

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 October 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 November 27, 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.

October 2018

No flooding occurred during the month of October.

Temperatures for the month of October were 2 to 4 degrees below average. It was the 8th coldest October for Caribou and the 3rd coldest for Houlton. The morning of October 27th was very cold with a low of 10 degrees at Houlton. This broke the previous record of 16 degrees set back in 1936. Caribou had low temperature 16 degrees, which broke the previous record of 17 degrees set in 1976. On the same morning, Estcourt Station recorded a low temperature of 5 degrees. This was the coldest temperature in the Contiguous U.S. that morning.

In regards to precipitation, rainfall went above normal for the month of October across much of the region. The exception to this was Houlton in Southeast Aroostook County, which recorded rainfall slightly below normal. Caribou recorded 4.08 inches of rainfall, which was 0.55 inches above normal for the month of October. Bangor recorded 4.66 inches of rainfall, which was 0.49 inches above normal. Houlton came in with 3.61 inches of rainfall, which was 0.05 inches below normal.

Snow made its way in for October, with Caribou recording 3.5 inches for the month. This was the highest snowfall for October since 2009. Some weather spotters across Northern Piscataquis and Southeast Aroostook County recorded 6 to 10 inches of snowfall for the month, while Bangor recorded a trace of snowfall. On the 27th, some locations across the far north received up to 1 inch of sleet, which is quite unusual for October.

Overall, groundwater conditions continued to improve with most of the wells around the region recording near normal levels. The exception was Millinocket which came in with levels below normal.

Streamflows across much of the HSA improved to near normal flows for October. The exception to this was Grindstone on the East Branch of the Penobscot River, which recorded below normal streamflows.

In regards to Drought monitoring, conditions improved significantly across the region. The USDM improved conditions across the region with much of the region seeing near normal conditions with the exception of far Northern Maine. This area was still ranked as Abnormally Dry through October 30th.

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	2.73	2.54	+0.19	NA	NA	NA	NA
Caribou	4.08	3.53	+0.55	3.5	1.7	1.8	2
Houlton	3.61	3.66	-0.05	NA	NA	NA	NA
*Millinocket	4.62	4.07	+0.55	NA	NA	NA	NA
Bangor	4.66	4.17	+0.49	T	0.1	-0.1	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	1010 - 2920	1720	1.48	Normal	1341	68
St. John River at Fort Kent	3300 - 9110	4140	0.81	Normal	5929	92
Aroostook River at Washburn	681 - 2320	NA	0.70	Normal	1654	88
Narraguagus River at Cherryfield	132- 415	218	1.11	Normal	227	70
E Br Penobscot River at Grindstone	636 - 1870	538	0.74	Below Normal	837	116
Mattawamkeag nr Mattawamkeag	516- 2200	651	0.53	Normal	1418	84
Piscataquis River nr Dover-Foxcroft	110 - 597	197	0.76	Normal	298	116

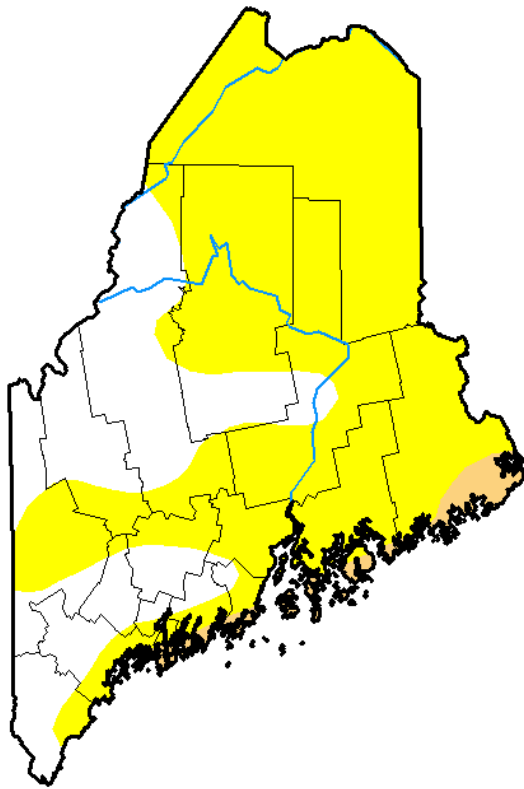
Groundwater Levels

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	27.80 – 11.20	14.87	-4.93	Normal	15
Crooked Road	6.59 – 4.90	5.07	-1.16	Normal	15
Hadley Lakes	6.62 – 5.27	6.22	0.22	Normal	33
Kenduskeag	25.80 – 22.90	25.11	0.31	Normal	41
Calais	4.00 – 1.55	2.43	0.08	Normal	19
Millinocket	11.10 – 9.74	11.55	1.15	Much Below Normal	24
Clayton Lake	15.90 – 14.50	15.51	0.41	Normal	40
Fort Kent	12.00 – 9.54	11.12	0.12	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.

Drought Conditions

U.S. Drought Monitor Maine



October 2, 2018
(Released Thursday, Oct. 4, 2018)
Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	29.37	70.63	3.06	0.00	0.00	0.00
Last Week <small>09-25-2018</small>	41.90	58.10	4.89	0.00	0.00	0.00
3 Months Ago <small>07-03-2018</small>	63.33	36.67	14.57	0.00	0.00	0.00
Start of Calendar Year <small>01-02-2018</small>	92.38	7.62	0.00	0.00	0.00	0.00
Start of Water Year <small>09-23-2018</small>	41.90	58.10	4.89	0.00	0.00	0.00
One Year Ago <small>10-03-2017</small>	12.94	87.06	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:

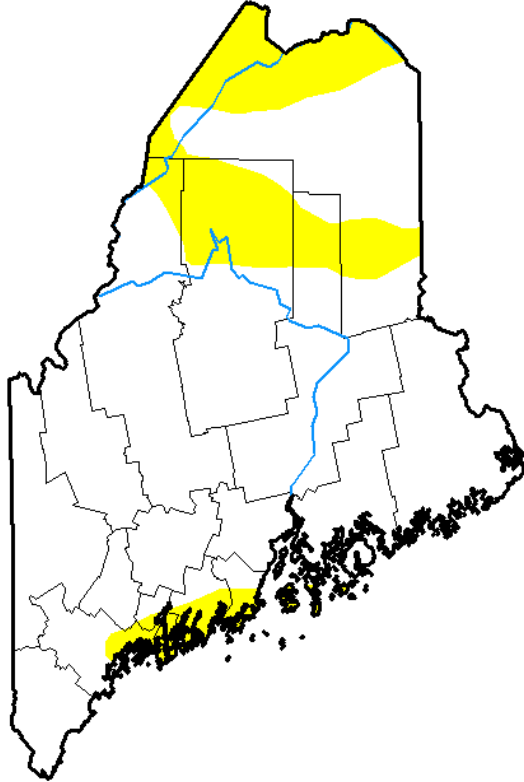
David Miskus
NOAA/NWS/NCEP/CPC



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

U.S. Drought Monitor
Maine

October 30, 2018
 (Released Thursday, Nov. 1, 2018)
 Valid 8 a.m. EDT



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	81.85	18.15	0.00	0.00	0.00	0.00
Last Week <i>10-23-2018</i>	51.81	48.19	0.00	0.00	0.00	0.00
3 Months Ago <i>07-31-2018</i>	47.64	52.36	13.33	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>09-25-2018</i>	41.90	58.10	4.89	0.00	0.00	0.00
One Year Ago <i>10-31-2017</i>	75.21	24.79	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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 National Drought Mitigation Center



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