

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 REPORT FOR: MONTH YEAR June 2021
MONTHLY REPORT OF HYDROLOGIC CONDITIONS		SIGNATURE Joseph Hewitt, HPM
TO: Hydrologic Information Center, W/OS31 NOAA's National Weather Service 1325 East West Highway Silver Spring, MD 20910-3283		DATE July 29th, 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).

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

June 2021

There was some flash flooding that did occur in June, which affected Washington County during the second week of June. This event occurred on June 9th as training thunderstorms dumped 5 inches of rain in just 3 hours which caused damage to a couple of roads, along with small streams going out of their banks. Two Flash Flood Warnings (FFWs) were issued with good lead time.

Precipitation for the month of June was below normal, with a number of sites reporting 1 to almost 3 inches below normal for the month. At Bangor, monthly precipitation was only 0.97 inches, which was 2.90 inches below normal. This made it 2nd driest June on record. Millinocket came with 1.37 inches of precipitation, which was 2.83 inches below normal, making it the 8th driest June on record. Precipitation was a bit better across Northern Maine, north of Houlton. Caribou recorded 3.41 inches of precipitation, which was 0.48 below normal for the month of June. The most significant rainfall event was on the 9th with the flash flooding as mentioned above.

June came in well above normal for average monthly temperatures with sites across the region coming with 3 to 5 degrees above normal. June 2021 ranked as the warmest June on record in Caribou with an average monthly temperature of 64.9 degrees which broke the previous record set back in 2020 of by 0.5 degrees. Houlton recorded an average monthly temperature of 65.1 degrees, which made it the 2nd warmest June on record behind 1973. Millinocket recorded an average monthly temperature of 67.2 degrees, which ranked as the 2nd warmest June on record, behind 1930. Bangor recorded an average monthly temperature of 67.7 degrees, which ranked as the 4th warmest June on record, behind 1930, 1933, and 1938. The first time since weather records began in Caribou in 1939, that there was a 90 degree day recorded during the first 10 days of June. In fact, there were back to back high temperatures of 92 degrees set on the 7th and 8th, which were record highs for Caribou. The low of 69 degrees set on the 27th in Caribou, tied with 1942, 1949, and 2017 for the all-time warmest low temperature during the month of June. The warmest temperature for the month occurred across the interior Downeast region on the 28th with several locations, including Bangor, recorded daily high temperatures of mid 90s, with heat indices of 100+ degrees. Caribou recorded daily high temperatures on the 7th and the 8th. On the 7th, the high temperature was 92 degrees, which broke the previous record high temperature of 84 degrees set in 1991. On the 8th, the temperature reached a high of 92 degrees, which broke the previous record high temperature of 87 degrees set in 1974. Houlton recorded a record high minimum temperature of 68 degrees on the 8th. This broke the previous record of 61 degrees set back in 1992. Record high

temperature of 92 degrees was set in Houlton, which broke the previous record of 86 degrees in 1991. Record high temperature of 92 degrees was also set on the 8th, which broke the previous record of 89 degrees set in 1974. Bangor recorded a record high temperature of 95 degrees on the 28th, which broke the previous record high of 94 degrees set in 1941. Bangor also set a record low temperature of 43 degrees on the 24th. This tied the previous record low set back in 1941. Millinocket record a record high minimum temperature of 67 degrees on the 8th. This broke the previous record of 60 degrees, set in 1930. A record high temperature of 95 degrees was set on the 7th, which broke previous record high temperature of 89 degrees, set back in 1908.

Streamflows across the region were well below normal for the month of June with a number of river gages reporting **record low** flows, such as the Piscataquis River at Dover-Foxcroft and the East Branch Penobscot River at Grindstone. The St. John River at Fort Kent and the Mattawamkeag River at Mattawamkeag recorded flows much below normal.

Groundwater levels dropped significantly during the month of June. A number of sites reported groundwater levels much below normal, such as Kenduskeag in Southern Penobscot County and Clayton Lake in Northwest Aroostook County. Amherst in Hancock County recorded **record low** groundwater levels.

In regards to Drought monitoring, the first week start out with **Abnormally Dry** for the southern and western areas. However, by the last week of June, conditions became worse, with northern and far eastern areas expanded to Abnormally Dry. Penobscot, Piscataquis, Somerset and Hancock Counties deteriorated to **Moderate Drought**. The exception to this was Southwest Piscataquis County and Southwest Penobscot County, as these areas dropped into the **Severe Drought Category**.

June 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	3.94	4.23	-0.29	NA	NA	NA	NA
Caribou	3.41	3.89	-0.48	0.0	0.0	0	0
Houlton	2.18	4.04	-1.86	NA	NA	NA	NA
*Millinocket	1.37	4.20	-2.83	NA	NA	NA	NA
Bangor	0.97	3.87	-2.90	0.0	0	0.0	0

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

June 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	1270 – 2790	962	0.80	Below Normal	1341	70
St. John River at Fort Kent	7600 - 12300	4650	0.88	Much Below Normal	5929	94
Aroostook River at Washburn	1400 - 3090	1290	0.87	Below Normal	1654	90
Narraguagus River at Cherryfield	208 - 492	129	0.63	Much Below Normal	227	73
E Br Penobscot River at Grindstone	1300 – 2780	783	1.04	Low	837	118
Mattawamkeag nr Mattawamkeag	1080 – 2540	699	0.55	Much Below Normal	1418	86
Piscataquis River nr Dover-Foxcroft	235 – 636	53	0.20	Low	298	118

