

<b>NWS Form E-5</b> (04-2006) (PRES. BY NWS Instruction 10-924)	<b>U.S. DEPARTMENT OF COMMERCE</b> <b>NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION</b> <b>NATIONAL WEATHER SERVICE</b>	HYDROLOGIC SERVICE AREA (HSA)
		<b>WFO Caribou, Maine</b>
<b>MONTHLY REPORT OF HYDROLOGIC CONDITIONS</b>		REPORT FOR: MONTH                      YEAR <b>June                              2018</b>
		SIGNATURE <b>Joseph Hewitt, HPM</b>
TO: Hydrologic Information Center, W/OS31 NOAA's National Weather Service 1325 East West Highway Silver Spring, MD 20910-3283		DATE <b>July 29, 2018</b>

*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 2018

No Flooding occurred during the month of June.

June 2018 came in with average temperatures below normal. Temperatures across the region ranged from 1 to 3 degrees below normal. Caribou recorded 5 nights with overnight lows in the 30s. This was the most since 2002. Houlton came in with 9 nights where overnight lows were in the 30s. This was the most since 2000. Light frost was recorded in Northwest Maine with Estcourt Station recording an overnight low of 29 degrees back on the 22<sup>nd</sup>.

In regards to precipitation, precipitation amounts varied quite a bit across the region as Northern Maine recorded precipitation below normal, while Penobscot including Bangor to the Downeast coast had above normal precipitation. Bangor recorded 5.42 inches of rainfall which was 1.66 inches above normal. Caribou came in with a total of 3.16 inches which was 0.32 inches below normal. Frenchville came in with 2.01 inches which was 1.84 inches below normal. Millinocket recorded 2.57 inches which was 1.50 inches below normal. A heavy rainfall event on June 28<sup>th</sup> and 29<sup>th</sup> helped to recharge things a bit with rainfall of 1.25 to 1.50 inches region wide.

Overall, groundwater conditions were near normal with the exception for far Northwest Maine as Clayton Lake came in with readings much below normal. Some of the Downeast sites such as McFarland Hill and Crooked Road at Acadia were below normal.

Streamflows were much below normal for the St. John, Aroostook and Piscataquis River basins nearing the 10<sup>th</sup> percentile. The Penobscot River basin south of Grindstone had streamflows slightly below normal. The St. Croix River Basin saw near normal streamflows. The rainfall that occurred on the 28<sup>th</sup> and 29<sup>th</sup> helped recharge streams and rivers.

As far the conditions approaching near Drought conditions, the USDM kept the Caribou HSA in normal conditions thanks in part to the heavy rainfall that occurred on the 28<sup>th</sup> and 29<sup>th</sup>. Conditions across the north and west were nearing abnormally dry before that rainfall. See the June images below.

**Precipitation Totals for Select Locations with all units in inches**

<b>Location</b>	<b>Total Precip</b>	<b>Normal Precipitation</b>	<b>Departure from Normal</b>	<b>Snowfall</b>	<b>Normal Snowfall</b>	<b>Departure from Normal Snowfall</b>	<b>Greatest Snow Depth</b>
Frenchville	2.01	3.85	-1.84	NA	NA	NA	NA
Caribou	3.16	3.48	-0.32	0.0	0.0	0.0	0
Houlton	3.29	3.65	- 0.36	NA	NA	NA	NA
*Millinocket	2.57	4.07	- 1.50	NA	NA	NA	NA
Bangor	5.40	3.76	+1.66	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**

<b>River</b>	<b>Normal Flow (cfs)</b>	<b>Monthly Mean Flow (cfs)</b>	<b>Monthly Mean (in)</b>	<b>Percentile Class</b>	<b>Drainage (mi<sup>2</sup>)</b>	<b>Years of Record</b>
St. John River at Ninemile Bridge	1330 - 2850	558	0.46	Much Below Normal	1341	67
St. John River at Fort Kent	7610 - 12600	3720	0.70	Much Below Normal	5929	91
Aroostook River at Washburn	1420 - 3180	733	0.49	Much Below Normal	1654	87
Narraguagus River at Cherryfield	208 - 490	243	1.99	Normal	227	70
E Br Penobscot River at Grindstone	1320 - 2880	968243	1.29	Much Below Normal	837	115
Mattawamkeag nr Mattawamkeag	1090 – 2650	562	0.44	Much Below Normal	1418	83
Piscataquis River nr Dover-Foxcroft	245 - 638	109	0.41	Much Below 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	12.40 – 4.14	18.19	9.07	Much Below Normal	14
Crooked Road	6.13 – 5.12	6.22	0.51	Below Normal	14
Hadley Lakes	5.03 – 4.31	4.67	0.01	Normal	32
Kenduskeag	22.10 – 20.40	21.82	0.52	Normal	40
Calais	2.43 – 0.88	1.32	-0.50	Normal	18
Millinocket	9.18 – 8.07	8.63	0.30	Normal	24
Clayton Lake	15.40 – 14.00	15.66	1.06	Much Below Normal	39
Fort Kent	7.81 – 5.83	6.66	0.02	Normal	40

