

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 May 2018
		SIGNATURE Joseph Hewitt, HPM
TO: Hydrologic Information Center, W/OS31 NOAA's National Weather Service 1325 East West Highway Silver Spring, MD 20910-3283		DATE June 29, 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.

May 2018

May 2018 finished with average temperatures above normal. Temperatures across the region ranged from 1 to 3.5 degrees above normal. The warmest day came on May 31st across northern and central areas as a number of locations came in with 90 degrees. Caribou had a high temperature of 87 degrees on the 31st. The Downeast and Bangor region had their warmest temperatures on the 25th with temperatures climbing into the mid and upper 80s. Bangor recorded a high temperature of 86 degrees on the 25th.

In regards to precipitation, precipitation was below normal for the entire HSA. Caribou recorded 2.33 inches of precipitation which was 1 inch below normal. Bangor came in with 2.37 inches which was 1.27 inches below. This was quite a change from the previous month of April where precipitation was well above normal.

Overall, groundwater conditions were near normal for the entire HSA with a few sites such as the Fort Kent region and central Washington County were slightly above normal. Streamflows were near or slightly above normal due in part to the heavy rainfall that occurred in late April and snowmelt in early May across northern and western Aroostook County.

Flooding continued into the month of May with significant flooding up in Northern Aroostook County main focus on the Fish River in Fort Kent. More on this below. The Mattawamkeag River remained in flood hitting 15.6 feet and then falling below flood stage(13.5 feet) on May 5th. Some roads were flooded and closed due to the high water.

Across Northern Aroostook County, the Big Black River at Big Black dropped below flood stage early in the morning on May 1st as ice pushed out of the river basin. The St. John River at Fort Kent also dropped below flood stage on May 1st. Attention turned to the Fish River in Fort Kent which hit Moderate Flood stage of 12.0 ft(Minor Flood Stage is 11.0 feet). This led to roads flooded and some of being damaged and closed. Some homes in Soldier Pond had water damage. The chain of lakes region lining along the Fish River region had some issues, especially on Portage Lake and Long Lake as lake levels rose and overflowed leading to some flooding of camps and even year round residences. A Flood Advisory was upgraded to an Areal Flood Warning to cover this situation. Ice on these lakes became an

Issue as ice broke up and moved. A number of homes and camps were damaged due to the ice coming on shore. Ice thickness on the lakes was 36-42 inches. Things improved around May 8th as water levels on the Fish River dropped below flood stage(11.0 feet) and the lake levels leveled off and started to recede.

Precipitation Totals for Select Locations with all units in inches

Location	Total Precip	Normal Precipitation	Departure from Normal	Snowfall	Normal Snowfall	Departure from Normal Snowfall	Greatest Snow Depth
Frenchville	1.97	3.04	-1.07	NA	NA	NA	NA
Caribou	2.33	3.33	-1.00	0.0	0.0	0.0	T
Houlton	1.87	2.10	- 0.23	NA	NA	NA	NA
*Millinocket	0.94	2.45	- 1.51	NA	NA	NA	NA
Bangor	2.37	3.64	-1.27	0.0	0.0	0.0	0

*Millinocket snowfall measured at wastewater treatment plant, not the ASOS site. Data was not available at this time.

Stream Flows for Selected Rivers

River	Normal Flow (cfs)	Monthly Mean Flow (cfs)	Monthly Mean (in)	Percentile Class	Drainage (mi²)	Years of Record
St. John River at Ninemile Bridge	NA	NA	NA	NA	1341	67
St. John River at Fort Kent	20200 – 42100	42400	8.24	Above Normal	5929	91
Aroostook River at Washburn	NA	NA	NA	NA	1654	87
Narraguagus River at Cherryfield	423 - 825	567	2.88	Normal	227	70
E Br Penobscot River at Grindstone	NA	NA	NA	NA	837	115
Mattawamkeag nr Mattawamkeag	3540 – 6710	6780	5.51	Above Normal	1418	83
Piscataquis River nr Dover-Foxcroft	690 - 1650	770	2.98	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	6.93 - 0.43	5.10	1.48	Normal	14
Crooked Road	5.66 – 4.84	5.37	0.10	Normal	14
Hadley Lakes	4.40 – 3.80	3.75	-0.45	Above Normal	32
Kenduskeag	20.40 – 18.90	19.44	-0.16	Normal	40
Calais	1.76 – 0.41	0.50	-0.50	Normal	18
Millinocket	8.58 – 7.19	7.34	-1.02	Normal	24
Clayton Lake	13.50 – 12.30	13.14	0.14	Normal	39
Fort Kent	6.42 – 3.82	2.95	-2.03	Above Normal	40

