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 **February** YEAR **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 **March 30, 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).

X	An X inside this box indicates that no flooding occurred within this hydrologic service area.

February 2017

Although February ended up averaging warmer than normal with near normal precipitation, it really was a tale of two months; the first half was cold and snowy while the second was much milder and rainy. The first two weeks of February averaged about eight degrees colder than normal, while the second half was around 12 degrees warmer than normal. The weather pattern remained fairly active during this period, allowing for near normal precipitation. However, the Bangor region and Downeast Maine were hit particularly hard with a couple of back-to-back snowstorms, resulting in well above normal snowfall for the month.

The first half of the month was characterized by a more southern storm track, allowing much of the precipitation to fall as snow with each event. Bangor's snow depth increased from just a trace to start February to peak at 31 inches on the 14th. Heading into the latter half of the month, though, temperatures soared and much of this snowpack was lost; Bangor was down to 1 inch of snow by the 28th. Storms tracked further north, allowing precipitation to fall as rain as far north as the Saint John Valley. Even more northern locations lost a good chunk of their snowpack; Caribou saw its snow depth decrease almost a foot by the end of the month.

This influx of snowmelt and liquid precipitation served to increase river flows. There was ice movement on the central waterways, such as the Piscataquis River, during the last few days of the month. A small ice jam formed on the Piscataquis River just below the Blanchard gage, but no flooding resulted. Meanwhile, even the upper Saint John River saw a bit of ice breakup by very late in the month into early March. This, too, formed a small ice jam in the St Francis/Allagash region, but no flooding was seen. Both these jams likely froze in place as it turned quite cold shortly after they formed.

Overall, river flows averaged near normal through the month as did groundwater, with just a few isolated exceptions.

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	0.90	0.81	+0.09				
Caribou	2.17	2.21	-0.04	15.8	22.2	-6.4	31
Houlton	1.62	2.00	-0.38				
Millinocket	2.28	2.18	+0.10	27.7			39
Bangor	2.26	2.52	-0.26	37.4	14.7	+22.7	31

*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	1480 – 3100	2690	0.47	Normal	5665	91
Aroostook River at Washburn					1654	87
Narraguagus River at Cherryfield	256 – 636	393	1.80	Normal	227	69
E Br Penobscot River at Grindstone					837	115
Mattawamkeag nr Mattawamkeag	578 – 1890	1550	1.14	Normal	1418	83
Piscataquis River nr Dover-Foxcroft	140 – 329	513	1.79	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	11.60 – 3.19	4.72	-1.33	Normal	13
Crooked Road	6.03 – 5.32	5.46	-0.19	Normal	13
Hadley Lakes	5.17 – 4.49	4.75	-0.05	Normal	30
Kenduskeag	22.30 – 20.80	20.57	-0.94	High	37
Calais	3.44 – 1.34	2.24	-0.09	Normal	16

Millinocket	10.40 – 9.26	11.22	1.39	Low	22
Clayton Lake	15.20 – 14.40	14.75	0.05	Normal	37
Fort Kent	11.80 – 9.44	9.99	-0.71	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.

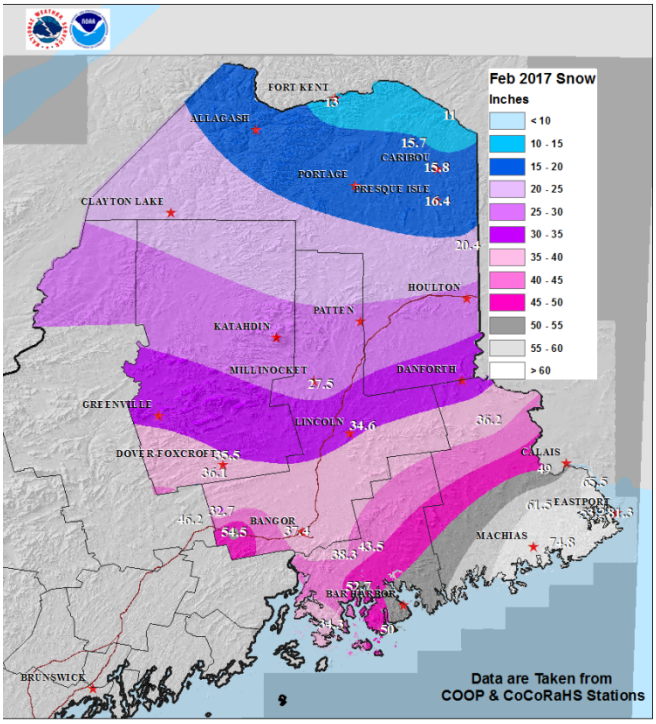
Non-Routine Hydrologic Products
February 2017
WFO Caribou, ME

PIL	TIME (UTC)	Date	Description

Significant River Crests
February 2017
WFO Caribou, ME

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

February 2017 Observed Snowfall



February 2017 Snowfall Departure from Average