

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 January 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 February 25th, 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.

January 2020

No flooding occurred during the month of January.

Ice stayed in place pretty much across the St. John and Aroostook basins with a small jam in place on the Aroostook River in Fort Fairfield. The jam had broken up some and was now about a mile long. There some open leads on both rivers. The Fish River was open for the most part w/some ice. Across the Piscataquis and Penobscot Rivers, ice was on the rivers with some open channels. Ice had flushed out the Penobscot and St. Croix Rivers during the middle part of the month, but reformed by later in the month, especially across the northern reaches of both rivers. 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 less than a foot, 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 January were above normal for the month with an average of 6 to 8 degrees above normal. Bangor came in with an average temperature 23.4 degrees, which was 6.4 degrees above normal. Bangor set a record high temperature of 55 degrees on the 11th, which broke the previous record of 52 degrees set in 1983. January was the 13th mildest for Bangor since 1926. Caribou had an average monthly temperature of 16.6 degrees, which was 6.3 degrees above normal. Caribou had the 9th warmest January since 1940. Millinocket had an average temperature of 22.1 inches, which was 8.1 inches above normal. It was the 7th mildest January in Millinocket. In Houlton, it was the 11th mildest January since 1949.

Precipitation overall was below normal for the HSA with the exception of Northeast Aroostook County where precipitation was above normal. Caribou came in 3.18 inches of precipitation, which was 0.47 inches above normal. Bangor recorded 2.42 inches of precipitation, which was 0.47 inches below normal.

Snowfall for the month of January was above normal across Northern Maine, while across Maine Central Highlands to the coast, snowfall was below normal. Caribou came in with 31.5 inches of snow for the month of January, which was 6.3 inches above normal. Bangor recorded 9.6 inches of snow for the month, which was 9.6 inches below normal. A storm system moved across the region with up to a foot of snow recorded from Caribou to the Maine-Canadian border. The Bangor region to the coast received rain, as temperatures warmed into the 40s and 50s. This event wiped out the snowpack, especially for the Bangor and Downeast region. Another storm came in on 18th and 19th which produced a more widespread snowfall and helped to replenish the snowpack. This was short lived as temperatures rebounded by late in the month. These warmer temperatures reduced the snowpack down to an inch or less from Bangor to the coast. Snow depths by the end of the month ranged from 16-24 inches from Caribou-Presque Isle to the Crown of Maine. Across the Maine Central Highlands, snow depths averaged 5 to 10 inches, while from Bangor to the coast, just a trace of snow was on the ground by the end of the month. Snow depths were near normal across Northern and Northwest Maine, while from the Maine Central Highlands to the coast, snow depths were below normal.

Streamflows across much of the HSA were near normal for January.

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	1.67	1.76	-0.09	NA	NA	NA	NA
Caribou	3.18	2.71	+0.47	31.5	25.2	+6.3	21
Houlton	1.95	2.86	-0.91	NA	NA	NA	NA
*Millinocket	2.23	2.93	-0.70	NA	NA	NA	NA
Bangor	2.42	2.89	-0.47	9.6	19.2	-9.6	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 ²)	Years of Record
St. John River at Ninemile Bridge	NA	NA	NA	NA	1341	68
St. John River at Fort Kent	NA	NA	NA	NA	5929	92
Aroostook River at Washburn	NA	NA	NA	NA	1654	88

Narraguagus River at Cherryfield	337 - 715	493	2.50	Normal	227	71
E Br Penobscot River at Grindstone	NA	NA	NA	NA	837	116
Mattawamkeag nr Mattawamkeag	882 – 2080	1430	1.16	Normal	1418	85
Piscataquis River nr Dover-Foxcroft	185 - 430	344	1.33	Normal	298	117

