NWS Form E-5 (04-2006) (PRES. BY NWS Instruction 10-924)	U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL WEATHER SERVICE	HYDROLOGIC SERVICE AREA (HSA) **WFO Caribou, Maine**
MONTHLY REPORT OF HYDROLOGIC CONDITIONS		REPORT FOR: MONTH **May** YEAR **2021**
TO: Hydrologic Information Center, W/OS31 NOAA's National Weather Service 1325 East West Highway Silver Spring, MD 20910-3283		SIGNATURE **Joseph Hewitt, HPM** DATE **July 3rd, 2021**

When no flooding occurs, include miscellaneous river conditions below the small box, such as significant rises, record low stages, ice conditions, snow cover, droughts, and hydrologic products issued (NWS Instruction 10-924).

X An X inside this box indicates that no flooding occurred within this hydrologic service area.

May 2021

No flooding occurred across the region during May.

Precipitation for the month of May was variable with slightly above normal precipitation for east-central Aroostook County and well below normal precipitation elsewhere. At Bangor, monthly precipitation was 1.82 inches which was 1.52 inches below normal. This tied 1993 as the 13th lowest monthly precipitation. Millinocket came with 2.12 inches of precipitation, which was 1.30 inches below normal. Caribou recorded 3.51 inches of precipitation, which was 0.05 above normal for the month of May. There were some rainfall events during the month of May across portions of the region, with the most significant rainfall event occurring on the 30th and 31st , with up to one inch of rainfall across much of the region. Houlton set a daily precipitation record of 0.98 inches on the 31st.

The only snow of note, fell at Frenchville, Caribou and Houlton on the 5th, when rain ended as a mix of snow and rain. Trace amounts were recorded at those three sites. Caribou snowfall for May was actually 0.08 inches below normal.

May came in with near to slightly above normal temperatures across much of the region. The outlier was Houlton, which came with monthly temperatures slightly below normal. The month of May opened up on the chilly side for the first 2 weeks, and then temperatures transitioned to above normal from mid to late May. The last 5 days however ended on the cool side. The warmest days occurred from the 20th through the 22nd and again on the 26th, where many sites, away from the coast, experienced 80+ temperatures. A few sites even came in with lower 90s on the 26th. There were some mornings during the first 2 weeks that saw morning reading below 32F, and again toward the end of the month. Frost/ Freeze headlines were issued during this stretch. Caribou came in with a monthly average temperature of 52.6 degrees, which was 0.4 degrees above normal. Houlton had an average monthly temperature of 50.8 degrees, which was 0.4 degrees below normal. Bangor came in with an average monthly temperature of 55.0 degrees, which was 0.5 degrees above normal.

Streamflows across the region continued to show declines during the month of May with slightly below normal to much below normal. The St. John, Allagash, Fish and Aroostook Rivers in northern Maine had streamflows much below normal. The Narraguagus River at Cherryfield, and the Piscataquis River recorded much below normal streamflows. Interestingly enough, the Mattawamkeag River and the East

Branch of the Penobscot River at Grindstone, dropped to slightly below normal. There was some decent rainfall in these areas to offset a further drop in flows.

Groundwater levels continued to be variable across the region during the month of May, but signals showed levels declining from what was recorded in April. Clayton Lake came in well below normal compared to levels being below normal in April. Wells across the Maine Central Highlands into portions eastern Maine dropped to below normal with Amherst coming in much below normal groundwater levels. The exception was Calais, which stayed with levels near normal.

In regards to Drought monitoring, the Abnormally Dry area was expanded a bit to include **Northern Somerset County** along with **Piscataquis, Penobscot and Hancock Counties**.

May Precipitation Totals for Select Locations with all units in inches

Location	Total Precip	Normal Precipitation	Departure from Normal	Snowfall	Normal Snowfall	Departure from Normal Snowfall	Greatest Snow Depth
Frenchville	1.97	3.07	-1.10	NA	NA	NA	NA
Caribou	3.51	3.46	+0.05	T	0.8	-0.8	T
Houlton	3.79	3.46	+0.33	NA	NA	NA	NA
*Millinocket	2.12	3.42	-1.30	NA	NA	NA	NA
Bangor	1.82	3.34	-1.52	0.0	0	0.0	0

*Millinocket snowfall measured at wastewater treatment plant, not the ASOS site. Data might not available every month.

May Stream Flows for Selected Rivers

River	Normal Flow (cfs)	Monthly Mean Flow (cfs)	Monthly Mean (in)	Percentile Class	Drainage (mi^2)	Years of Record
St. John River at Ninemile Bridge	4610 – 8720	2380	2.05	Much Below Normal	1341	70
St. John River at Fort Kent	20700 - 42200	10300	2.00	Much Below Normal	5929	94
Aroostook River at Washburn	4790 - 9390	3190	2.22	Much Below Normal	1654	90
Narraguagus River at Cherryfield	424 – 826	296	1.50	Much Below Normal	227	73
E Br Penobscot River at Grindstone	3070 – 6250	2500	3.44	Below Normal	837	118

Mattawamkeag nr Mattawamkeag	3540 – 6720	2710	2.20	Below Normal	1418	86
Piscataquis River nr Dover-Foxcroft	696 – 1640	428	1.66	Much Below Normal	298	118

