

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 2019
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 November 27, 2019

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.

No major flooding was reported in October. There was one Urban and Small Stream Flood Advisory issued during the month for some minor flooding with poor drainage and ditches filling up.

October came in above normal temperatures for the region. Temperatures ranged from 1.5 to 2.5 degrees above normal across the region. Widespread freezes finished the growing season for east central and Downeast Maine on the 5th and 6th.

Precipitation came in above normal across the HSA. The highest rainfall totals for the month were across the Millinocket and Bangor region where over 5 inches of rain was recorded for the month. Bangor recorded 5.80 inches and Millinocket recorded 5.04 inches of rainfall. There were two heavy rainfall events during the month of October with the first significant rain event coming in on October 6th and 7th, where 0.25 to 0.30 inches of rain fell across Aroostook County, while around an inch of rain was reported from the Maine Central Highlands to the Downeast region. Another heavy rain event occurred on the 23rd where 1 to 2 inches of rain fell across the HSA. Light snow was reported across northern and central areas on the 4th and again on the 26th and 27th, with generally trace amounts being reported. The exception to this was back across NW Maine, near Deboullie Mountain where up to an inch of snow was reported.

Streamflows across the HSA were near normal across the HSA.

Groundwater conditions were near normal levels across Northern Maine and the Maine Central Highlands with the exception for Millinocket, which came with levels below normal for October. Groundwater levels across the Downeast region were reported to be above normal.

In regards to Drought Monitoring, conditions for the entire HSA continued in the normal range.

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	4.91	2.54	+2.37	NA	NA	NA	NA
Caribou	3.76	3.53	+0.23	T	1.6	-1.6	T
Houlton	4.25	3.86	+0.59	NA	NA	NA	NA
*Millinocket	5.04	4.07	+0.97	NA	NA	NA	NA
Bangor	5.80	4.17	+1.63	0.00	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	1030 – 2910	2510	2.16	Normal	1341	69
St. John River below Fish River at Fort Kent	3340 – 9060	6440	1.25	Normal	5929	93
Aroostook River at Washburn	682 - 2320	1590	1.11	Normal	1654	89
Narraguagus River at Cherryfield	136 - 412	338	1.72	Normal	227	71
E Br Penobscot River at Grindstone	622 – 1860	1410	1.94	Normal	837	117
Mattawamkeag River near Mattawamkeag	516 – 2160	1750	1.42	Normal	1418	85
Piscataquis River nr Dover-Foxcroft	110 – 594	465	1.80	Normal	298	117

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	NA	NA	NA	NA	15

Amherst	26.00-20.40	19.73	-5.07	Above Normal	29
Hadley Lakes	6.61-5.32	5.63	-0.37	Normal	34
Kenduskeag	25.70 – 22.90	21.97	-2.83	Above Normal	41
Calais	3.90 – 1.55	0.71	-1.68	Above Normal	20
Millinocket	11.10 – 9.97	11.24	0.84	Below Normal	25
Clayton Lake	15.80 – 14.50	15.52	0.32	Normal	41
Fort Kent	12.00 – 9.68	10.18	-0.92	Normal	41

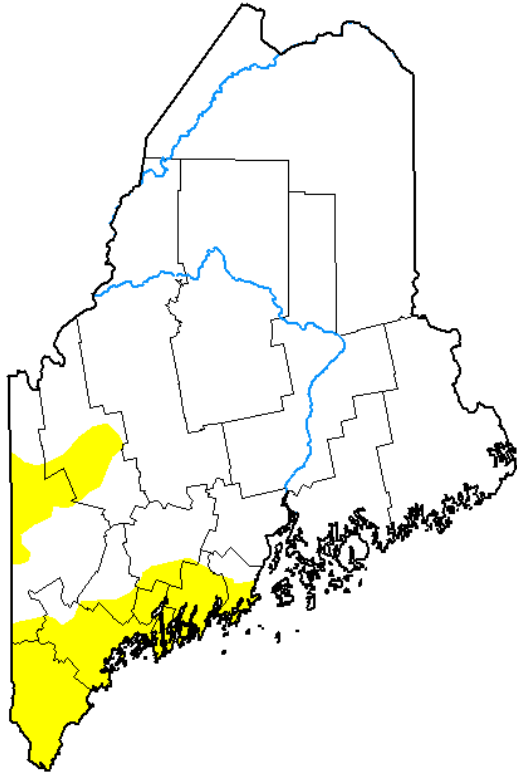
Flow or Water Level	Percentile Range	Explanation
Record Low	0 th	The monthly mean streamflow or median water level during this month is the lowest ever recorded during the period of record for this site.
Very Low	0 th to 10 th	The monthly mean streamflow or median water level during this month is less 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
September 2019
WFO Caribou, ME**

