

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 2018

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 15, 2018

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 2018

January 2018 finished with average temperatures slightly above normal. The exception was the Saint John Valley and Northwest Maine where average temperatures were near normal. Temperatures across the region ranged from 1.5 to 2.5 degrees above average the month of January. The month started out with the arctic airmass in place. A major warmup occurred from the 11th to the 13th with temperatures running well above average. Temperatures the rest of the way alternated from below to above freezing(32F). The coldest temperatures of the month occurred during the first week of January with readings getting down to around -30 F in the Northwest region. The warmest high temperature was on the 12th with many locations hitting 50F or warmer, especially along the eastern locations.

In regards to precipitation, precipitation was above normal across the entire HSA with the exception of NW Aroostook County as precipitation was slightly below normal. As a matter of fact, some sites such as Caribou and Bangor had precipitation amounts for January greater than 2.50 inches above normal. This precipitation helped bring all areas above normal for ground water conditions. The exception to this was NW Aroostook County as ground water conditions were near normal. Some sites across the Downeast region such as Penobscot and Hancock County saw near record high readings for January.

A series of storms brought more abundant snowfall to the region from the Bangor region northward to the Maine-Quebec border. Caribou recorded 38.9 inches of snow for the month. This was 13.7 inches above normal for January. Bangor came in with 30.1 inches for the month which was 10.9 inches above normal for the month. Snow depths by the end of the month ranged from 15 to 22 inches across the Central Highlands and the Penobscot River Valley to 24 to 30 inches for Northern Maine including the Allagash region with a few sites closing in near 34 inches. The Downeast coastal region had a snow depth of 5 to 10 inches.

Snow and ice covered about 95% of the rivers and streams in the HSA. Ice thicknesses averaged from 12-20 inches on the rivers in the HSA. Some flooding did occur during the month of January. Heavy rainfall and temperatures in the 50s on the 12th and 13th allowed for some flooding in portions Hancock and Washington County. An areal flood warning was issued. Ice jams set up on the Kenduskeag Stream in Bangor and on the Penobscot River near Eddington. The ice did cause the gage to spike above FS(18.0 feet) for a brief period at Eddington(EDDM1) on the 14th. A River Flood Warning was issued.

No flooding issues were reported however from this jam. Other ice jams set up on the Piscataquis River near Blanchard and on the Pleasant River in Milo in Piscataquis County.

Precipitation Totals for Select Locations

All units inches

Location	Total Precip	Normal Precipitation	Departure from Normal	Snowfall	Normal Snowfall	Departure from Normal Snowfall	Greatest Snow Depth
Frenchville	1.89	2.54	-0.65	NA	NA	NA	NA
Caribou	4.12	3.27	+0.85	34.2	22.9	11.3	19
Houlton	3.24	3.29	-0.05	NA	NA	NA	NA
Millinocket	2.68	3.53	-0.85	NA	NA	NA	NA
Bangor	3.83	3.48	0.35	27.7	14.2	13.3	16

*Millinocket snowfall measured at wastewater treatment plant, not the ASOS site

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	67
St. John River at Fort Kent	2200 – 4470	2990	0.58	Normal	5665	91
Aroostook River at Washburn	NA	NA	NA	NA	1654	87
Narraguagus River at Cherryfield	332 – 690	2330	6.25	Record High	227	69
E Br Penobscot River at Grindstone	NA	NA	NA	NA	837	115
Mattawamkeag nr Mattawamkeag	868 – 2070	2530	2036	High	1418	83
Piscataquis River nr Dover-Foxcroft	183 – 426	759	2.94	Very High	298	115

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
McFarland Hill	4.31 – 0.63	0.84	-1.91	Normal	13
Crooked Road	5.44 – 5.11	4.98	-0.19	High	13
Hadley Lakes	5.21 – 4.37	3.70	-1.00	Record High	30
Kenduskeag	22.40 – 20.30	19.07	-2.03	Record High	37

Calais	2.75 – 1.09	0.62	-1.03	High	16
Millinocket	10.50 – 8.87	9.46	0.06	Normal	22
Clayton Lake	14.90 – 13.90	13.87	-0.73	High	37
Fort Kent	11.80 – 8.75	9.06	-1.04	Normal	38

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
December 2017
WFO Caribou, ME**

