

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            YEAR  
**February        2020**

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  
**March 31st, 2020**

*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.

**February 2020**

No flooding occurred during the month of February.

Ice stayed in place pretty much across the St. John and Aroostook basins with a small jam remaining in place on the Aroostook River in Fort Fairfield. The jam is about a mile long. There some open leads on both rivers. The Fish River was open all the way to the confluence with the St. John River. Across the Piscataquis and Penobscot Rivers, ice was on the rivers with some open channels. The Penobscot River had some ice reform especially north Bangor to Grindstone. Warmer temperatures later in the month allowed the ice break up and move on the Penobscot. The St. Croix Rivers had ice reform, but warmer temperatures allowed for ice breakup. The thickest ice was across the northern rivers such as the Allagash, St. John and Aroostook, with thicknesses of 16 to 24 inches. Across the southern rivers, ice thickness was 5 to 10 inches, except on the Kingsbury Stream in Piscataquis County and on the East Branch of the Penobscot River in Grindstone, where ice thickness was measured at 15 inches.

Temperatures for the month of February were above normal with 1.5 to 3 degrees above normal. Bangor had an average monthly temperature of 24.0 degrees, which was 3.2 degrees above normal. Bangor had a high temperature of 47 degrees on the 24<sup>th</sup> and 25<sup>th</sup>. Bangor recorded its lowest temperature of 11 below back on the 21<sup>st</sup>. Caribou had an average monthly temperature of 16.3 degrees, 2.2 degrees above normal. Caribou had its highest temperature for the month of 47 degrees on the 24<sup>th</sup> and 25<sup>th</sup>. Caribou's lowest temperature for the month was 24 below on the 15<sup>th</sup>. The lowest temperature observed across the region was 36 below at Masardis on the 15<sup>th</sup>.

Precipitation was above normal across most of northern Maine, including the Maine Central Highlands. From Bangor to the coast, precipitation was below normal. Caribou recorded 2.38 inches of precipitation which was 0.17inches above normal. Bangor came in with 1.65 inches of precipitation which was 0.87 inches below normal.

Snowfall for the month of February was above normal across Northern Maine, while from Bangor to the coast, snowfall was below normal. Caribou came in with 33.0 inches of snow, which was 10.8 inches

above normal. Bangor recorded 9.7 inches for the month of February, which was 5.0 inches below normal. The most significant winter storm for the month occurred on the 6<sup>th</sup> into the 7<sup>th</sup> with over 20 inches of snow was observed in spots across Northern Aroostook County. Snowfall amounts dropped off rapidly to the south with less than 6 inches of snow to the south of Millinocket. Another storm came in on the 27<sup>th</sup> that produced 8 to 12 inches of snow from the Katahdin region northward, while less than inch of snow fell from Bangor to the coast. By the end of the month, snow depths ranged from 25 to 35 inches across Northern Maine, with only an inch in Bangor and trace amounts along the coast.

Streamflows across much of the HSA were near normal for February, except for NW Maine as streamflows were above normal.

Groundwater conditions remained at near to slightly above normal levels, especially for Northern Maine and eastern Washington County.

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

### 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	0.92	0.81	+0.11	NA	NA	NA	NA
Caribou	2.38	2.21	+0.17	33.0	22.2	+10.8	30
Houlton	1.62	2.00	-0.38	NA	NA	NA	NA
*Millinocket	2.30	2.18	+0.12	NA	NA	NA	NA
Bangor	1.65	2.52	-0.87	9.7	14.7	-5.0	7

\*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	1540 - 3320	8102	1.48	Much Above Normal	5929	92
Aroostook River at Washburn	NA	NA	NA	NA	1654	88
Narraguagus River at Cherryfield	276 - 639	350	1.66	Normal	227	71
E Br Penobscot River at Grindstone	NA	NA	NA	NA	837	116
Mattawamkeag nr Mattawamkeag	584 – 1980	1020	0.78	Normal	1418	85

Piscataquis River nr Dover-Foxcroft	141 - 343	177	0.64	Normal	298	117
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**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	20.10 – 18.50	18.92	-0.48	Normal	29
Crooked Road	NA	NA	NA	NA	15
Hadley Lakes	5.14 – 4.40	4.84	+0.07	Normal	34
Kenduskeag	22.20 – 20.80	21.47	-0.03	Normal	41
Calais	3.12. – 1.18	0.64	-1.44	Above Normal	20
Millinocket	10.40 – 9.36	10.30	+0.54	Normal	26
Clayton Lake	15.20 – 14.40	14.83	+0.13	Normal	41
Fort Kent	11.60 – 9.42	8.83	-1.87	Above 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.

