

<b>NWS Form E-5</b> (04-2006) (PRES. BY NWS Instruction 10-924)	<b>U.S. DEPARTMENT OF COMMERCE</b> <b>NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION</b> <b>NATIONAL WEATHER SERVICE</b>	HYDROLOGIC SERVICE AREA (HSA)  <b>WFO Caribou, Maine</b>
<b>MONTHLY REPORT OF HYDROLOGIC CONDITIONS</b>		REPORT FOR: MONTH                      YEAR <b>April                              2020</b>
TO: Hydrologic Information Center, W/OS31 NOAA's National Weather Service 1325 East West Highway Silver Spring, MD 20910-3283		SIGNATURE <b>Joseph Hewitt, HPM</b>
		DATE <b>May 26<sup>TH</sup> , 2020</b>

*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.

### April 2020

Minor flooding occurred during the month of April.

Ice broke up on the northern rivers including the St. John, Allagash and Aroostook Rivers. The ice jam on the Aroostook River in Fort Fairfield broke up and moved downstream near the bridge during the first week of April. The jam led to some backwater issues leading to some minor flooding and a few road closures. The jam finally let go during the second week of April with little additional flooding. Areal Flood Advisory was issued for the minor flooding. Another ice jam set up downstream of the Washburn gage(WSHM1) on Aroostook River near Crouseville on the 8th. This led to backwater to spill across route 164, and a section of that road was closed to traffic for about 18 hrs. An Areal Flood Advisory was issued for this ice jam. This jam broke and flushed out on the 9th. Smaller jams on the St. John River between St. John and St. Francis broke up and flushed out downstream with no flooding reported. Across the rest of the HSA, rivers opened up with the last bit of ice along the Piscataquis River near Dover Foxcroft and along the Eastern Branch of the Penobscot River being flushed out. Heavy rain and warmer temperatures lead to significant runoff, snowmelt and ice break up. A Flood Watch was issued for northern and central sections of Maine. An Areal Flood Warning was issued for the Dover-Foxcroft and Sebec region due to the heavy rain and snowmelt. The Piscataquis River at Dover-Foxcroft went above Flood Stage on the 14<sup>th</sup> with a River Flood Warning being issued. The river crested at 12.07 ft and fell below flood stage at 230 PM EDT on the 14<sup>th</sup>. Some flooding did occur in the Dover-Foxcroft and Guilford area. An Areal Flood Warning was issued on the 13<sup>th</sup>. The Penobscot River at Bangor went above Flood Stage on the night of the 9<sup>th</sup> due to a 2.0 foot surge that came up the Penobscot Bay. The River crested at 12.05 ft during the early morning hours on the 10<sup>th</sup>. Some minor flooding was reported in downtown Bangor. The Mattawamkeag River at Mattawamkeag rose above Flood Stage on the 15<sup>th</sup> at 13.53(FS is 13.5 ft). A River Flood Warning was issued on the 14<sup>th</sup>. The river crested at 14.35 ft on the 17<sup>th</sup>. The river went below stage on the 19<sup>th</sup>. There was some flooding along the Bancroft Rd.

Temperatures for the month of April were above normal with 1 to 2 degrees below normal. Caribou had a monthly average temperature of 36.6 degrees, which was 2 degrees below normal. Bangor had a

monthly average temperature of 41.4 degrees, which was 1.4 degrees below normal. The warmest temperature in Caribou for the month was 62 degrees on the 29<sup>th</sup>. This was the first 60 degree day since November 1<sup>st</sup> 2019. Bangor’s warmest temperature for the month was 64 degrees on the 25<sup>th</sup>. This was the 5<sup>th</sup> latest date for the first 60 degree day on record in Bangor. Caribou recorded its lowest temperature for the month on the 9<sup>th</sup>, which was 15 degrees.

Precipitation was near to slightly below normal across Northern Maine. Northwest Maine, including the St. John Valley had precipitation below normal. The Maine Central Highlands and Downeast, areas recorded precipitation amounts above normal. Caribou recorded 2.83 inches of precipitation which was 0.17 inches above normal. Bangor came in with 4.78 inches of precipitation, which was 1.16 inches above normal. Houlton came in with 3.31 inches of precipitation, which was 0.57 inches below normal.

Snowfall for the month of April was above normal across the region. Caribou came in with 21.9 inches of snow for the month, which was 14.5 inches above normal. Bangor recorded 7.8 inches for the month of March, which was 4.1 inches above normal. A few snow events occurred during the month of April. The first snow event came in on the 9<sup>th</sup> and 10<sup>th</sup> which delivered anywhere from 4 to 8 inches across the Bangor and Downeast region, while Northern Maine and the Maine Central Highlands saw 10 to 18 inches of heavy snow. The second event was on the 21<sup>rd</sup> and 22<sup>nd</sup> with 5 to 10 inches of snow across Northern Maine, while from the Maine Central Highlands on south, trace amounts of snow fell. Snow depths started out from 25 to 36 inches across Northern and Northwest Maine with 6 to 14 inches across the Maine Central Highlands. The Bangor region to the coast were down to trace amounts. By the end of the month, snow depths dropped to a trace in Caribou while up across the northern border and back into the Allagash, snow depths were still around 6 to 10 inches in some locations.

