| 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 **November** YEAR **2017** |
| TO: Hydrologic Information Center, W/OS31<br>NOAA's National Weather Service<br>1325 East West Highway<br>Silver Spring, MD 20910-3283 | | SIGNATURE **Joseph Hewitt, HPM**<br>DATE **December 22, 2017** |

*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).*

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

## November 2017

November 2017 finished with average temperatures running below normal. Temperatures across the region averaged from 0.5 to 2 degrees below average for the month of November. This is a sharp contrast to October which was the warmest October on record for Caribou, Bangor, Houlton and Millinocket.

In regards to precipitation, precipitation varied from above normal across far northern areas while central and downeast areas were below normal. Caribou recorded 3.67 inches for November which was 0.04 inches above normal for the month. Bangor recorded 3.05 inches which was 1.15 inches below normal. The precipitation was a benefit to help alleviate the abnormally dry conditions. Some areas however, down across southern Hancock and Washington County were still quite dry but did show improvement.

As far as snowfall goes, 3.9 inches of snow was recorded at Caribou which was 6.6 inches below normal. Bangor recorded a trace of snow for the month which was 2.3 inches below normal.

No flooding was reported during the month of November.

### Precipitation Totals for Select Locations
All units inches

| Location | Total Precip | Normal Precipitation | Departure from Normal | Snowfall | Normal Snowfall | Departure from Normal Snowfall | Greatest Snow Depth |
|---|---|---|---|---|---|---|---|
| Frenchville | 3.19 | 2.94 | +0.25 | NA | NA | NA | NA |
| Caribou | 3.67 | 3.63 | +0.04 | 3.9 | 10.5 | -6.6 | 3 |
| Houlton | 3.90 | 4.01 | -0.11 | NA | NA | NA | NA |
| Millinocket | 2.32 | 4.43 | -2.11 | NA | NA | NA | NA |
| Bangor | 3.05 | 4.20 | -1.15 | T | 2.3 | -2.3 | T |

*Millinocket snowfall measured at wastewater treatment plant, not the ASOS site

## Stream Flows for Selected Rivers

| River | Normal Flow (cfs) | Monthly Mean Flow (cfs) | Monthly Mean Precip (in) | Percentile Class | Drainage ($mi^2$) | Years of Record |
|---|---|---|---|---|---|---|
| St. John River at Ninemile Bridge | 1560 - 3080 | 3740 | 3.11 | High | 1341 | 67 |
| St. John River at Fort Kent | 5300 –12000 | 13800 | 2.60 | High | 5665 | 91 |
| Aroostook River at Washburn | 1350 – 3680 | 3450 | 2.33 | Normal | 1654 | 87 |
| Narraguagus River at Cherryfield | 348 – 864 | 293 | 1.44 | Low | 227 | 69 |
| E Br Penobscot River at Grindstone | 866 – 2350 | 2910 | 3.88 | High | 837 | 115 |
| Mattawamkeag nr Mattawamkeag | 1540 – 4210 | 3800 | 2.99 | Normal | 1418 | 83 |
| Piscataquis River nr Dover-Foxcroft | 324 – 998 | 501 | 1.88 | 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 | 8.27 – 0.43 | 16.16 | 12.86 | Low | 13 |
| Crooked Road | 5.09 – 4.81 | 5.67 | 0.70 | Low | 13 |
| Hadley Lakes | 5.98 – 4.50 | 6.02 | 0.98 | Low | 30 |
| Kenduskeag | 25.50 – 21.20 | 23.78 | 0.58 | Normal | 37 |
| Calais | 1.61 – 0.56 | 0.95 | -0.14 | Normal | 16 |
| Millinocket | 10.80 – 9.23 | 10.43 | 0.33 | Normal | 22 |
| Clayton Lake | 15.10 – 14.00 | 13.85 | -0.85 | High | 37 |
| Fort Kent | 11.60 – 9.29 | 9.50 | -0.90 | Normal | 38 |

| 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**
**October 2017**
**WFO Caribou, ME**

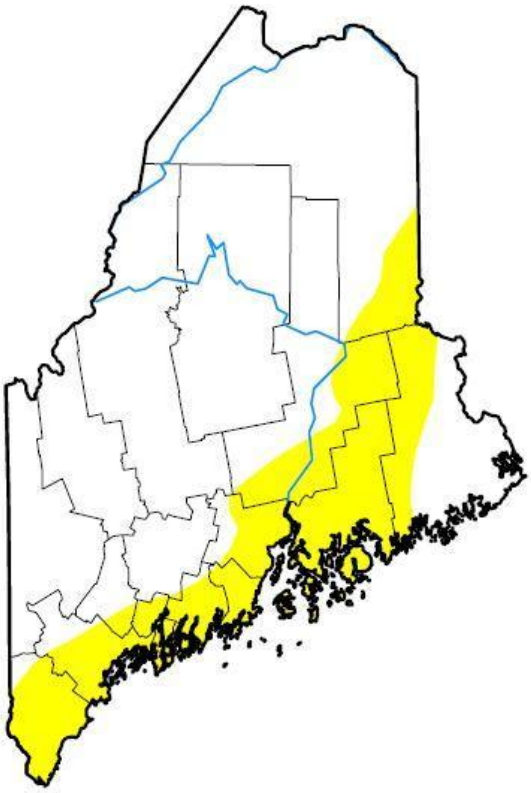
| PIL | TIME (UTC) | Date | Description |
|---|---|---|---|
| | | | |
| | | | |
| | | | |