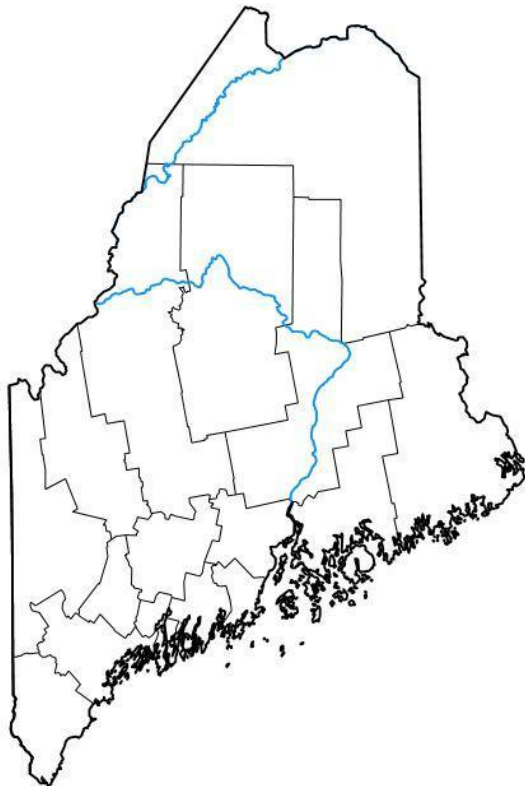




## Drought Conditions for February

February 4th, 2020

### U.S. Drought Monitor Maine



**February 4, 2020**

(Released Thursday, Feb. 6, 2020)

Valid 7 a.m. EST

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> <small>01-28-2020</small>	100.00	0.00	0.00	0.00	0.00	0.00
<b>3 Months Ago</b> <small>11-05-2019</small>	100.00	0.00	0.00	0.00	0.00	0.00
<b>Start of Calendar Year</b> <small>12-31-2019</small>	100.00	0.00	0.00	0.00	0.00	0.00
<b>Start of Water Year</b> <small>10-01-2019</small>	87.45	12.55	0.00	0.00	0.00	0.00
<b>One Year Ago</b> <small>02-05-2019</small>	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:

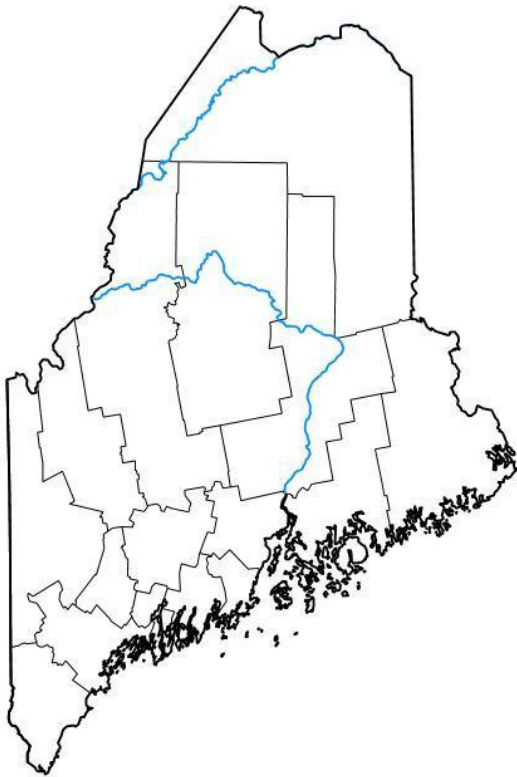
Richard Tinker  
CPC/NOAA/NWS/NCEP



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

February 25<sup>th</sup>, 2020

## U.S. Drought Monitor Maine



**February 25, 2020**

(Released Thursday, Feb. 27, 2020)

Valid 7 a.m. EST

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>02-18-2020</i>	100.00	0.00	0.00	0.00	0.00	0.00
<b>3 Months Ago</b> <i>11-26-2019</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>02-26-2019</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](https://droughtmonitor.unl.edu)