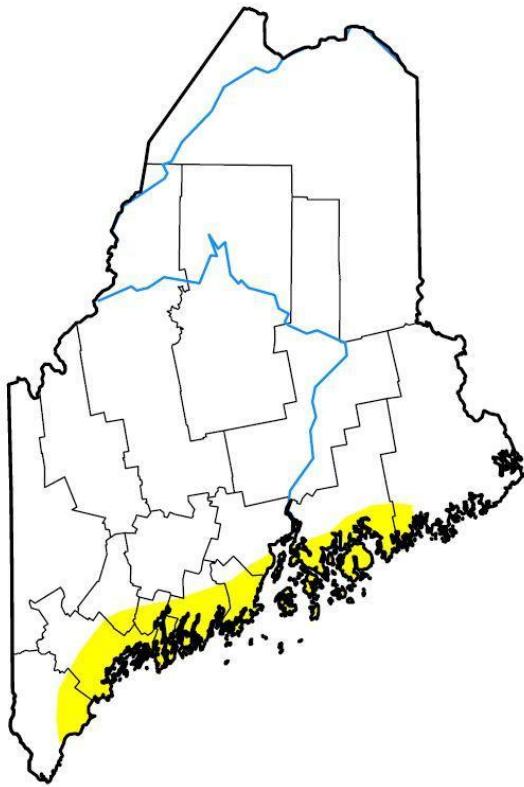
PIL	TIME (UTC)	Date	Description
PWMFLWCAR	1238Z	1/13/18	Areal Flood Warning for Hancock and Washington County

**Significant River Crests
December 2017
WFO Caribou, ME**

Location	ID	Date	Time (UTC)	Crest Stage (ft)	Flood Stage (ft)
Eddington	EDDM1	1/14/2018	2015	18.02	18.0

Drought Monitor for January 2, 2018

U.S. Drought Monitor Maine



January 2, 2018
(Released Thursday, Jan. 4, 2018)
Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	92.38	7.62	0.00	0.00	0.00	0.00
Last Week <i>12-26-2017</i>	92.38	7.62	0.00	0.00	0.00	0.00
3 Months Ago <i>10-03-2017</i>	12.94	87.06	24.62	0.00	0.00	0.00
Start of Calendar Year <i>01-02-2018</i>	92.38	7.62	0.00	0.00	0.00	0.00
Start of Water Year <i>09-26-2017</i>	57.81	42.19	24.62	0.00	0.00	0.00
One Year Ago <i>01-03-2017</i>	23.74	76.26	62.91	0.57	0.00	0.00

Intensity:

- 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. See accompanying text summary for forecast statements.

Author:

Eric Luebehusen
U.S. Department of Agriculture

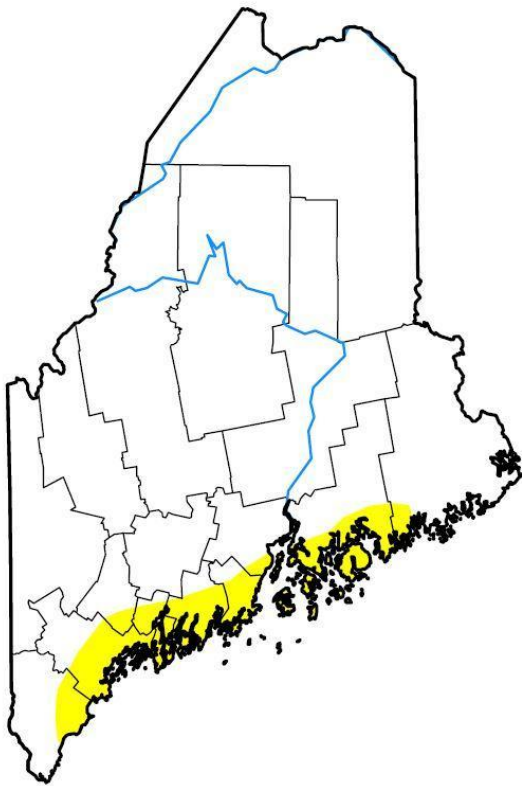


<http://droughtmonitor.unl.edu/>

Drought Monitor for January 30, 2018

U.S. Drought Monitor Maine

January 30, 2018
(Released Thursday, Feb. 1, 2018)
Valid 7 a.m. EST



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	92.38	7.62	0.00	0.00	0.00	0.00
Last Week <i>01-23-2018</i>	92.38	7.62	0.00	0.00	0.00	0.00
3 Months Ago <i>10-31-2017</i>	75.21	24.79	0.00	0.00	0.00	0.00
Start of Calendar Year <i>01-02-2018</i>	92.38	7.62	0.00	0.00	0.00	0.00
Start of Water Year <i>09-26-2017</i>	57.81	42.19	24.62	0.00	0.00	0.00
One Year Ago <i>01-31-2017</i>	28.13	71.87	38.02	0.57	0.00	0.00

Intensity:

- 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. See accompanying text summary for forecast statements.

Author:

Richard Heim
NCEI/NOAA



<http://droughtmonitor.unl.edu/>