Streamflows across much of the HSA were near normal for March with the exception for the Mattawamkeag River and Piscataquis River basins as flows were above normal.

Groundwater conditions were near normal across the region with the exception of eastern Washington County as groundwater levels were above normal. Calais came in with a monthly reading on High groundwater levels.

In regards to Drought monitoring, the HSA continued to see normal conditions.

**Precipitation Totals for Select Locations with all units in inches**

<b>Location</b>	<b>Total Precip</b>	<b>Normal Precipitation</b>	<b>Departure from Normal</b>	<b>Snowfall</b>	<b>Normal Snowfall</b>	<b>Departure from Normal Snowfall</b>	<b>Greatest Snow Depth</b>
Frenchville	1.44	2.81	-1.37	NA	NA	NA	NA
Caribou	2.83	2.66	+0.17	21.9	7.4	+7.4	23
Houlton	3.31	3.88	-0.57	NA	NA	NA	NA
*Millinocket	3.61	3.56	+0.05	NA	NA	NA	NA
Bangor	4.78	3.62	+1.16	7.8	3.7	+4.1	8

\*Millinocket snowfall measured at wastewater treatment plant, not the ASOS site. Data was not available at this time.

### Stream Flows for Selected Rivers

River	Normal Flow (cfs)	Monthly Mean Flow (cfs)	Monthly Mean (in)	Percentile Class	Drainage (mi <sup>2</sup> )	Years of Record
St. John River at Ninemile Bridge	NA	NA	NA	NA	1341	68
St. John River at Fort Kent	18800 – 35800	29600	5.57	Normal	5929	93
Aroostook River at Washburn	NA	NA	NA	NA	1654	88
Narraguagus River at Cherryfield	934 – 1500	1210	5.95	Normal	227	72
E Br Penobscot River at Grindstone	NA	NA	NA	NA	837	116
Mattawamkeag nr Mattawamkeag	7040 -10400	11800	9.28	Above Normal	1418	85
Piscataquis River nr Dover-Foxcroft	1640 – 2520	2700	10.11	Above Normal	298	117

### 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	17.90 – 16.40	16.69	-0.41	Normal	30
Crooked Road	NA	NA	NA	NA	15
Hadley Lakes	4.18 – 3.45	3.96	+0.28	Normal	34
Kenduskeag	19.10 – 17.80	18.07	-0.23	Normal	42
Calais	0.66 – -0.20	-1.06	-1.40	High	20
Millinocket	9.36 – 7.39	7.55	-0.99	Normal	26
Clayton Lake	12.60 – 10.40	11.70	+0.20	Normal	41
Fort Kent	10.50 – 6.96	7.32	-1.24	Normal	42

Flow or Water Level	Percentile Range	Explanation
Record Low	0 <sup>th</sup>	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 <sup>th</sup> to 10 <sup>th</sup>	The monthly mean streamflow or median water level during this month is less than the 10 <sup>th</sup> percentile when compared to all of the months during the period of record for this site.
Low	10 <sup>th</sup> to 25 <sup>th</sup>	The monthly mean streamflow or median water level during this month is between the 10 <sup>th</sup> and 25 <sup>th</sup> percentiles when compared to all of the months during the period of record for this site.
Normal	25 <sup>th</sup> to 75 <sup>th</sup>	The monthly mean streamflow or median water level during this month is between the 25 <sup>th</sup> and 75 <sup>th</sup> percentiles when compared to all of the months during the period of record for this site.
High	75 <sup>th</sup> to 90 <sup>th</sup>	The monthly mean streamflow or median water level during this month is between the 75 <sup>th</sup> and 90 <sup>th</sup> percentiles when compared to all of the months during the period of record for this site.
Very High	90 <sup>th</sup> to 100 <sup>th</sup>	The monthly mean streamflow or median water level during this month is greater than the 90 <sup>th</sup> percentile when compared to all of the months during the period of record for this site.
Record High	100 <sup>th</sup>	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  
April 2020  
WFO Caribou, ME**