Groundwater Levels

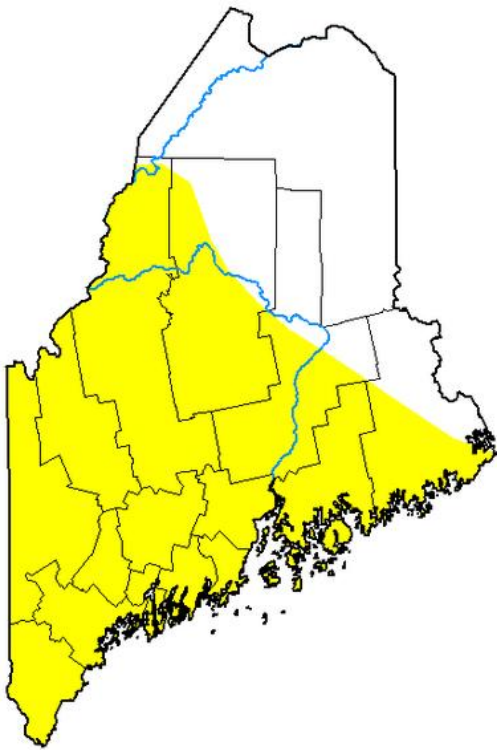
Station	Normal Range (ft)	Mean Water Level Below Land-sfc Datum (ft)	Departure from Month-end Median (ft)	Percentile Class	Years of Record
Amherst	20.30 – 18.90	23.07	3.47	Low	31
Crooked Road	NA	NA	NA	NA	NA
Hadley Lakes	5.03 – 4.30	5.13	0.46	Below Normal	35
Kenduskeag	22.20 – 20.50	22.53	1.23	Much Below Normal	43
Calais	2.26 – 0.83	2.30	0.55	Below Normal	21
Millinocket	9.05 – 7.96	9.67	1.31	Much Below Normal	27
Clayton Lake	15.40 – 14.10	16.04	1.44	Much Below Normal	42
Fort Kent	7.74 – 5.78	8.15	1.53	Below Normal	43

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
June 2021
WFO Caribou, ME**

WMO Identifier	Date	Issuance	Name of Product
PWMFLSCAR	6/9	0840Z	Areal Flood Advisory For S Washington County
PWMFLSCAR	6/9	1052Z	Cancelled Flood Advisory
PWMFLSCAR	6/9	0859Z	Flood Advisory for SE Hancock County
PWMFLSCAR	6/9	1157Z	Cancelled Flood Advisory
PWMFFWCAR	6/9	0848Z	Flash Flood Warning for S Washington County
PWMFFSCAR	6/9	1054Z	Cancelled Flash Flood Warning
PWMFFWCAR	6/9	0947Z	Flash Flood Warning for SE Hancock County
PWMFFSCAR	6/9	1212Z	Cancelled Flash Flood Warning
PWMFLSCAR	6/19	1919Z	Urban and Small Stream Flood Advisory for NE Aroostook County
PWMFLSCAR	6/19	2001Z	Cancelled Flood Advisory
PWMFLSCAR	6/19	2138Z	Urban and Small Stream Flood Advisory for NE Aroostook County
PWMFLSCAR	6/19	2223Z	Cancelled Flood Advisory

U.S. Drought Monitor
Maine



June 1, 2021

(Released Thursday, Jun. 3, 2021)

Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	34.65	65.35	0.00	0.00	0.00	0.00
Last Week 05-25-2021	45.76	54.24	0.00	0.00	0.00	0.00
3 Months Ago 03-02-2021	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 06-02-2020	92.26	7.74	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>

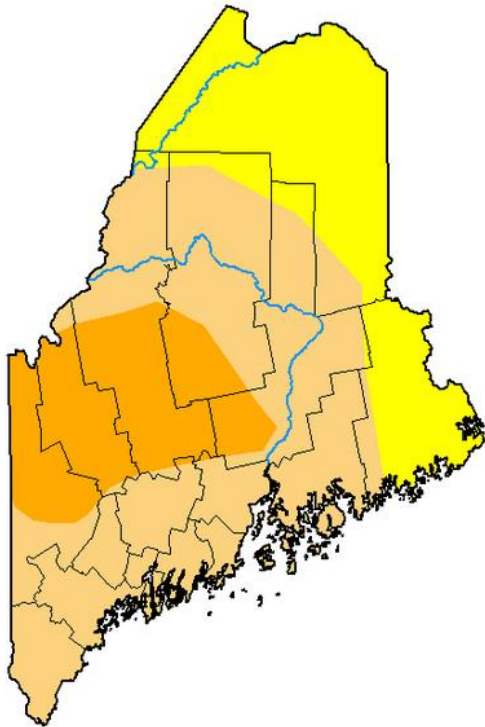
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droughtmonitor.unl.edu

U.S. Drought Monitor
Maine



June 29, 2021

(Released Thursday, Jul. 1, 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	20.85	0.00	0.00
Last Week <i>06-22-2021</i>	0.00	100.00	70.44	6.97	0.00	0.00
3 Months Ago <i>03-30-2021</i>	86.32	13.68	0.00	0.00	0.00	0.00
Start of Calendar Year <i>12-29-2020</i>	91.54	8.46	0.00	0.00	0.00	0.00
Start of Water Year <i>09-29-2020</i>	0.00	100.00	100.00	83.86	7.28	0.00
One Year Ago <i>06-30-2020</i>	0.00	100.00	39.07	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>

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