Flow or Water Level	Percentile Range	Explanation
Record Low	0 <sup>th</sup>	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 <sup>th</sup> to 10 <sup>th</sup>	The monthly mean streamflow or median water level during this month is less than the 10 <sup>th</sup> percentile when compared to all of the months during the period of record for this site.
Low	10 <sup>th</sup> to 25 <sup>th</sup>	The monthly mean streamflow or median water level during this month is between the 10 <sup>th</sup> and 25 <sup>th</sup> percentiles when compared to all of the months during the period of record for this site.
Normal	25 <sup>th</sup> to 75 <sup>th</sup>	The monthly mean streamflow or median water level during this month is between the 25 <sup>th</sup> and 75 <sup>th</sup> percentiles when compared to all of the months during the period of record for this site.
High	75 <sup>th</sup> to 90 <sup>th</sup>	The monthly mean streamflow or median water level during this month is between the 75 <sup>th</sup> and 90 <sup>th</sup> percentiles when compared to all of the months during the period of record for this site.
Very High	90 <sup>th</sup> to 100 <sup>th</sup>	The monthly mean streamflow or median water level during this month is greater than the 90 <sup>th</sup> percentile when compared to all of the months during the period of record for this site.
Record High	100 <sup>th</sup>	The monthly mean streamflow or median water level during this month is the highest ever recorded during the period of record for this site.




**Significant River Crests  
May 2018**

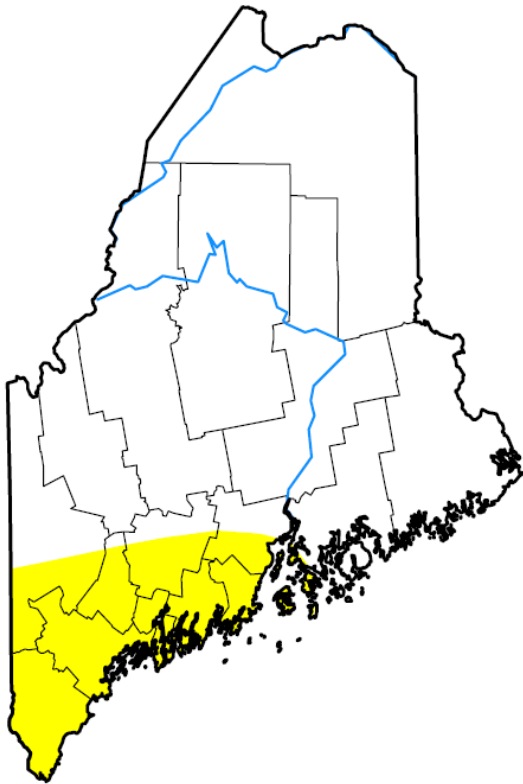
**WFO Caribou, ME**

<b>Location</b>	<b>ID</b>	<b>Date</b>	<b>Time (UTC)</b>	<b>Crest Stage (ft)</b>	<b>Flood Stage (ft)</b>

**Drought Conditions**

# U.S. Drought Monitor Maine

**June 5, 2018**  
(Released Thursday, Jun. 7, 2018)  
Valid 8 a.m. EDT



*Drought Conditions (Percent Area)*

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
<b>Current</b>	83.94	16.06	0.00	0.00	0.00	0.00
<b>Last Week</b> <i>05-29-2018</i>	100.00	0.00	0.00	0.00	0.00	0.00
<b>3 Months Ago</b> <i>03-06-2018</i>	100.00	0.00	0.00	0.00	0.00	0.00
<b>Start of Calendar Year</b> <i>01-02-2018</i>	92.38	7.62	0.00	0.00	0.00	0.00
<b>Start of Water Year</b> <i>09-26-2017</i>	57.81	42.19	24.62	0.00	0.00	0.00
<b>One Year Ago</b> <i>06-06-2017</i>	100.00	0.00	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:

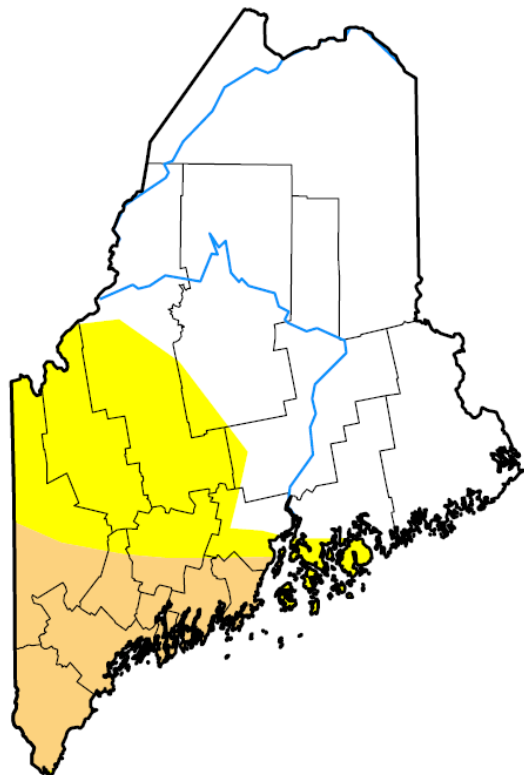
Anthony Artusa  
NOAA/NWS/NCEP/CPC



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

# U.S. Drought Monitor Maine

**June 26, 2018**  
(Released Thursday, Jun. 28, 2018)  
Valid 8 a.m. EDT



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	63.33	36.67	14.57	0.00	0.00	0.00
Last Week <i>06-19-2018</i>	63.33	36.67	0.00	0.00	0.00	0.00
3 Months Ago <i>03-27-2018</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>06-27-2017</i>	96.45	3.55	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:

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