**Significant River Crests**
**October 2017**
**WFO Caribou, ME**

| Location | ID | Date | Time (UTC) | Crest Stage (ft) | Flood Stage (ft) |
|---|---|---|---|---|---|
| | | | | | |
| | | | | | |
| | | | | | |

Drought Monitor for November 7, 2017

## U.S. Drought Monitor
# Maine



## November 7, 2017
*(Released Thursday, Nov. 9, 2017)*
**Valid 7 a.m. EST**

*Drought Conditions (Percent Area)*

| | None | D0-D4 | D1-D4 | D2-D4 | D3-D4 | D4 |
|---|---|---|---|---|---|---|
| **Current** | 75.21 | 24.79 | 0.00 | 0.00 | 0.00 | 0.00 |
| **Last Week** 10-31-2017 | 75.21 | 24.79 | 0.00 | 0.00 | 0.00 | 0.00 |
| **3 Months Ago** 08-08-2017 | 42.20 | 57.80 | 16.60 | 0.00 | 0.00 | 0.00 |
| **Start of Calendar Year** 01-03-2017 | 23.74 | 76.26 | 62.91 | 0.57 | 0.00 | 0.00 |
| **Start of Water Year** 09-26-2017 | 57.81 | 42.19 | 24.62 | 0.00 | 0.00 | 0.00 |
| **One Year Ago** 11-08-2016 | 12.43 | 87.57 | 69.99 | 13.45 | 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.*

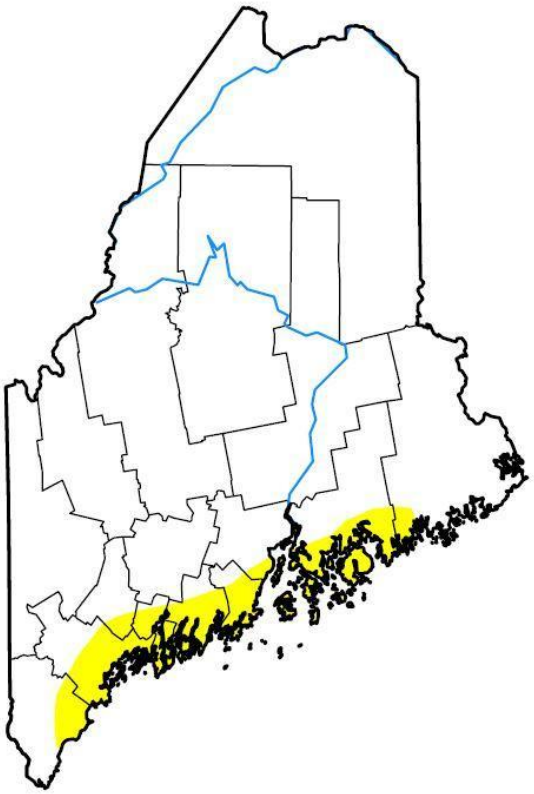
*Author:*
David Miskus
NOAA/NWS/NCEP/CPC

**http://droughtmonitor.unl.edu/**

Drought Monitor for November 28, 2017

## *U.S. Drought Monitor*

# Maine



## November 28, 2017

***(Released Thursday, Nov. 30, 2017)***

**Valid 7 a.m. EST**

*Drought Conditions (Percent Area)*

| | None | D0-D4 | D1-D4 | D2-D4 | D3-D4 | D4 |
|---|---|---|---|---|---|---|
| **Current** | 92.38 | 7.62 | 0.00 | 0.00 | 0.00 | 0.00 |
| **Last Week** *11-21-2017* | 75.21 | 24.79 | 0.00 | 0.00 | 0.00 | 0.00 |
| **3 Months Ago** *08-29-2017* | 35.65 | 64.35 | 28.88 | 0.00 | 0.00 | 0.00 |
| **Start of Calendar Year** *01-03-2017* | 23.74 | 76.26 | 62.91 | 0.57 | 0.00 | 0.00 |
| **Start of Water Year** *09-26-2017* | 57.81 | 42.19 | 24.62 | 0.00 | 0.00 | 0.00 |
| **One Year Ago** *11-29-2016* | 13.96 | 86.04 | 72.36 | 39.08 | 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 Simeral
Western Regional Climate Center

**http://droughtmonitor.unl.edu/**