

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  
**September    2018**

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

SIGNATURE  
**Joseph Hewitt, HPM**

DATE  
**October 22, 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.

### September 2018

No Flooding occurred during the month of September.

The warmth continued for the month of September as temperatures were 1 to 4 degrees above average. Caribou recorded its warmest temperature on the 17<sup>th</sup> with 88 degrees. There were 5 days in September where the high temperature was 80 degrees or warmer. Bangor recorded its highest temperature of 90 degrees on the 3<sup>rd</sup>. Colder weather did make its way into the month with the first cold snap coming on the 8<sup>th</sup> through 10<sup>th</sup>, which brought frost and freezing temperatures to parts of the region. Bangor recorded a low of 35 degrees on the 9<sup>th</sup>. Houlton had 3 nights with 32 degrees or lower. Another cold snap came on the 23<sup>rd</sup> on the 25<sup>th</sup> with low temperatures in the 20s for 3 consecutive nights in Houlton. Caribou recorded 26 degrees on the 24<sup>th</sup>, which was a daily record.

In regards to precipitation, rainfall was below normal for the month of September across the entire region. Caribou recorded 1.74 inches of rainfall, which was 1.58 inches below normal for the month of September. This made it the driest September since the year 2000 and the 8<sup>th</sup> driest on the record. Bangor recorded 2.63 inches of rainfall, which was 1.20 inches below normal.

Overall, groundwater conditions continued to be near normal with the exception for the McFarland Hill site at Acadia National Park, as groundwater conditions were below normal.

Streamflows across much of the HSA were below normal. The Aroostook, St. John River and Mattawamkeag River basins recorded streamflows well below normal. The exception to this was the East Branch of the Penobscot River gage, as it had streamflows near normal.

In regards to Drought conditions, the USDM kept the Moderate Drought(D1) category across the Hancock County coast, including eastern Washington County, while expanding the Abnormally Dry category (D0) across Northern Maine further south and east.

**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	2.66	3.52	-0.86	NA	NA	NA	NA
Caribou	1.74	3.32	-1.58	0.0	0.0	0.0	0
Houlton	1.92	3.40	-1.48	NA	NA	NA	NA
*Millinocket	1.82	3.72	-1.90	NA	NA	NA	NA
Bangor	2.63	3.83	-1.20	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	409 - 1900	512	0.43	Normal	1341	67
St. John River at Fort Kent	2380 - 6080	1390	0.26	Much Below Normal	5929	91
Aroostook River at Washburn	420 - 1360	224	0.15	Much Below Normal	1654	87
Narraguagus River at Cherryfield	59 – 210	59.4	0.29	Normal	227	70
E Br Penobscot River at Grindstone	542 – 1100	622	0.83	Normal	837	115
Mattawamkeag nr Mattawamkeag	208 – 923	115	0.09	Much Below Normal	1418	83
Piscataquis River nr Dover-Foxcroft	57.5 - 222	51.5	0.19	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	26.50 – 14.00	27.73	2.53	Below Normal	14
Crooked Road	7.32 – 5.90	6.79	0.07	Normal	14
Hadley Lakes	6.34 – 5.62	6.15	0.18	Normal	32
Kenduskeag	25.40 – 23.60	24.66	0.16	Normal	40
Calais	4.06 – 2.46	3.00	-0.17	Normal	18
Millinocket	11.00 – 10.00	11.25	0.85	Below Normal	24
Clayton Lake	16.30 – 14.80	16.14	0.04	Normal	39
Fort Kent	11.90 – 9.41	10.60	-0.01	Normal	40