Groundwater Levels

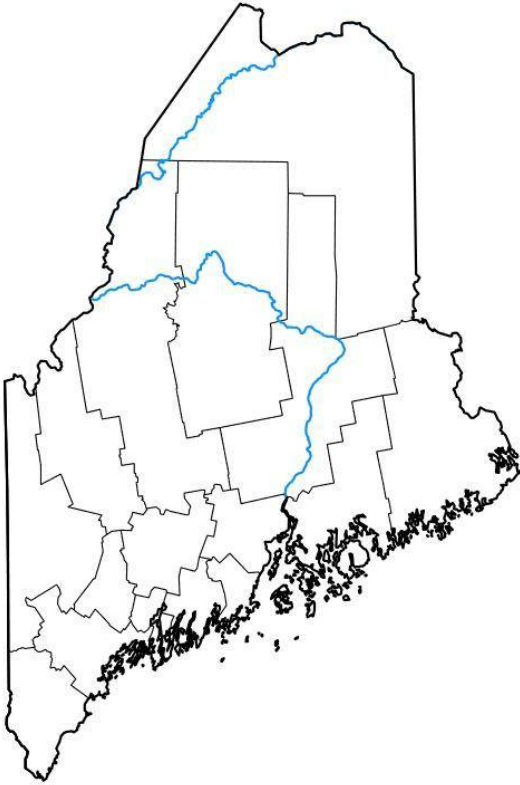
Station	Normal Range (ft)	Mean Water Level Below Land-sfc Datum (ft)	Departure from Month-end Median (ft)	Percentile Class	Years of Record
Amherst	18.90 – 17.80	18.12	-0.38	Normal	29
Crooked Road	5.15 – 4.28	4.43	-0.22	Normal	15
Hadley Lakes	5.16 – 4.36	4.08	-0.59	Normal	34
Kenduskeag	22.40 – 20.30	20.48	-0.52	Normal	41
Calais	2.56 – 0.86	0.64	-0.74	Above Normal	20
Millinocket	10.60 – 8.93	9.99	+0.54	Normal	26
Clayton Lake	14.90 – 13.90	14.61	+0.11	Normal	41
Fort Kent	11.70 – 8.74	8.09	-1.76	Above Normal	42

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.

Drought Conditions for January

January 7th, 2020

U.S. Drought Monitor Maine



January 7, 2020
(Released Thursday, Jan. 9, 2020)
Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	100.00	0.00	0.00	0.00	0.00	0.00
Last Week 12-31-2019	100.00	0.00	0.00	0.00	0.00	0.00
3 Months Ago 10-08-2019	93.38	6.62	0.00	0.00	0.00	0.00
Start of Calendar Year 12-31-2019	100.00	0.00	0.00	0.00	0.00	0.00
Start of Water Year 10-01-2019	87.45	12.55	0.00	0.00	0.00	0.00
One Year Ago 01-08-2019	94.48	5.52	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:

Curtis Riganti
National Drought Mitigation Center

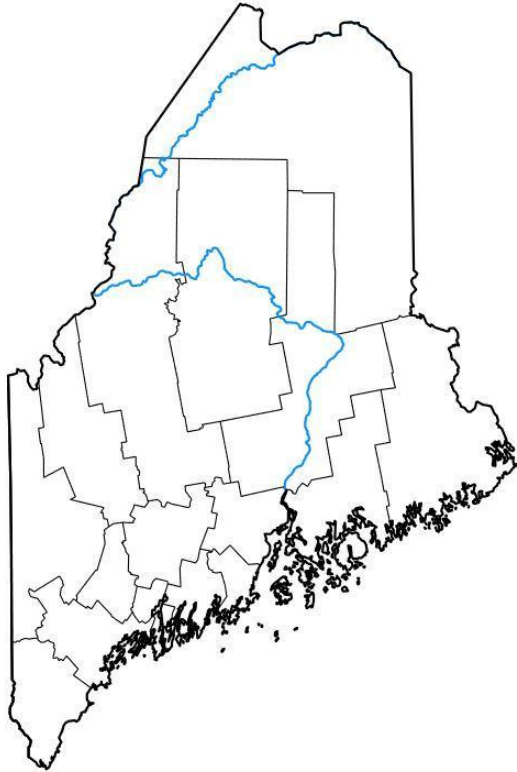


droughtmonitor.unl.edu

January 28th, 2020

U.S. Drought Monitor
Maine

January 28, 2020
(Released Thursday, Jan. 30, 2020)
Valid 7 a.m. EST



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	100.00	0.00	0.00	0.00	0.00	0.00
Last Week <i>01-21-2020</i>	100.00	0.00	0.00	0.00	0.00	0.00
3 Months Ago <i>10-29-2019</i>	93.21	6.79	0.00	0.00	0.00	0.00
Start of Calendar Year <i>12-31-2019</i>	100.00	0.00	0.00	0.00	0.00	0.00
Start of Water Year <i>10-01-2019</i>	87.45	12.55	0.00	0.00	0.00	0.00
One Year Ago <i>01-29-2019</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

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Author:

Richard Heim
NCEI/NOAA



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