

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 REPORT FOR: MONTH YEAR March 2021
MONTHLY REPORT OF HYDROLOGIC CONDITIONS		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 April 30th, 2021
<hr/> <i>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).</i>		

An X inside this box indicates that no flooding occurred within this hydrologic service area.

March 2021

Some flooding did occur during the last week of March due to ice jams on the Aroostook River. There was some flooding on the Grimes Rd near the Caribou-Fort Fairfield town line. More flooding occurred on the Russell Rd and Riverside Ave in Fort Fairfield due to an ice that set up south the Fort Fairfield bridge. Another ice jam set up just east of the Town of Crouseville along the Aroostook River which resulted in the closure of portion of Route 164. Areal Flood Warnings were issued for these ice jams along with a Flood Watch being issued well in advance the onset of flooding. There was no damage or loss of live.

Precipitation for the month of March was below normal across the HSA. Caribou recorded 2.44 inches which was 0.07 inches below normal. Bangor recorded 1.66 inches of precipitation, which was 1.72 inches below normal. Houlton came in with only 1.98 inches of precipitation, which was 0.61 inches below normal. Millinocket recorded 1.82 inches of precipitation, which was 1.24 inches below normal. The most significant precipitation event came between the 26th and the 28th with rain across the northern ½ of the region changing over to snow on the 27th into the 28th, while the Bangor and Downeast region received just rain during those 3 days, with anywhere from 1.42 inches in Bangor to over 3 inches along the coastal areas.

Snowfall was below normal across the HSA. Caribou measured 13.6 inches of snow for the month of March. This was 5.1 inches below the normal snowfall of 18.7 inches. In Bangor, only a trace of snow was observed for the whole month. This was 11.7 inches below normal. March 2021 tied with March 1946, for the least snow for March since records began back in 1925. The most significant snow event occurred on April 1st with snow and strong winds across the northern ½ of the HSA. This led to numerous road closures and snow amounts of 4 to 7 inches. At the start of the month, snow depths ranged from 15 to 30 inches across the northern areas, from Millinocket to the northern Maine-Canadian border. Further south from the Bangor region to the coast, snow depths were from 4 to 10 inches. By the end of the month, snow depths dropped off to a range of 4 to 10 inches across far Northwest Maine, while further east, across the rest of Northern Maine, snow depths ranged from a trace to 4 inches. Elsewhere, little to no snow was observed.

March came in with 2 to 3 degrees above normal across the region. There were alternating spells where temperatures were either above or below normal. A pronounced warmup came on the 20th and lasted through the 25th, which brought high temperatures in the 50s and 60s. This led to a dramatic melt of the snowpack. Caribou came in with an average temperature of 26.9 degrees, which was 2.4 degrees above normal. The highest temperature was 62 degrees on the 22nd, and the lowest temperature of -4 degrees on the 2nd. Bangor recorded an average temperature of 33.0 degrees, which was 2.8 degrees above normal. Bangor had its highest temperature of 66 degrees on the 22nd, and its lowest temperature of 3 degrees on the 2nd.

Streamflows across the region were above normal for March with the exception of the Downeast region as streamflows were near normal. The St. John basin came in **with much above normal** streamflows.

Wells across the region were in the normal range, including Amherst, which showed an improvement from January when it showed below normal levels. The exception was Fort Kent, which showed above normal readings.

In regards to Drought monitoring, the region remained in the normal range for the most part for March, with the exception for Hancock County coast, which continued with **Abnormally Dry** conditions.

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	1.38	1.48	-0.10	NA	NA	NA	NA
Caribou	2.44	2.51	-0.07	13.6	18.3	-4.7	26
Houlton	1.98	2.59	-0.61	NA	NA	NA	NA
*Millinocket	1.82	3.06	-1.24	NA	NA	NA	NA
Bangor	1.66	3.38	-1.72	T	11.7	-11.7	6

*Millinocket snowfall measured at wastewater treatment plant, not the ASOS site. Data might not available every month.

March Stream Flows for Selected Rivers

River	Normal Flow (cfs)	Monthly Mean Flow (cfs)	Monthly Mean (in)	Percentile Class	Drainage (mi ²)	Years of Record
St. John River at Ninemile Bridge	NA	NA	NA	NA	1341	70
St. John River at Fort Kent	1690 - 4820	8110	1.58	Much Above Normal	5929	94
Aroostook River at Washburn	NA	NA	NA	NA	1654	90

Narraguagus River at Cherryfield	480 – 974	598	3.04	Normal	227	73
E Br Penobscot River at Grindstone	NA	NA	NA	NA	837	118
Mattawamkeag nr Mattawamkeag	1050 – 2890	3050	2.48	Above Normal	1418	86
Piscataquis River nr Dover-Foxcroft	277 – 775	785	3.04	Above Normal	298	118

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
Amherst	19.70 – 17.60	21.15	3.05	Much Below Normal	30
Crooked Road	NA	NA	NA	NA	15
Hadley Lakes	4.90 – 4.15	4.96	0.42	Below Normal	35
Kenduskeag	22.40 – 19.40	21.46	0.66	Normal	42
Calais	1.57 – 0.58	0.88	-0.19	Normal	21
Millinocket	10.40 – 9.49	9.92	-0.01	Normal	27
Clayton Lake	14.90 – 13.70	14.83	0.73	Normal	42
Fort Kent	12.50 – 10.00	9.92	-1.08	Above Normal	43

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
March 2021
WFO Caribou, ME**