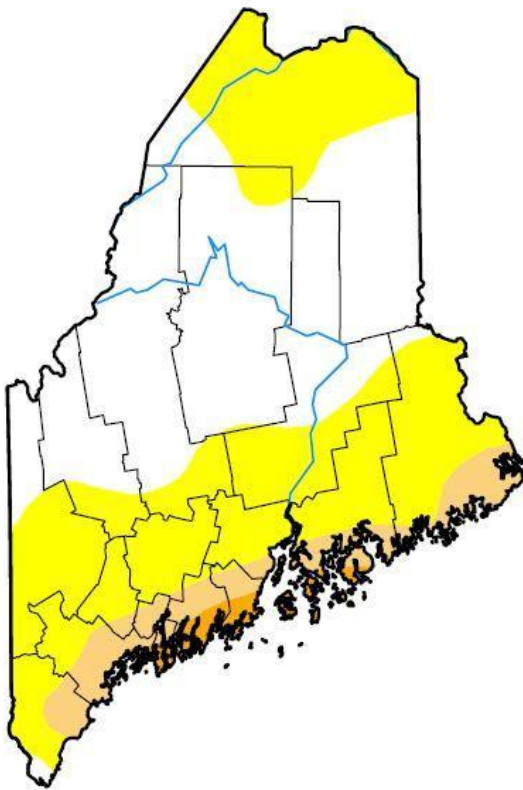
Flow or Water Level	Percentile Range	Explanation
Record Low	0 <sup>th</sup>	The monthly mean streamflow or median water level during this month is the lowest ever recorded during the period of record for this site.
Very Low	0 <sup>th</sup> to 10 <sup>th</sup>	The monthly mean streamflow or median water 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.





# Drought Conditions

## U.S. Drought Monitor Maine



**September 4, 2018**

(Released Thursday, Sep. 6, 2018)

Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	46.45	53.55	9.75	1.88	0.00	0.00
Last Week <i>08-28-2018</i>	54.81	45.19	7.39	0.00	0.00	0.00
3 Months Ago <i>06-05-2018</i>	83.94	16.06	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>09-05-2017</i>	35.65	64.35	28.88	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.*

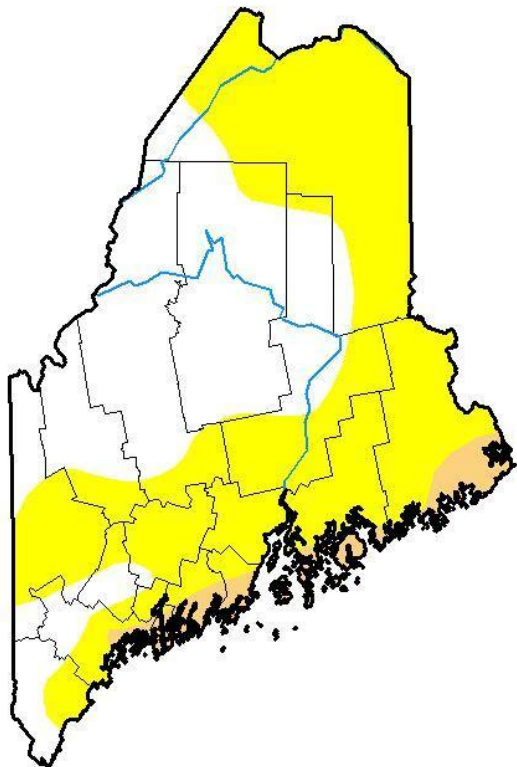
Author:

David Miskus  
NOAA/NWS/NCEP/CPC



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

**U.S. Drought Monitor**  
**Maine**



**September 25, 2018**  
(Released Thursday, Sep. 27, 2018)  
Valid 8 a.m. EDT

*Drought Conditions (Percent Area)*

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
<b>Current</b>	41.90	58.10	4.89	0.00	0.00	0.00
<b>Last Week</b> <i>09-18-2018</i>	41.90	58.10	4.89	0.00	0.00	0.00
<b>3 Months Ago</b> <i>06-26-2018</i>	63.33	36.67	14.57	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>09-26-2017</i>	57.81	42.19	24.62	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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NCEI/NOAA



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