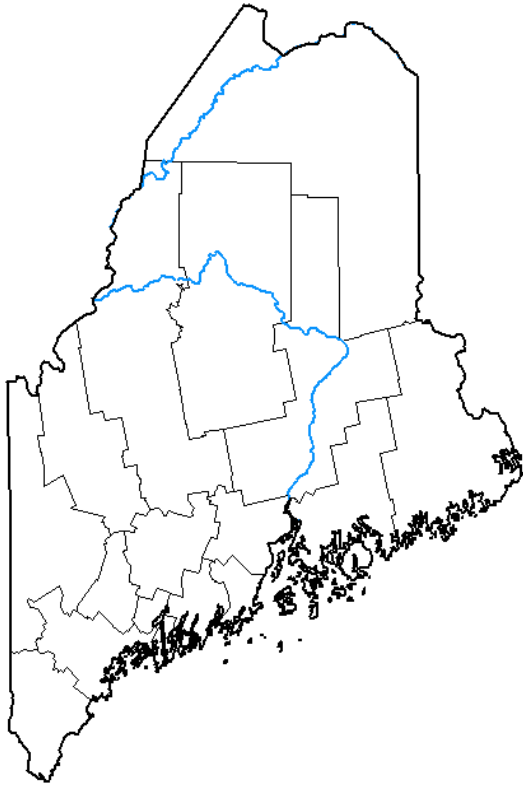
PWMFLSCAR	1149	4/5/20	Areal Flood Advisory for Ice Jam Caribou-Fort Fairfield
PWMFLSCAR	0743	4/6/20	New Areal Flood Advisory for Ice Jam Caribou-Fort Fairfield
PWMFLSCAR	1022	4/7/20	Extended Areal Flood Advisory for Ice Jam Caribou-Fort Fairfield
PWMFLCAR	1957	4/7/20	New Areal Flood Advisory for Ice Jam in Fort Fairfield
PMWFLSCAR	2334	4/7/20	Areal Flood Advisory for Ice Jam near Washburn
PWMFLSCAR	2116	4/8/20	Extended Areal Flood Advisory for Ice Jam near Washburn
PWMFLSCAR	2042	4/9/20	Cancellation of Areal Flood Advisory



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**Drought Conditions for April**

**U.S. Drought Monitor**  
**Maine**



**April 7, 2020**  
(Released Thursday, Apr. 9, 2020)  
Valid 8 a.m. EDT

*Drought Conditions (Percent Area)*

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
<b>Current</b>	100.00	0.00	0.00	0.00	0.00	0.00
<b>Last Week</b> <i>03-31-2020</i>	100.00	0.00	0.00	0.00	0.00	0.00
<b>3 Months Ago</b> <i>01-07-2020</i>	100.00	0.00	0.00	0.00	0.00	0.00
<b>Start of Calendar Year</b> <i>12-31-2019</i>	100.00	0.00	0.00	0.00	0.00	0.00
<b>Start of Water Year</b> <i>10-01-2019</i>	87.45	12.55	0.00	0.00	0.00	0.00
<b>One Year Ago</b> <i>04-09-2019</i>	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:

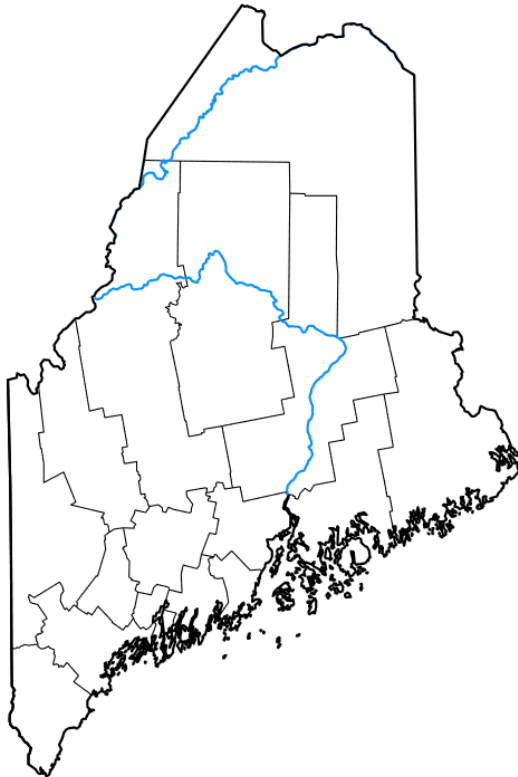
David Simeral  
Western Regional Climate Center



[droughtmonitor.unl.edu](https://droughtmonitor.unl.edu)

# U.S. Drought Monitor Maine

**April 28, 2020**  
(Released Thursday, Apr. 30, 2020)  
Valid 8 a.m. EDT



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
<b>Current</b>	100.00	0.00	0.00	0.00	0.00	0.00
<b>Last Week</b> <i>04-21-2020</i>	100.00	0.00	0.00	0.00	0.00	0.00
<b>3 Months Ago</b> <i>01-28-2020</i>	100.00	0.00	0.00	0.00	0.00	0.00
<b>Start of Calendar Year</b> <i>12-31-2019</i>	100.00	0.00	0.00	0.00	0.00	0.00
<b>Start of Water Year</b> <i>10-01-2019</i>	87.45	12.55	0.00	0.00	0.00	0.00
<b>One Year Ago</b> <i>04-30-2019</i>	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>*

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[droughtmonitor.unl.edu](http://droughtmonitor.unl.edu)