

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 August 2017
		SIGNATURE Maureen Hastings, HPM
TO: Hydrologic Information Center, W/OS31 NOAA's National Weather Service 1325 East West Highway Silver Spring, MD 20910-3283		DATE September 9, 2017

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.

August 2017

The dry summer continued through August as much of Caribou's HSA saw rainfall totals that averaged 25 to 70 percent of normal. As such, monthly-averaged river flows were in the 25th percentile or less, with some locations reporting near record lows. The short-term drought conditions worsened, particularly along and south of I-95. See the Drought Monitor graphics at the end of this report.

Although the month was on average very dry, there were a couple of heavy rain events, mainly early in the month. On August 3rd through 5th, a cold front stalled across the region. This combined with PWATs up to 1.50 inches allowed for training thunderstorms that produced rainfall amounts of 2 to 4 inches of rain across portions of the Central Highlands. Flash Flood Warnings were issued on the 3rd, and some flooding was reported in rural parts of Penobscot County, where a campground lodge reported water in their basement. Some minor flooding was also reported in rural Piscataquis County, where a few inches of running water spread into a local gift shop. Flood Advisories were issued for the same general late on the 4th, when 2 to 3 inches of rain fell, but no flooding was reported.

Outside of this frontal passage, any other rain events were minor. Another cold front, this one more progressive, brought a quarter to a half an inch of rain on the 15th, while another on the 18th brought additional spotty convection. Overall, many locations totaled less than 3 inches of rain through the month, with some spots seeing less than 2 inches. As would be expected, river levels were very low, so while some rises were seen on the heavier rainfall events, the mainstem rivers remained well within their banks.

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	1.91	4.00	-2.09				
Caribou	2.28	3.76	-1.48				
Houlton	2.88	3.68	-0.80				
Millinocket	1.14	3.94	-2.80				
Bangor	1.64	2.98	-1.34				

*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 Precip (in)	Percentile Class	Drainage (mi ²)	Years of Record
St. John River at Ninemile Bridge	420 – 2070	280	0.24	Low	1341	67
St. John River at Fort Kent	2250 – 6120	1380	0.27	Very Low	5665	91
Aroostook River at Washburn	435 – 1240	310	0.22	Very Low	1654	87
Narraguagus River at Cherryfield	63.9 – 182	4.28	0.22	Very Low	227	69
E Br Penobscot River at Grindstone	561 – 1060	546	0.75	Low	837	115
Mattawamkeag nr Mattawamkeag	264 – 990	87.8	0.07	Very Low	1418	83
Piscataquis River nr Dover-Foxcroft	61.2 – 201	39.9	0.15	Low	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	23.90 – 14.10	22.57	2.37	Normal	13
Crooked Road	7.01 – 5.88	7.42	0.97	Very Low	13
Hadley Lakes	5.89 – 5.46	5.88	0.15	Normal	30
Kenduskeag	24.30 – 23.20	24.04	0.24	Normal	37
Calais	4.03 – 2.26	3.32	0.15	Normal	16
Millinocket	10.40 – 9.36	10.12	0.22	Normal	22

Clayton Lake	16.30 – 15.20	16.38	0.57	Low	37
Fort Kent	11.20 – 8.32	9.56	-0.24	Normal	38

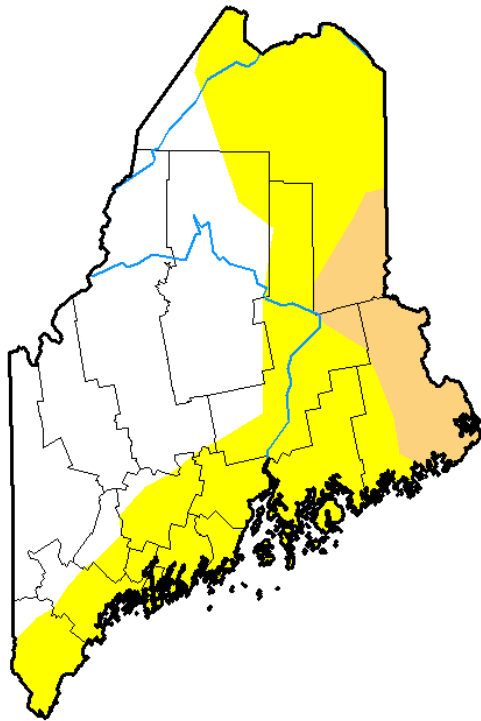
Flow or Water Level	Percentile Range	Explanation
Record Low	0 th	The monthly mean streamflow or median water level during this month is the lowest ever recorded during the period of record for this site.
Very Low	0 th to 10 th	The monthly mean streamflow or median water level during this month is less 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
August 2017
WFO Caribou, ME**

PIL	TIME (UTC)	Date	Description
FLSCAR	1738	8/3/17	Small Stream Flood Advisory for E Central Piscataquis and Central Penobscot Counties
FLSCAR	1742	8/3/17	Small Stream Flood Advisory for N Central Penobscot County
FFWCAR	1827	8/3/17	Flash Flood Warning for N Central Penobscot County
FLSCAR	1844	8/3/17	Flood Advisory for SW Piscataquis County
FLSCAR	1851	8/3/17	Continue Small Stream Flood Advisory for E Central and C Penobscot Counties
FFWCAR	1905	8/3/17	Flash Flood Warning for SW Piscataquis County
FLSCAR	1921	8/3/17	Small Stream Flood Advisory for E Central Piscataquis County
FFSCAR	2006	8/3/17	Continue Flash Flood Warning for N Central Penobscot County
FLSCAR	2022	8/3/17	Small Stream Flood Advisory for E Central Piscataquis and Central Penobscot Counties
FFSCAR	2027	8/3/17	Continue Flash Flood Warning for SW Piscataquis County
FLSCAR	2106	8/3/17	Continue Small Stream Flood Advisory for E Central Piscataquis County
FFSCAR	2156	8/3/17	Cancel Flash Flood Warning for SW Piscataquis County
FFSCAR	2350	8/3/17	Cancel Flash Flood Warning for N Central Penobscot County
FLSCAR	0252	8/6/17	Small Stream Flood Advisory for E Central Piscataquis and N Central Penobscot Counties
FLSCAR	0336	8/6/17	Continue Small Stream Flood Advisory for E Central Piscataquis and N Central Penobscot Counties

Drought Monitor for August 1, 2017

U.S. Drought Monitor Maine



August 1, 2017

(Released Thursday, Aug. 3, 2017)

Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	43.36	56.64	9.82	0.00	0.00	0.00
Last Week 07-25-2017	63.93	36.07	0.00	0.00	0.00	0.00
3 Months Ago 05-02-2017	92.04	7.96	0.00	0.00	0.00	0.00
Start of Calendar Year 01-03-2017	23.74	76.26	62.91	0.57	0.00	0.00
Start of Water Year 09-27-2016	42.23	57.77	40.81	26.75	8.35	0.00
One Year Ago 08-02-2016	53.40	46.60	11.55	2.68	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:

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