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 May 2018 WFO Caribou, ME

PIL	TIME (UTC)	Date	Description
PWMFLSCAR	0814	5/1/2018	Cancellation of the Big Black River at Big Black
PWMFLSCAR	0814	5/1/2018	Continuation of River Point Flood Warning for Fish River at Fort Kent
PWMFLSCAR	0814	5/1/2018	Continued River Point Flood Warning for St. John River at Fort Kent
PWMFLSCAR	0814	5/1/2018	Continued River Point Flood Warning for Mattawamkeag River at Mattawamkeag
PWMFLSCAR	1034	5/1/2018	Extension of the River Point Flood Warning for the St. John River at Fort Kent

PWMFLSCAR	1814	5/1/2018	Flood Advisory for Fish River Chain of Lakes and streams
PWMFLSCAR	0201	5/2/2018	Cancellation of River Point Flood Warning for the St. John River at Fort Kent
PWMFLSCAR	0730	5/2/2018	Continuation for Point Flood Warning for Fish River at Fort Kent
PWMFLSCAR	0730	5/2/2018	Continuation for Point Flood Warning for Mattawamkeag River
PWMFLSCAR	0806	5/2/2018	Continuation of Flood Advisory for Fish River chain of lakes and streams
PWMFLWCAR	1828	5/2/2018	Areal Flood Warning for Fish River Chain of Lakes and streams
PMWFLSCAR	1837	5/22018	Cancellation of the Flood Advisory for Fish River Chain of Lakes
PWMFLSCAR	0247	5/3/2018	Continuation of Point Flood Warning for Fish River at Fort Kent
PWMFLSCAR	0247	5/3/2018	Continuation of Point Flood Warning for Mattawamkeag River
PWMFLSCAR	0254	5/3/2018	Continuation of Areal Flood Warning for Fish River Chain of Lakes
PWMFLSCAR	0730	5/3/2018	Continuation of Point Flood Warning Fish River at Fort Kent
PWMFLSCAR	0730	5/3/2018	Continuation of Point Flood Warning for Mattawamkeag River
PWMFLSCAR	0733	5/3/2018	Continuation of Areal Flood Warning for Fish River Chain of Lakes
PWMFLWCAR	1810	5/3/2018	Re-issuance of Areal Flood Warning for Fish River Chain of Lakes
PWMFLSCAR	1814	5/3/2018	Extension of Point Flood Warning Fish River at Fort Kent
PWMFLSCAR	1814	5/3/2018	Extension of Point Flood Warning for Mattawamkeag River
PWMFLSCAR	0643	5/4/2018	Continuation of Point Flood Warning for Fish River at Fort Kent
PWMFLSCAR	1203	5/42018	Continuation of Point Flood Warning for Mattawamkeag River
PWMFLSCAR	1828	5/4/2018	Continuation of Areal Flood Warning for Fish River Chain of Lakes
PWMFLSCAR	1915	5/42018	Continuation of Point Flood Warning for Fish River at Fort Kent
PWMFLSCAR	0259	5/5/2018	Continuation of Areal Flood Warning for Fish River Chain of Lakes
PWMFLSCAR	1602	5/5/2018	Cancellation of Point Flood Warning for Mattawamkeag River
PWMFLSCAR	1603	5/52018	Continuation of Point Flood Warning for Fish River at Fort Kent
PWMFLSCAR	1959	5/5/2018	Continuation of Areal Flood Warning for Fish River Chain of Lakes
PWMFLSCAR	0215	5/6/2018	Continuation of Point Flood Warning for Mattawamkeag River
PWMFLSCAR	1237	5/6/2018	Continuation of Point Flood Warning for Fish River at Fort Kent
PWMFLSCAR	1556	5/6/2018	Extension of Point Flood Warning for Fish River at Fort Kent
PWMFLSCAR	1708	5/6/2018	Continuation of Areal Flood Warning for Fish River Chain of Lakes
PWMFLSCAR	0940	5/7/2018	Extension of Point Flood Warning for Fish River at Fort Kent
PWMFLSCAR	1759	5/7/2018	Extension of Areal Flood Warning for Fish River Chain of Lakes
PWMFLSCAR	0143	5/8/2018	Cancellation of Point Flood Warning for Fish River at Fort Kent
PWMFLSCAR	1819	5/8/2018	Cancellation of Areal Flood Warning for Fish River Chain of Lakes

