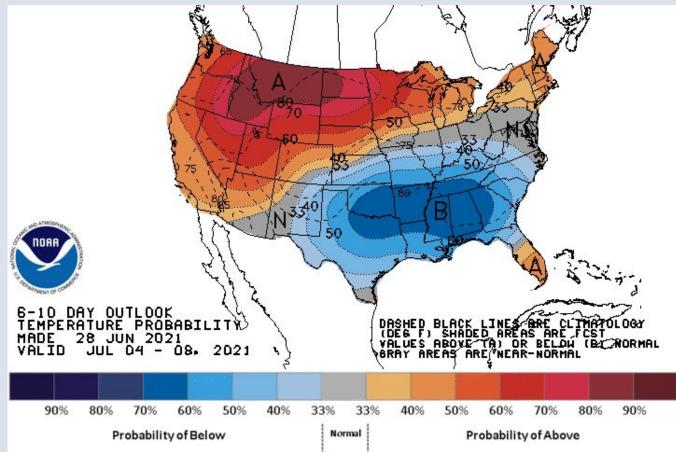


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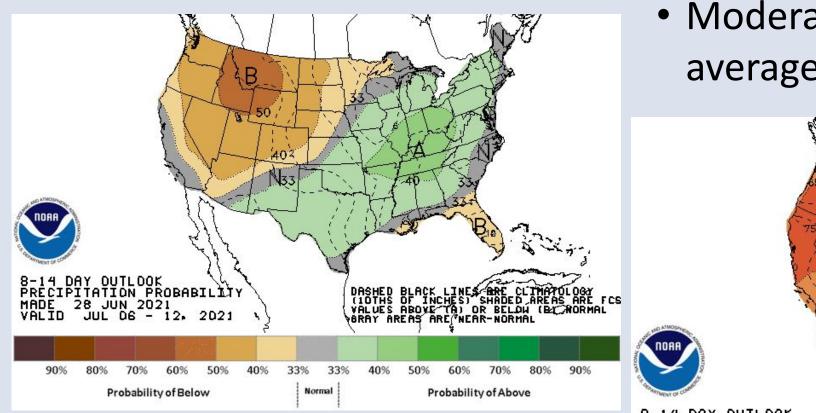


Weak signal favoring below normal precipitation

• Moderate confidence in above average temperatures

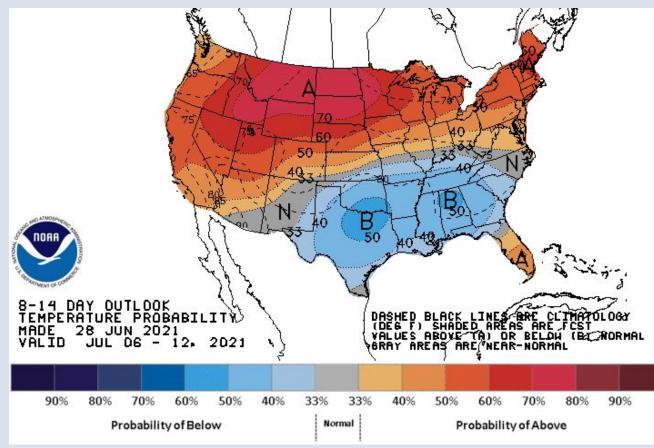


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• Weak signal favoring near normal precipitation

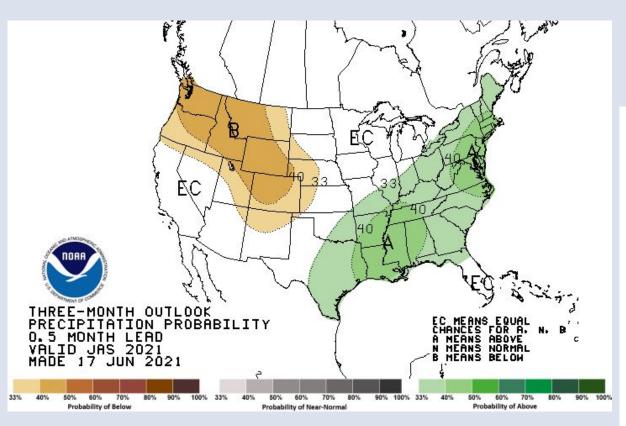
• Moderate confidence in above average temperatures