Groundwater Levels

Station	Normal Range (ft)	Mean Water Level Below Land-sfc Datum (ft)	Departure from Month-end Median (ft)	Percentile Class	Years of Record
Amherst	18.50 – 17.50	20.47	2.57	Much Below Normal	31
Crooked Road	NA	NA	NA	NA	NA
Hadley Lakes	4.37 – 3.74	4.45	0.38	Below Normal	35
Kenduskeag	20.40 – 18.90	20.70	1.16	Below Normal	43
Calais	1.67 – 0.38	0.79	-0.20	Normal	21
Millinocket	8.53 – 7.07	8.87	1.30	Below Normal	27
Clayton Lake	13.50 – 12.30	14.58	1.58	Much Below Normal	42
Fort Kent	6.26 – 3.64	6.10	1.23	Normal	43

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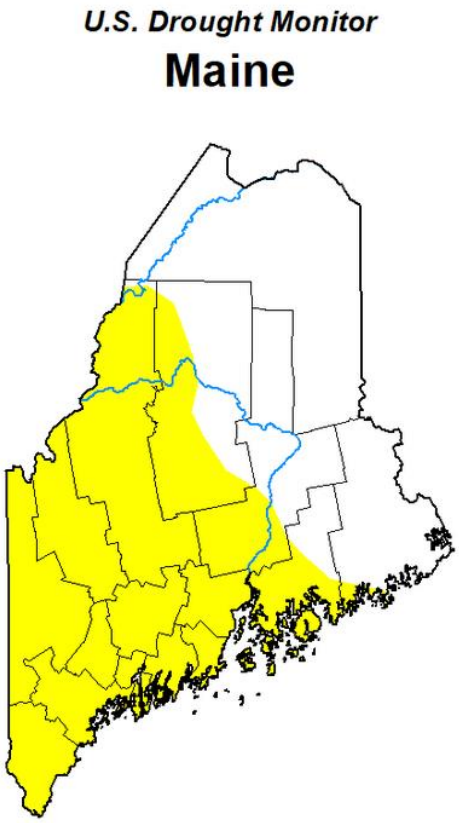
Flow or Water Level	Percentile Range	Explanation
Record Low	0^{th}	The monthly mean streamflow or median water level during this month is the lowest ever recorded during the period of record for this site.
Very Low	0^{th} to 10^{th}	The monthly mean streamflow or median water level during this month is less than the 10^{th} percentile when compared to all of the months during the period of record for this site.
Low	10^{th} to 25^{th}	The monthly mean streamflow or median water level during this month is between the 10^{th} and 25^{th} percentiles when compared to all of the months during the period of record for this site.
Normal	25^{th} to 75^{th}	The monthly mean streamflow or median water level during this month is between the 25^{th} and 75^{th} percentiles when compared to all of the months during the period of record for this site.
High	75^{th} to 90^{th}	The monthly mean streamflow or median water level during this month is between the 75^{th} and 90^{th} percentiles when compared to all of the months during the period of record for this site.
Very High	90^{th} to 100^{th}	The monthly mean streamflow or median water level during this month is greater than the 90^{th} percentile when compared to all of the months during the period of record for this site.
Record High	100^{th}	The monthly mean streamflow or median water level during this month is the highest ever recorded during the period of record for this site.

Non-Routine Hydrologic Products
May 2021
WFO Caribou, ME

WMO Identifier	Date	Issuance	Name of Product

Drought Conditions for May 2021



May 4, 2021
(Released Thursday, May. 6, 2021)
Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	45.31	54.69	0.00	0.00	0.00	0.00
Last Week *04-27-2021*	44.34	55.66	0.00	0.00	0.00	0.00
3 Months Ago *02-02-2021*	91.68	8.32	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 *05-05-2020*	100.00	0.00	0.00	0.00	0.00	0.00

Intensity:

- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

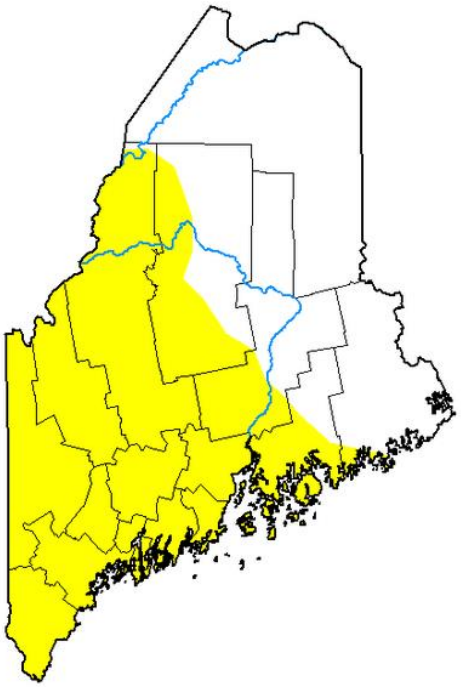
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to https://droughtmonitor.unl.edu/About.aspx

Author:
David Simeral
Western Regional Climate Center

droughtmonitor.unl.edu

U.S. Drought Monitor

Maine



May 25, 2021

(Released Thursday, May. 27, 2021)

Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	45.76	54.24	0.00	0.00	0.00	0.00
Last Week *05-18-2021*	58.98	41.02	0.00	0.00	0.00	0.00
3 Months Ago *02-23-2021*	92.01	7.99	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 *05-26-2020*	93.80	6.20	0.00	0.00	0.00	0.00

Intensity:

- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

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

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