**Significant River Crests
May 2018**

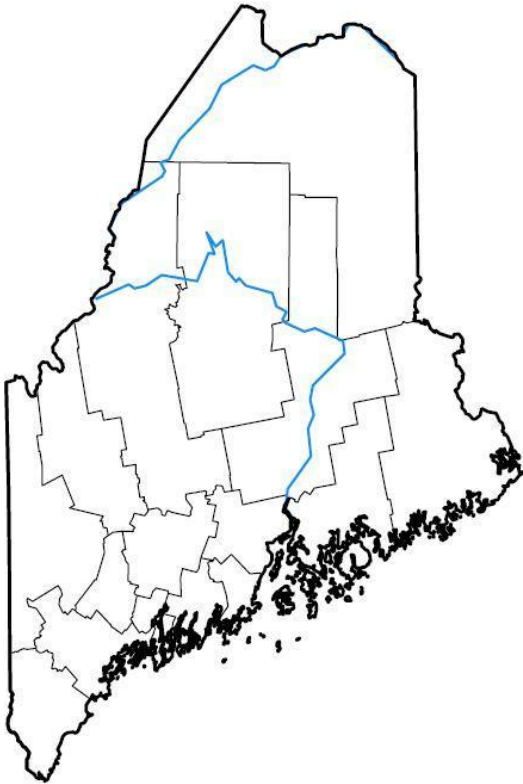
WFO Caribou, ME

Location	ID	Date	Time (UTC)	Crest Stage (ft)	Flood Stage (ft)
Fish River at Fort Kent	FIHM	5/1/2018	0905	12.0	11.0

Drought Conditions

U.S. Drought Monitor
Maine

May 1, 2018
 (Released Thursday, May. 3, 2018)
 Valid 8 a.m. EDT



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	100.00	0.00	0.00	0.00	0.00	0.00
Last Week <i>04-24-2018</i>	100.00	0.00	0.00	0.00	0.00	0.00
3 Months Ago <i>01-30-2018</i>	92.38	7.62	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>06-02-2017</i>	92.04	7.96	0.00	0.00	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.

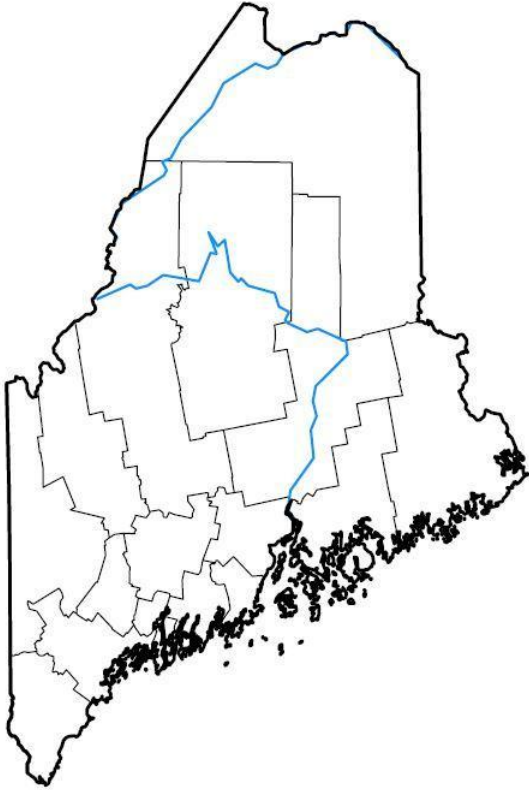
Author:

David Simeral
 Western Regional Climate Center



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

U.S. Drought Monitor Maine



May 29, 2018
(Released Thursday, May. 31, 2018)
Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	100.00	0.00	0.00	0.00	0.00	0.00
Last Week <i>05-22-2018</i>	100.00	0.00	0.00	0.00	0.00	0.00
3 Months Ago <i>02-27-2018</i>	100.00	0.00	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>05-30-2017</i>	100.00	0.00	0.00	0.00	0.00	0.00

Intensity:

- D0 Abnormally Dry
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The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

Author:

Anthony Artusa
NOAA/NWS/NCEP/CPC



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