PIL	TIME (UTC)	Date	Description
PWMFLSCAR	1527	10/23/19	Urban and Small Stream Flood Advisory

Drought Conditions for October 2019

U.S. Drought Monitor Maine



October 1, 2019

(Released Thursday, Oct. 3, 2019)

Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	87.45	12.55	0.00	0.00	0.00	0.00
Last Week <i>09-24-2019</i>	87.53	12.47	0.00	0.00	0.00	0.00
3 Months Ago <i>07-02-2019</i>	100.00	0.00	0.00	0.00	0.00	0.00
Start of Calendar Year <i>01-01-2019</i>	94.48	5.52	0.00	0.00	0.00	0.00
Start of Water Year <i>10-01-2019</i>	87.45	12.55	0.00	0.00	0.00	0.00
One Year Ago <i>10-02-2018</i>	29.37	70.63	3.06	0.00	0.00	0.00

Intensity:

None	D2 Severe Drought
D0 Abnormally Dry	D3 Extreme Drought
D1 Moderate Drought	D4 Exceptional Drought

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

Author:

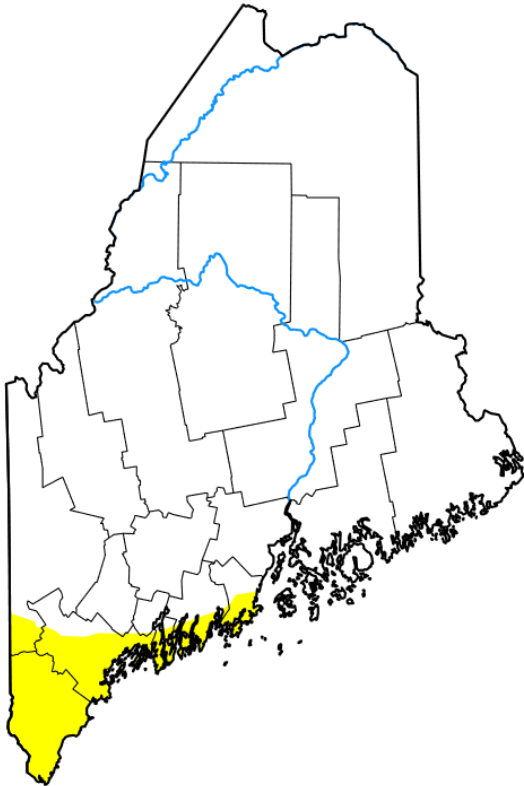
Brian Fuchs
National Drought Mitigation Center



droughtmonitor.unl.edu

U.S. Drought Monitor Maine

October 29, 2019
(Released Thursday, Oct. 31, 2019)
Valid 8 a.m. EDT



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	93.21	6.79	0.00	0.00	0.00	0.00
Last Week <small>10-22-2019</small>	93.21	6.79	0.00	0.00	0.00	0.00
3 Months Ago <small>07-30-2019</small>	100.00	0.00	0.00	0.00	0.00	0.00
Start of Calendar Year <small>01-01-2019</small>	94.48	5.52	0.00	0.00	0.00	0.00
Start of Water Year <small>10-01-2019</small>	87.45	12.55	0.00	0.00	0.00	0.00
One Year Ago <small>10-30-2018</small>	81.85	18.15	0.00	0.00	0.00	0.00

Intensity:

- None
- 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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