

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
TO: Hydrologic Information Center, W/OS31 NOAA's National Weather Service 1325 East West Highway Silver Spring, MD 20910-3283		REPORT FOR: MONTH YEAR March 2017
		SIGNATURE Maureen Hastings, HPM
		DATE April 8, 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.

March 2017

While March finished with below normal precipitation across much of northern, central, and Downeast Maine, snowfall was actually above normal, although not by much. Temperatures were, on average, 4 to 6 degrees colder than normal, which likely played into the higher snowfall.

The first part of the month, in particular, was very cold. The coldest stretch occurred March 10th through the 12th, when overnight lows dropped below zero in most locations. Many northern spots didn't get above zero on the 11th. This cold weather actually allowed river ice to strengthen and redevelop after the mild end to February, when some ice movement was noted, even in the far north. The cold also impacted the snowpack; after February's warmth, snowmelt, and rain and sleet, the bitterly cold air froze the pack very solid indeed. Snow water contents of 7 to 11 inches were common through the end of the month, with isolated amounts of a foot or more. The highest SWEs were seen in the higher elevations of the Central Highlands.

The cold snap mentioned above was followed by the month's really only truly significant snow event, when the area was blanketed with 8 to 18 inches of snow. The greatest snow amounts fell across the North Woods. The snowpack grew by several inches across the state from this event. Northern areas maintained their pack through the end of the month, and even added to it with a moderate snow event (4-10 inches) on the 27th and 28th. More southern sites, though, gradually lost the pack; Bangor went from a peak snow depth of 14 inches on the 15th to 3 inches on the 31st.

Overall, river flows average near to above normal for the month. No flooding was observed.

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	1.57	1.48	+0.09				
Caribou	2.72	2.51	+0.21	23.6	18.3	+5.3	29
Houlton	1.53	2.59	-1.06				
Millinocket	1.58	3.06	-1.48	17.2			23
Bangor	2.07	3.38	-1.31	17.0	5.3	+6.0	14

*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					1341	67
St. John River at Fort Kent	1620 – 4450	7010	1.36	High	5665	91
Aroostook River at Washburn					1654	87
Narraguagus River at Cherryfield	478 – 1000	536	2.72	Normal	227	69
E Br Penobscot River at Grindstone					837	115
Mattawamkeag nr Mattawamkeag	954 – 2820	3630	2.95	High	1418	83
Piscataquis River nr Dover-Foxcroft	262 – 776	469	1.81	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	7052 – 0.04	2.51	0.37	Normal	13
Crooked Road	5.73 – 4.85	5.28	-0.06	Normal	13
Hadley Lakes	4.95 – 4.13	4.37	-0.23	Normal	30
Kenduskeag	22.50 – 19.40	19.31	-1.59	High	37
Calais	1.69 – 0.59	1.49	0.29	Normal	16
Millinocket	10.40 – 9.44	10.57	0.65	Low	22

Clayton Lake	15.40 – 13.60	13.72	-0.48	Normal	37
Fort Kent	12.80 – 10.00	9.49	-1.71	High	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.

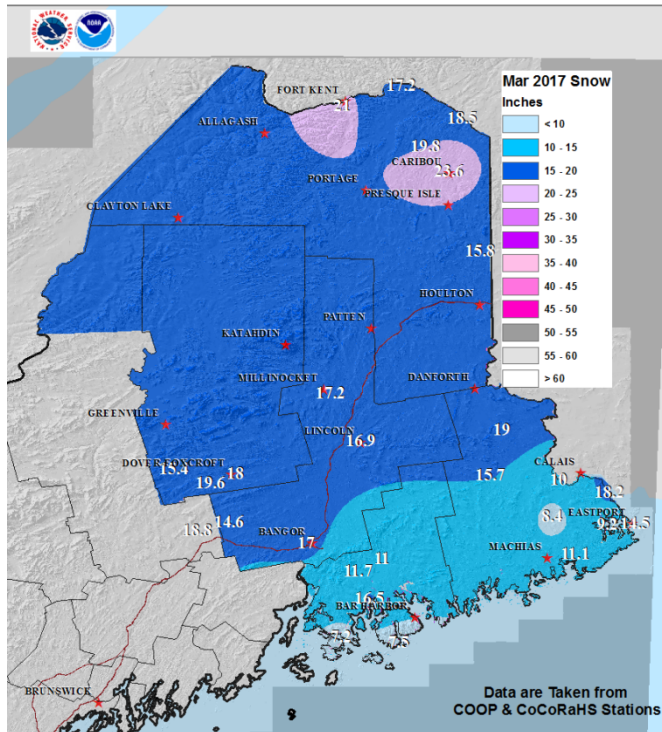
**Non-Routine Hydrologic Products
March 2017
WFO Caribou, ME**

PIL	TIME (UTC)	Date	Description

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

Location	ID	Date	Time (UTC)	Crest Stage (ft)	Flood Stage (ft)

March 2017 Observed Snowfall



March 2017 Snowfall Departure from Average

