

WFO Caribou, Maine

MONTHLY REPORT OF HYDROLOGIC CONDITIONS

REPORT FOR:
MONTH YEAR
June 2017

TO: Hydrologic Information Center, W/OS31
NOAA's National Weather Service
1325 East West Highway
Silver Spring, MD 20910-3283

SIGNATURE
Maureen Hastings, HPM

DATE
July 17, 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.

June 2017

Most climate locations across Caribou's HSA ended up having a wetter than normal June. As one would expect from summer convection though, there was really no discernable pattern of rainfall across the state due to the day to day variability in showers and thunderstorms. Overall, though, the month started dry and finished wet, with most locations seeing the bulk of their monthly rainfall in the last 2 weeks of the month. Persistent upper troughiness was the driver of this wet pattern for the last half of the month.

The most significant rainfall event occurred on June 19th. Moisture surged northward into the state ahead of a slow-moving cold front; precipitable waters exceeded 2 inches in places. A Flash Flood Watch was issued prior to the event, and several Flash Flood Warnings and Flood Advisories were issued during the afternoon and evening of the 19th. Some flooding was noted, mainly in Aroostook County, where water came up over a three roads in the Saint Agatha/Guerette/Eagle Lake areas. These were mainly due to runoff from heavy rainfall flowing out of potato fields, and culverts becoming overwhelmed. Rainfall totals for the day of 1 to 2 inches were common, with locally higher amounts. Millinocket received 1.46 inches of rain on the 19th, which set a new record daily rainfall for the date.

Mainstem rivers and streams were rather low through the first part of the month owing to the dry weather. Therefore, although some rises were seen during the last half of the month, mainstem waterways remained well within their banks.

River flows averaged near normal in most locations, though a few gages were below normal. Groundwater wells mainly averaged near normal, though some sites varied from above to below normal.

Precipitation Totals for Select Locations
All units inches

Location	Total Precip	Normal Precipitation	Departure from Normal	Snowfall	Normal Snowfall	Departure from	Greatest Snow Depth
----------	--------------	----------------------	-----------------------	----------	-----------------	----------------	---------------------

						Normal Snowfall	
Frenchville	5.84	3.85	+1.99				
Caribou	4.39	3.48	+0.91				
Houlton	2.92	3.65	-0.73				
Millinocket	6.16	4.07	+2.09				
Bangor	4.32	3.76	+0.56				

*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 (mi²)	Years of Record
St. John River at Ninemile Bridge	1320 – 2860	1420	1.18	Normal	1341	67
St. John River at Fort Kent	7630 – 126000	6900	1.30	Low	5665	91
Aroostook River at Washburn	1420 – 3200	1470	0.99	Normal	1654	87
Narraguagus River at Cherryfield	208 – 492	212	1.04	Normal	227	69
E Br Penobscot River at Grindstone	1310 – 2920	1440	1.92	Normal	837	115
Mattawamkeag nr Mattawamkeag	1090 – 2660	1210	0.95	Normal	1418	83
Piscataquis River nr Dover-Foxcroft	243 – 638	302	1.13	Normal	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	12.60 – 3.53	7.76	-2.74	Normal	13
Crooked Road	6.15 – 5.10	5.81	0.11	Normal	13
Hadley Lakes	5.04 – 4.31	4.23	-0.47	High	30
Kenduskeag	22.20 – 20.30	20.89	-0.42	Normal	37
Calais	2.57 – 0.85	1.73	-0.14	Normal	16
Millinocket	9.20 – 8.15	7.94	-0.42	High	22
Clayton Lake	15.40 – 13.90	15.41	0.81	Low	37
Fort Kent	7.83 – 5.78	5.98	-0.69	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
June 2017
WFO Caribou, ME**

PIL	TIME (UTC)	Date	Description
FFACAR	0703	6/18/17	Flash Flood Watch issued for Aroostook, Penobscot, Piscataquis, N Washington and N Somerset Counties
FFACAR	1248	6/18/17	Continue Flash Flood Watch
FFACAR	1916	6/18/17	Continue Flash Flood Watch
FFACAR	2224	6/18/17	Continue Flash Flood Watch
FFACAR	0120	6/19/17	Continue Flash Flood Watch
FFACAR	0703	6/19/17	Continue Flash Flood Watch
FFACAR	1851	6/19/17	Extend Flash Flood Watch in time
FFWCAR	1940	6/19/17	Flash Flood Warning for SW Piscataquis County
FFSCAR	2057	6/19/17	Continue Flash Flood Warning
FLSCAR	2110	6/19/17	Flood Advisory for SE Piscataquis and Central Penobscot Counties
FLSCAR	2145	6/19/17	Flood Advisory for Minor Flooding in Poor Drainage Areas for NW Piscataquis, W Central Aroostook, and N Somerset Counties
FLSCAR	2159	6/19/17	Flood Advisory for N Central Aroostook County
FFACAR	2204	6/19/17	Continue Flash Flood Watch
FFWCAR	2223	6/19/17	Extend Flash Flood Warning for SW Piscataquis County
FFSCAR	2322	6/19/17	Continue Flash Flood Warning for N Central Aroostook County
FLSCAR	0021	6/20/17	Cancel Flood Advisory for NW Piscataquis, W Central, and N Somerset Counties
FFSCAR	0115	6/20/17	Cancel Flash Flood Warning for N Central Aroostook County
FFACAR	0117	6/20/17	Continue Flash Flood Watch
FFSCAR	0212	6/20/17	Expire Flash Flood Warning for SW Piscataquis County
FFACAR	2000	6/20/17	Continue Flash Flood Watch
FFACAR	2203	6/20/17	Expire Flash Flood Watch