WMO Identifier	Date	Issuance	Name of Product
FLSCAR	03/27	0727Z	Areal Flood Advisory for Ice Jam on the Aroostook River
FLWCAR	03/27	1936Z	Flood Warning for Ice Jam on Aroostook River near Caribou-Fort Fairfield town line.
FLSCAR	03/28	0038Z	Extension of Flood Warning for Ice Jam on Aroostook River near Caribou-Fort Fairfield town line
FLWCAR	03/28	1413Z	Flood Warning for Aroostook River expanded down to Fort Fairfield due to Ice Jam
FLWCAR	3/29	0921Z	Flood Warning for Ice Jam on the Aroostook River in Crouseville
FLSCAR	3/29	1339Z	Flood Advisory for Ice Jam in Caribou-Fort Fairfield
FLWCAR	3/29	1702	Flood Warning extended out in time for Ice Jam on Aroostook River at Caribou-Fort Fairfield
FLW CAR	3/30	0927Z	Flood Warning extended in areal coverage for Ice Jam on Aroostook River in Crouseville
FLSCAR	3/30	1522Z	Cancellation of Flood Warning for Ice Jam on the Aroostook River in Crouseville
FFACAR	3/30	1936Z	Flood Watch issued for Northern and Central Maine
FLSCAR	3/30	1948Z	Cancellation of Flood Advisory for Ice Jam on the Aroostook River along Caribou-Fort Fairfield town line in lieu of Flood Watch
FLSCAR	3/30	1954Z	Cancellation Flood Advisory for Ice Jam on Aroostook River in Fort Fairfield area in lieu of the Flood Watch
FFACAR	3/31	0839Z	Continuation of the Flood Watch

FFACAR	3/31	2057Z	Mattawamkeag River was added into the existing Watch

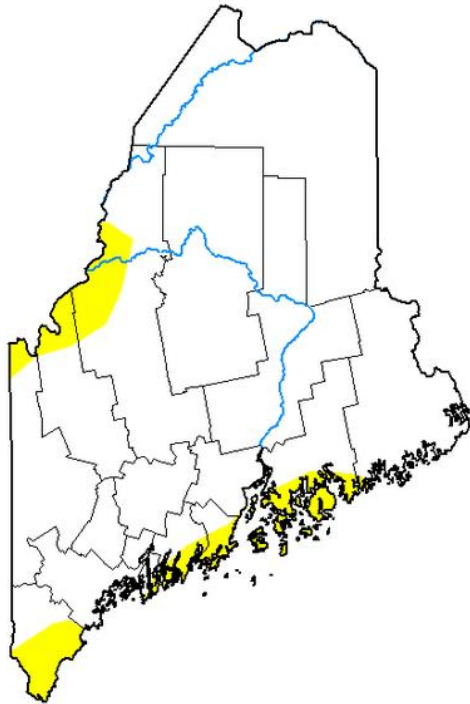
Drought Conditions for March 2021

U.S. Drought Monitor
Maine

March 2, 2021

(Released Thursday, Mar. 4, 2021)

Valid 7 a.m. EST



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	92.00	8.00	0.00	0.00	0.00	0.00
Last Week <small>02-23-2021</small>	92.00	8.00	0.00	0.00	0.00	0.00
3 Months Ago <small>12-01-2020</small>	31.74	68.26	21.34	5.40	0.00	0.00
Start of Calendar Year <small>12-29-2020</small>	91.54	8.46	0.00	0.00	0.00	0.00
Start of Water Year <small>09-29-2020</small>	0.00	100.00	100.00	83.86	7.28	0.00
One Year Ago <small>03-03-2020</small>	100.00	0.00	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. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>

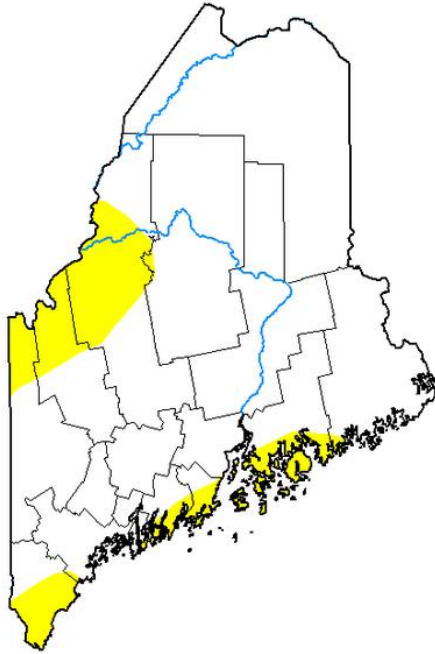
Author:

Brian Fuchs
National Drought Mitigation Center



droughtmonitor.unl.edu

U.S. Drought Monitor
Maine



March 30, 2021
(Released Thursday, Apr. 1, 2021)
Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	86.32	13.68	0.00	0.00	0.00	0.00
Last Week <small>03-23-2021</small>	86.35	13.65	0.00	0.00	0.00	0.00
3 Months Ago <small>12-29-2020</small>	91.54	8.46	0.00	0.00	0.00	0.00
Start of Calendar Year <small>12-29-2020</small>	91.54	8.46	0.00	0.00	0.00	0.00
Start of Water Year <small>09-29-2020</small>	0.00	100.00	100.00	83.86	7.28	0.00
One Year Ago <small>03-31-2020</small>	100.00	0.00	0.00	0.00	0.00	0.00

Intensity:

- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
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Author:
Brad Pugh
CPC/NOAA



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