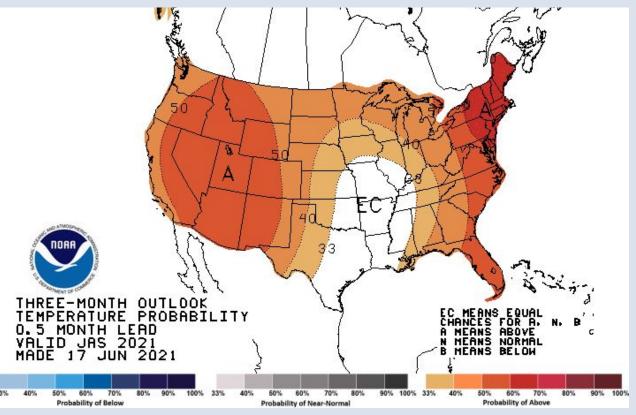
### July through September



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 Weak signal favoring above normal precipitation.\*Influence from above normal tropical activity • Moderate confidence in above average temperatures

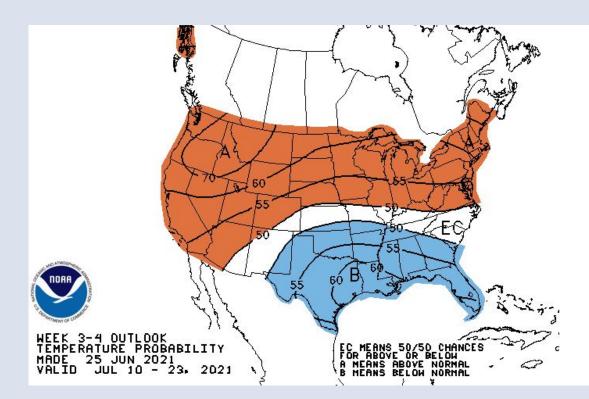




**Gray/Portland** WEATHER FORECAST OFFICE

- MEEK 3-4 EXPERIMENTAL OUTLOOK PRECIPITATION PROBABILITY MADE 25 JUN 2021 VALID JUL 10 - 23, 2021
- Weak signal favoring near normal precipitation

• Moderate confidence in above average temperatures



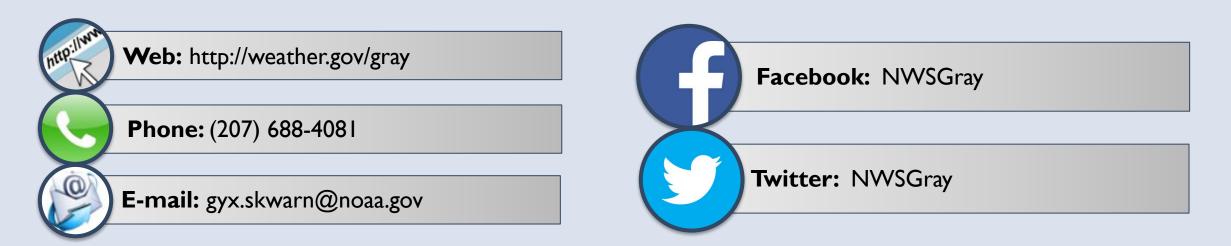
## Key Points



- Severe Drought (D2) for portions of central Maine (Androscoggin, Kennebec, and Penobscot watersheds). Moderate Drought (D1) and abnormally dry (D0) conditions for the rest of the state.
- Spring rainfall was below normal, and trend has continued into early summer. Warmer than normal temperatures have added more stress to the system.
- Short term pattern supports rain shower chances over the next week but no widespread improvements expected
- Long range outlook is favoring normal precipitation probabilities through July. Moderate confidence for above average temperatures.



# Questions?



For the latest drought graphics and information go to: <u>www.weather.gov/gyx/EMhome#Drought</u>

